

# CONSTRUCTION MANAGEMENT



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### 05/24

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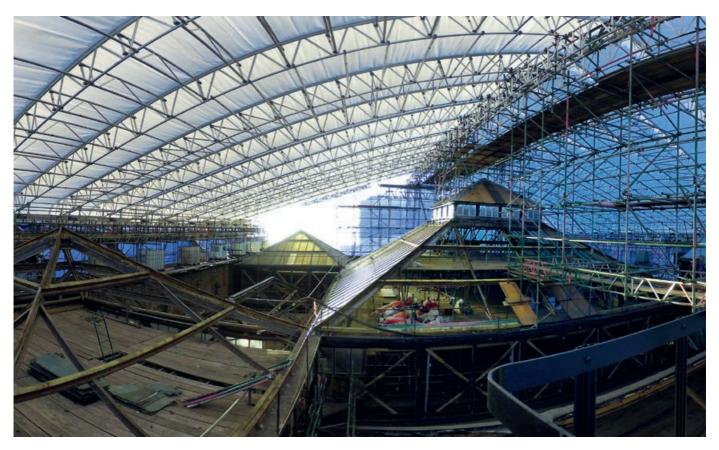
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#### ▲ Quinn replaces V&A roofing

Quinn London is undergoing the complex replacement of the 1,600 sq m Victorian roofing at the Victoria & Albert Museum in South Kensington, London. The project involves the complete replacement of the Georgian wire pyramid glazed roofing over both the North Court and Gallery 38.



#### **◀** Roman artefacts found in Grove

An archaeologist holds one of the miniature votive axes from a Roman villa uncovered at a Barratt and David Wilson Homes development in south Oxfordshire. The Red River Archaeology team said the items found suggest a ritual or pilgrimage took place somewhere on the estate.

Katy Robinson, senior project manager at **East Riding of Yorkshire** Council, won the Equality, **Diversity and Inclusion** Individual category at the CIOB Awards 2024 (p28)





#### ▼ Equality-Harmony mural restoration

A Grade II-listed mural on the Broadwater Farm Estate in north London, commissioned following the 1985 riots, has been dismantled and restored by heritage contractor DBR. The mural required relocating as its previous site was being demolished to make way for new council homes.



#### ▲ Teopanzolco **Cultural Centre, Mexico**

Saeed Rezvanian became the overall winner of the Global Cement and Concrete Association's 5th Concrete in Life photography competition with this shot of the Teopanzolco Cultural Centre a triangular concrete building adjoining an archaeological site with Aztec ruins.

#### Stabilisation works at the Port of Dover

Geotechnical engineering specialist CAN has begun a 20-week project to remove around 400 tonnes of loose chalk and vegetation from the White Cliffs of Dover. The team is combining rope access and mobile elevated platforms to carry out the work.





## 'It's never about one individual'

Construction Manager of the Year 2024, Galliford Try's Barry Kingscote, tells Cristina Lago what was key to the success of his winning Marble Arch project

#### "Why do I think I won the award?

You're asking the wrong person!" Barry Kingscote laughs, still in a celebratory mood after being crowned Construction Manager of the Year (CMYA) at the CIOB Awards 2024. Since then, he's received "a few texts" from friends and colleagues congratulating him

for landing the highest accolade in the construction industry. Although the award recognises his personal achievements, Kingscote insists that his team is also acknowledged.

"It's never about one individual," he says. "Okay, I was the recipient of the award but the truth is that every member of the wider

▲ Barry Kingscote receives his award from host June Sarpong (left) and CIOB president Sandi Rhys Jones

We were demolishing a building with a live boundary against another project. They were erecting wall structures within a few millimetres of it, as were we

Barry Kingscote, **Galliford Try** 

Galliford Try team was involved in this project to produce a fantastic quality building."

The building that the project director - MCIOB since 9 April; he achieved membership through the CMYA judging process - is referring to is 1-4 Marble Arch. This mixed-use development involved, among other things, retaining a century-old structure that required several significant amendments to the design.

"The job itself was very complex from the outset," explains Kingscote. "We were working with a blue-chip client on an estate with historic and newer buildings. I had been lucky enough to work with the Portman Estate in my previous project, which was 100 yards away. That was a success and influential in us landing this scheme, which was definitely more complex."

Although demolition behind a retaining facade is not unusual in London, adding a second basement to the structure made the project particularly challenging, says Kingscote. Complicating things even further was the fact that 1-4 Marble Arch was adjacent to another major development.

"We were demolishing a building with a live boundary against another project," says Kingscote. "They were erecting wall structures within a few millimetres of it, as were we."

There were six tower cranes between the two sites, and 100 lorries a day bringing deliveries, which meant careful logistics planning. Being in the heart of the West End, surrounded by tourist attractions added an extra layer of complexity: "Obviously, you need to respect neighbours and the businesses in the area, including hotels and residential buildings," says Kingscote.

Technical innovation was present throughout the project, continues Kingscote, including the 300-tonne temporary works structure used to retain the six-storey high facade.

One of the elements Kingscote takes most pride in is the ability to bring together a large team, both within Galliford Try and external stakeholders. He worked closely with the client, the Portman Estate, but also with the project management team at Buro Four, the consultant team of architects AHMM, the consulting team at AKT II and Westminster Council.

A close collaboration with Transport for London ensured that there were no problems with a tube line running a few metres away from the site's south boundary.

"I believe the collaboration that was achieved was key for success," adds Kingscote. "We were here for

I believe the collaboration that was achieved was key for success. We were here for three and a half years, people lived and breathed through some difficult times, including Covid-19 Barry Kingscote,

**Galliford Try** 

▼ 1-4 Marble Arch

is in the heart of

the West End of

London

three and a half years, people lived and breathed through some difficult times, including Covid-19. I think all enjoyed their time with us and we've created a fantastic building for years to come."

See p16-17 for more on the project.



## Eye on election for new CIC deputy chair

lan Brant steps up to a key role on the Construction Industry Council, knowing that a year of political change lies ahead. He speaks to Will Mann

an Brant was appointed Construction Industry Council (CIC) deputy chair in March, knowing that a new government will be in power by the time he becomes chair in June 2025.

This means a busy year ahead for the CIOB trustee, fellow and new CIC deputy chair, who also runs his own consultancy, Brant Construction Quantum Experts, specialising in dispute avoidance and resolution.

"The CIC's mantra is bringing built environment professionals and the professional membership bodies together, drawing on an unrivalled breadth of knowledge," he tells CM.

"Obviously each body has its own priorities for the next election, but there will be some high-level topics that are of interest to all built environment professionals.

"On those topics, it makes sense for CIC to speak with one voice both as an industry and on behalf of the professions. The general election will inevitably mean change. Therefore, industries speaking with one voice will ensure that key professions are

both heard and influential when delivering government policy.

"CIOB has a broad-church membership and is unique in this. We have members who are clients, contractors, consultants and who work across the supply chain. There are obvious parallels here to CIC's broader spectrum. CIC is looking at the whole built environment, covering issues like planning reform which could benefit the whole industry, including CIOB members.

"So, it is not only Eddie Tuttle and his policy team that go into bat for CIOB members, ensuring that the public interest is considered strongly across the political spectrum in the UK and at Westminster. CIOB is also at the heart of the CIC that is working hard to effect positive change."

A longstanding challenge is ensuring that the industry speaks to the government with one voice and CIC works very closely with the Construction Leadership Council (CLC) to deliver this.

"It is for the professions, for the CIC, to be involved with issues like defining competence and quality and



The general election will inevitably mean change. **Industries** speaking with one voice will ensure that kev professions are both heard and influential Ian Brant, CIC

implementing the Building Safety Act. Because you have got half a million members across the CIC membership who will be responsible for these issues at the coal face, and the CIC can channel knowledge and policies down through that membership."

The CIC, like its constituent member bodies, is working on its election manifesto, Brant says. Key issues will share common ground with CIOB's top priorities, including quality, building safety, skills, climate change, EDI and digital innovation.

"Building safety is obviously a huge topic, and I'm up to speed with the Building Safety Act and the secondary legislation that is coming through," he says. "I am by no means an expert on it, but I know where to go to get the questions answered if I need to.

"I chaired the CIOB's External Affairs Board for two years, working with Eddie Tuttle and the likes of Paul Nash, who sits on the Industry Safety Steering Group and is now on the Building Advisory Committee (BAC). CIOB also played a key role in developing the competency programme that CIC initiated and



is now with the Building Safety Regulator for implementation."

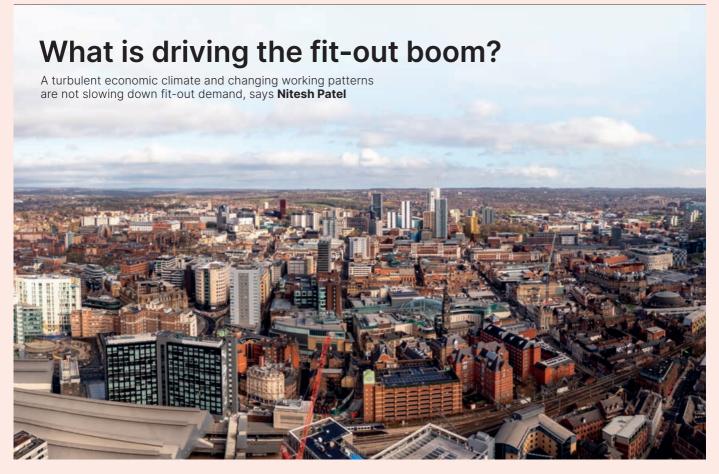
Brant's day job involves looking into disputes, which may be ideal for the complex legislative matter in his CIC role. "You need to be a 'details' person to understand disputes, and that's what I like to get into," he says.

His career has included working for two global contractors on sectors including commercial, education, housing, rail and utilities, so he has a wide range of knowledge to draw on.

Looking ahead, he sees increased opportunities for collaboration between CIOB, CIC and its other member organisations. "There are a number of subcommittees within CIC that are doing similar work to our advisory panels in the CIOB and similar structures within the other bodies on key issues and I am keen to collectively work together where we can on this through CIC as part of the one-voice mantra.

"Greater collaboration through the CIC can really benefit CIOB members when you look at the breadth of the CIC membership.

"And from a CIC point of view, the more we can join up our thinking, the more likely that we will enhance an ear from the next government, who will recognise that we are speaking on behalf of half a million built environment professionals and ensuring that the public interest is both considered and met, and CIC is uniquely placed to help deliver this."





It has been three years since the Covid-19 lockdown measures were relaxed in Britain and.

despite a general return to business as usual, hybrid working continues to have a lasting legacy.

In this context, employers are increasingly looking at ways to improve the workplace environment by listening to their employees' views when investing in new office layouts. Without enticing workers back into the office, businesses lose productivity benefits from collaboration and could be left with costly stranded assets.

Despite an unsettled economic environment, high labour and material costs, shifting working patterns and increased building

regulations, investment in both the refit of existing space and fit out of new space has continued to remain strong.

Making the right choices relies on having good quality data to underpin investment decisions. The latest Turner & Townsend **Global Fit-out Report provides** this with a granular dataset that can guide companies looking to maximise value for money.

The report also compares average fit-out costs for cities in Britain and across the world. Zurich, London and Edinburgh are the most expensive cities in Europe on an average cost per square metre basis - largely driven by higher labour costs in these markets.

London commands an 18% premium over UK cities in the survey for high-specification briefs with an average cost of US\$3,885.5/sq m (£3110.49). Despite Brexit, London is still a leading global financial centre and both the City and Canary Wharf continue to attract investment. By contrast, low specification fit-out costs are similar across UK cities, possibly reflecting the many regeneration initiatives in cities such as Manchester. Birmingham and now in Leeds.

There are several factors underpinning current fit-out demand. With uncertainty over working patterns and in-person attendance, occupiers are looking for flexibility in their leases, but also in their space. Businesses and their employees want robust workspaces that can foster productivity and social collaboration.

Many companies are balancing this against the need to meet their environmental, social and governance objectives - and will need a fit out that matches those needs. We're increasingly seeing how the granularity and reliability of data are helping occupiers manage these competing demands.

#### The case of Leeds

One city that has seen increased fit-out activity in recent years is Leeds, which will be hosting the 2024 UK Real Estate Investment and Infrastructure Forum this month. With a host of financial, legal and professional services firms, Leeds is an attractive proposition for developers and investors.

According to the Deloitte Leeds Crane Survey 2024, there was a

Graduate inward migration percentage rate for Leeds in 2018-19

34

Leeds saw a six-fold increase in floorspace from 2022 to 2023

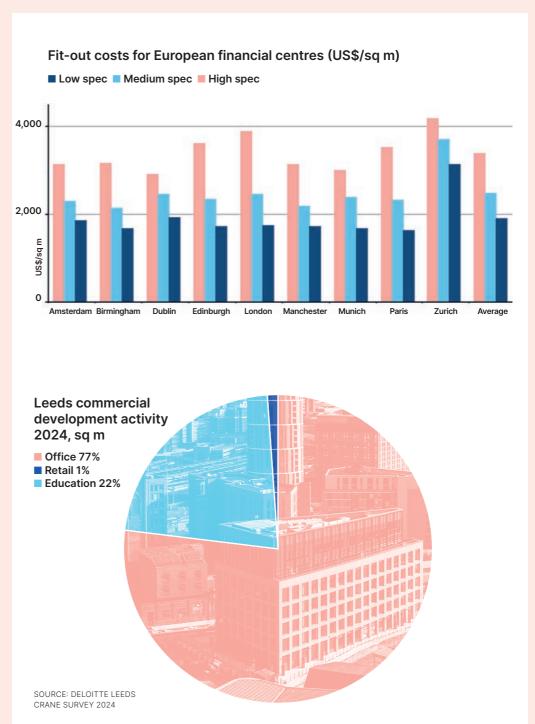
With uncertainty over working patterns and in-person attendance, occupiers are looking for flexibility in their leases, but also in their space

six-fold increase in floorspace delivered, from 9,077 sq m in 2022 to 64,939 sq m in 2023, of which 35,833 sq m was delivered across two schemes in the South Bank area. New office space accounted for over three-quarters of new development in 2023.

In 2023, occupier demand was robust, with a take-up rate that was 10% above the five-year annual average. Fifty-eight per cent of the take-up in 2023 was by financial and professional services firms. However, the level of Grade A supply at the end of 2023 was the lowest since 2019, illustrating the ongoing supply squeeze in the office market. If Leeds wants to attract the right developers, it will need to invest in Grade A office space.

The investment zone status given to West Yorkshire by the government in November 2023 is expected to boost further investment in Leeds, Bradford and Huddersfield. However, if clients want to take advantage of this growing hub, they will need to have a firm grasp of fit out's cost drivers as well as the relevant data. By doing so, businesses will be able to maximise their investments and drive productivity in their offices.

Nitesh Patel is a lead economist, UK, at Turner & Townsend.





**Caroline Gumble** 

## A call to arms for sustainability

Caroline Gumble recalls a presentation by Saul Humphrey FCIOB where he spoke to students about the importance of sustainability in decision-making

#### A few weeks ago I spent time with

CIOB members and other partners from the construction community in Essex. I had a packed itinerary, including construction sites, academic institutions and an offsite manufacturer (see p50 for details).

A common theme emerged during these meetings: sustainability. We covered the breadth of disciplines, talking about achieving EPC A for new houses, reducing carbon emissions on construction sites and how to deliver retrofit training across the industry, among other things.

However, there was one particular meeting that I have been reflecting on for some time. I was invited to the Anglia Ruskin University campus at Chelmsford, one of our accredited centres, to meet students and tutors and see some practical work and training sessions in action.

In introducing a fascinating presentation from campaigning development company Human Nature, Saul Humphrey FCIOB, one of our longstanding members and a chartered environmentalist, said something that has stuck with me. Addressing the students who were with us, he issued a call to arms, saying that whatever your role and whatever your level of seniority, you have more influence and agency than you think.



career and join a company that does the right things

▼ Caroline Gumble with Saul Humphrev FCIOB (left) and Mark Tree, head of school at Anglia **Ruskin University** 

If you're in a working environment where there are opportunities to raise the importance of decisionmaking focused on sustainability, take them. If you're in a working environment where your voice is not heard and there are values which do not match your own, consider taking your skills and talents elsewhere.

I recognise that's not always an easy decision but it is easier to spend your life in a workplace which aligns with your ideals than it is to feel you cannot be part of positive change.

Perhaps it could be argued that this is one useful consequence of the skills gap - for those already in the industry and feeling unable to deliver the positive things we can achieve in the built environment, you have the power to invest in your career and join a company that does the right things.

You spend a lot of time at work and most people want to do good things when it comes to delivering quality, prioritising safety and wellbeing and protecting our planet. There are companies out there that share those values and will, in turn, value and welcome you.

I also want to take this opportunity to congratulate Saul after being named our Sustainability Award winner at the CIOB Awards event in April. Well done, Saul - it is well deserved.

Caroline Gumble is CEO of CIOB. Read more about Saul Humphrey FCIOB's sustainability work on p30.





**Paul Gandy Tilbury Douglas** 





▼Two Tilbury Douglas project managers, Dan Harmer (far left) and Stuart Palmer, were recently certified by CIOB's Principal Contractor Competency Certification Scheme

## Why Tilbury Douglas is championing competency

Tilbury Douglas CEO Paul Gandy explains why the contractor is putting its project managers through CIOB's Principal Contractor Competency Certification Scheme

#### As someone who has spent over 40

years in the construction industry, I feel confident in saying that the Building Safety Act is one of the biggest changes the industry has seen for a generation. It will impact everyone - contractors, designers, customers, building operators and building control. All of us need to face the challenge. Now is the time to invest in our people so we can meet the Building Safety Act requirements and demonstrate the competency required by the new legislation.

#### Pioneering qualification

In particular, the spotlight is on the dutyholder role of principal contractor. Tilbury Douglas was proud that

two of our project managers, Dan Harmer and Stuart Palmer, recently participated in the CIOB's pilot Principal Contractor Competency Certification Scheme (PCCCS).

This groundbreaking scheme aims to certify competence for anyone executing the principal contractor role, as defined by the new legislation. The pilot phase, which involved a rigorous selection process, involved 10 construction professionals from diverse backgrounds, with Tilbury Douglas among the first tier 1 contractors to participate.

Dan and Stuart were honoured to be among the first recipients of the certification, which validates their competence. They realise that under It is big a step forward to have a competency scheme that will certify people needing to fulfil the principal contractor role

the requirements of the Building Safety Act – and to improve overall standards in the industry – providing evidence of competence is key.

The PCCCS is moving from pilot to full rollout and it is big a step forward for the industry to have a competency scheme in place that will certify people needing to fulfil the principal contractor role. The scheme provides a path for the entire industry to follow as it adapts to the new building safety regime.

#### A time of rapid change

At Tilbury Douglas, we regard putting our project managers through the PCCCS as a proactive step to ensure our construction teams possess the necessary qualifications to deliver safer buildings. We expect clients will increasingly prioritise contractors with certified competent teams, so more and more construction management professionals will have to start the certification process in the coming months.

Competency certification is just one of many building safety rules and regulations coming into the industry, along with building control registration, a new higher risk buildings regime, the golden thread, product and materials compliance, to name a few. As the industry culture adapts to this new regime, Tilbury Douglas will be at the forefront of the changes. Paul Gandy is CEO at Tilbury

Douglas, vice president of CIOB,

and serves on the Build UK board

as a contractor director.

**Feedback** A selection of readers' comments about news and issues in the industry from across the CIOB community and social media



▲ Waikato treatment plant in New Zealand, part of Watercare Services' 10-year, NZ\$13bn (£6.16bn) programme of work

#### BIMplus 25/03 The digital transformation of Auckland's water works

Farzam Farzadi and Steve Webster of Watercare Services explained the digital journey of New Zealand's largest company in the water and wastewater industry.

Brendan Attewell FEngNZ **CPEng MICE CEng** The Waikato Water Treatment Plant and Helensville Wastewater Treatment Plant in this article have both been constructed by Brian Perry Civil as part of the Watercare Enterprise Model in New Zealand.

Both of these projects have seen a progressive step change in how critical water infrastructure assets are delivered where open collaboration between client, designer and constructor is actively encouraged - leading to a legacy of digital lessons learned and refinement of digital processes that enable "the consistent implementation of practical solutions".

Digital tools are not the silver bullet - but they can be the enabler of greater value when true collaboration is encouraged. Congratulations to Farzam, Steve and the Brian Perry Civil team for their hard work on these critical projects.

Dr Adrian Robinson

I too transitioned from industry to academia; it took me a long time to work out how to do it, and I am sure I am not alone in thinking this, but it is possible to make a course engaging and participative while also being grounded in construction theory. The most effective way of working with the 'infiltration of ChatGPT' is to engage the students in critical thinking;

A unified and concerted effort is needed to address the challenges posed by the skills crisis **Tamlyn Lingham FCIOB** 

in fact, it's the only way. It requires a lot of perseverance and energy (not everyone wants to 'think' in the classroom), but the majority of students appreciate a discursive and challenging approach. Good luck, Hamza.

CIOB People 25/03 Skills crisis: why collaboration is critical in challenging times

Tamlyn Lingham FCIOB The collaborative efforts highlighted in this article, particularly the success of initiatives like the Work Ready Programme, underscore the importance

of proactive measures in addressing skill shortages and nurturing a sustainable talent pool for the future.

While the accomplishments of pilot programmes, such as the one at Pembrokeshire College, are indeed noteworthy, it's imperative to broaden our scope and reach across all regions of the UK. While rural areas have shown promise, focusing solely on them may inadvertently neglect the larger communities and urban centres where skill shortages are equally pressing.

By expanding these collaborative initiatives to encompass a nationwide approach, we can ensure equitable access to opportunities and skill development resources for individuals across diverse regions.

Additionally, fostering partnerships with employers, training providers, government agencies and local communities will be instrumental in scaling up these programmes effectively.

Ultimately, a unified and concerted effort is needed to address the challenges posed by the skills crisis, and leadership in championing collaborative solutions is pivotal in shaping a brighter future.

 Share your views on the latest industry issues by posting comments online at www.constructionmanagement.co.uk or by emailing the editor at construction-management@ atompublishing.co.uk

### CIOB People 05/04

#### Why construction courses need a revamp

Hamza Momade MCIOB, professor of construction management at Ontario's **Durham College and construction** manager at Roni Group, argued that the industry has a role to play in supporting innovation in academic courses.



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Building Sustainable Worlds

### **Construction Manager of the Year 2024**



## Marble magnificence

Galliford Try's Barry Kingscote wins Construction Manager of the Year 2024 for his expert execution of a mixed-use development in London's Marble Arch that interfaces old and new. Read the reports on our winners over the next 15 pages



Winner **Barry Kingscote, Galliford Try** 

Project: 1-4 Marble Arch Scope: Seven floors of new office space and three floors of retail behind a retained and rejuvenated facade Client: The Portman Estate Form of contract: JCT 2016, **Negotiated Two-Stage** Design & Build with Amendments Value: £64.8m

The almost pristine construction shots of 1-4 Marble Arch illustrate the success of this project: a complex development executed with impeccable technical and organisational skills in a busy central London location.

The project involved the retention of the 1920s art deco facades on the south and east elevation and the demolition of its insides, to be replaced with seven floors of offices and three levels of retail, now named One Great Cumberland Place and One Marble Arch respectively.

This required construction of a second basement level for plant and cycle parking, erection of an eightstorey steel frame and installation of 500 stone-faced precast panels to complete the facades.

For our Construction Manager of the Year Barry Kingscote, a chartered civil engineer, this project demonstrated his expertise in interface management, whether between the old and new structures, the complex temporary works and the permanent ones, the contractor at work on an adjoining scheme or the many specialist contractors.

#### **Commercial**

According to Kingscote, his temporary works strategy was one of the elements that secured the winning tender for Galliford Try. He adopted the role of temporary works coordinator to oversee four specialist designers to tackle temporary works elements including the facade retention scheme, support during basement excavation, construction sequencing, party wall support and structural movement monitoring.

Galliford Try's bid proposed alternative solutions for several elements of the work, which aimed to reduce risks and provide cost and programme benefits. These included: secant piling in lieu of sheet piling to form the new second level of basement; a buttress-piled temporary works solution in lieu of traditional props across the basement

excavation; and an alternative temporary works design to support the diaphragm wall of Marble Arch Place, the adjoining construction site.

Kingscote had a strong track record with client The Portman Estate when he started work. He had project managed the £51m construction of 1-9 Seymour Street – then The Portman Estate's largest project as a solo developer – between February 2016 and its completion in 2018.

There were, of course, surprises along the way – even with the £200,000 of investigation and opening up works instigated by Kingscote as a risk-reduction measure during the preconstruction phases. The form and variety of the existing building could only be properly assessed during demolition, leading to changes in temporary works details and connections.



Although the client owned the risks related to the retained facade, Kingscote's approach was to treat them as his own, absorbing them into design development and keeping the project on track.

This was a flagship development in a flagship location. Kingscote understood that the appearance of the site and the execution of the works was as crucial to the organisation's brand as achieving a high-quality final product.

#### **Other finalists**

Tom Arkley MCIOB Willmott Dixon Interiors, Thomas Hardy House & Dugdale Arts Centre

Clinton Wright MCIOB Featherstone, Blick Rothenberg Office Refurbishment

Scott Young Willmott Dixon Interiors, ESB Level 28



Winner
Joshua Waterman MCIOB,
Integrated Project
Delivery

Project: Battersea Power Station – Phase Two Scope: Restoration and redevelopment of Grade II\*-listed former power station Form of contract:

Construction Management

Value: £1.8m

Initially working on this iconic

redevelopment for project manager Turner & Townsend, Joshua Waterman was quickly seconded to the client, Battersea Power Station Development Company, and was identified as the best person to lead on project controls. This role expanded to include managing the design team, reporting to

shareholders and sequencing and programming of the works.

The vast project involved the restoration of the existing Grade II\*-listed structure including the dismantling and rebuilding of all four of the former power station's chimneys.

The site was redeveloped into 254 apartments, over 100 retail units including cafes, bars and restaurants and 500,000 sq ft of office space.

As the youngest member of the small, seven-strong client team, Waterman made and influenced many decisions, from switching the form of procurement to construction management from design and build – as so many risks remained at that point – to changing construction methods and programmes, to masterminding the handover schedule.



#### **High Rise Accommodation**

Sponsored by







#### Chris Warren, Willmott Dixon

**Project:** Perry Barr Regeneration Scheme Plots 8 & 9

Scope: 430 apartments in

eight blocks Client: Lendlease Construction (Europe)

Form of contract: NEC Option A

Value: £79.8m

#### **Chris Warren joined Willmott Dixon**

in 2019 to head up its Perry Barr projects, bringing with him two decades of experience in offsite construction.

For what was originally bid as in-situ concrete frame and brickwork, Warren proposed an alternative solution using various modern methods of construction (MMC) which overcame the problem of limited resources for traditional builds - and added more apartments.

Willmott Dixon's contract involved two plots, 8 and 9,

delivering 217 and 213 apartments respectively - each plot with four blocks ranging between four and six storeys.

Warren's MMC-led proposal saw the use of lightweight gauged steel frame, Corium brick slips and 700 bathroom pods.

This gave a 30% improvement in floor-to-floor cycle times and reduced the weight of the building, leading to a 70% decrease in the foundations, reducing waste and lowering the embodied carbon of the development.

The biggest technical hurdle for Warren was obtaining Fire Regulation 38 sign-off for the interfaces with the lightweight gauged steel frame.

He instructed the suppliers of the frame to undertake several offsite fire tests and employed an independent body to assess some elements.

Warren achieved practical completion for the plots two weeks and three weeks ahead of the contract programmes.



Winner **Eoin McCarthy,** JJ Rhatigan

**Project:** Abbey Place Scope: 245 apartments in two buildings

Client: Hub

Form of contract: JCT D&B 2016

with Amendments Value: £53.4m

#### The delivery of this 245-apartment

development in Abbey Wood, London, was JJ Rhatigan's first project for Hub and saw Eoin McCarthy manage the construction of two buildings, 13 and 21 storeys high.

When the project was paused due to funding issues, McCarthy used the lull to propose an alternative facade material. Rather than the specified glass reinforced concrete cladding, he suggested a more affordable aluminium lookalike.

McCarthy deployed bathroom pods to take the 349 bathrooms off the critical path. And he proposed the construction of a new Energy Centre - rather than upgrading an existing one - because it would deliver better long-term value.

Deploying digital tools to meticulously control progress and quality, he achieved early handover.

#### Other finalists

**Chris Homewood MCIOB** 

Higgins Partnerships, Hanwell Square

Paul Murray MCIOB

McAleer & Rushe, Creed Court St Paul's London

**Aaron Pearson** 

Willmott Dixon Gascoigne East Phase 2 - Block E2

Dan Royce MCIOB

Willmott Dixon, The Triloav Rotherham

**Andrew Ziadi** Bualer Developments, Central Parade



#### Low Rise Accommodation

Sponsored by







Winner Andrew Deacon. **Linear Design** & Construct

Project: Lancefield Quay Redevelopment

Scope: Reinstatement of 22 fire-damaged apartments Client: Lancefield Quay Riverside Form of contract: SBCC with

Quantities Value: £5.3m

#### Originally built in 1947 as a transit

store and converted to residential in the 1980s, Lancefield Quay on Glasgow's riverside suffered a fire in 2019 resulting in damage to 22 of the 92 apartments. Andrew Deacon managed the reinstatement of those apartments, which involved the reconstruction of the top floors of the building using timber frame.

Deacon masterminded a redesign of the scaffold to allow faster erection of the timber kits, conservatories and roofs. He also suggested a

modification to the gutter widths to prevent them overflowing and staining the walls - as had happened on the existing building.

Since 22 households were involved in this project, Deacon effectively had 22 customers to deal with. Each had to choose their kitchens. bathrooms, fixtures and fittings right down to the colour of light switch - a process that was complicated when Covid-related supply chain issues meant that some products and materials were not available. Costs for each apartment had to be individually tracked and signed off.

The replacement section had to match the existing building as closely as possible, which was sometimes a challenge. For instance, the original roof leadwork supplier no longer existed, resulting in an extensive search by Deacon and the architect to find a product close enough.

The handover process was managed on a flat-by-flat basis, with tradesmen retained for six weeks after practical completion so that any snagging could be handled quickly.



#### Winner Martin Bennett MCIOB. Willmott Dixon

Project: Caerphilly Housing Pilot Site Scope: 18 new Passivhaus standard apartments Client: Caerphilly County **Borough Council** 

Form of contract: NEC3 Option A

Value: 4.8m

#### The Caerphilly Housing Pilot

residential scheme provided the first homes to be built by the council in 20 years and the first in Wales to be built to Passivhaus standards using a light gauge steel frame system.

Martin Bennett was involved from the very earliest stages of the project which saw 18 one-bedroom apartments built across two sites in Trethomas and Trecenydd. He proposed using a light gauge steel frame system which would take the facade off the critical path, allowing internal works to start sooner.

Bennett worked with the supplier to develop a large steel-framed panel system to meet stringent Passivhaus airtightness requirements.

Education and upskilling were a vital part of Bennett's strategy, from educating the supply chain to explaining the systems to tenants.

#### Other finalists

Jon Kelly MCIOB Storey Homes, The Place Kempston

Paul Lawrence Bellway Homes, Brampton Gate

**David Noonan MCIOB** Barr Build,

Ridgeley Farmhouse Lee Rowley

Barratt Developments, B5 Central



#### Leisure & Healthcare



Value: £44m

#### Winner Ross Taylor MCIOB, Willmott Dixon

**Project:** Grove View Integrated Health Hub & Residential Scope: Health and care hub with residential development for over-55s **Client:** Central Bedfordshire Council Form of contract: JCT 2016 D&B with amendments

Ross Taylor's plan for this combined

healthcare hub and residential development in Dunstable for Central Bedfordshire Council was to set the bar high from the beginning by creating a site where everybody could do their best work.

Newcomers were inducted in a Learning Centre which doubled as a training centre for those on site and visiting students, and the canteen boasted pool and table tennis tables.

This was a project of two halves: a 6,375sq m care hub and a 98-home

development for people over 55. Taylor managed the development accordingly, assigning two different teams of staff and specialist contractors to the healthcare and residential elements. This meant that there was always a backup if one contractor got into difficulty.

Taylor's ethos is for a project to be 100% designed before it starts on site, allowing his site management teams to focus on delivering an optimum product, rather than dealing with clashes or interface details.

The healthcare hub was delivered using Willmott Dixon's predesigned Cura system, which meant that suppliers could be brought on board early.

Taylor's preparation, together with a focus on team building and appreciating each other's individualities, paid off in the delivery of the project. Bedfordshire's satisfaction is underlined by the award of another contract to Willmott Dixon.





Winner Nick Proverbs MCIOB. Willmott Dixon

Project: Harvest View

**Scope:** 80-bed halfway house for patients between leaving hospital and returning home

Client: Sandwell Metropolitan

**Borough Council** 

Form of contract: JCT 2016

with quantities Value: £12.7m

This project to provide 80 beds for

patients ready to leave hospital, but not guite ready to go home, threw up a raft of complications. Since this was a traditionally procured contract, Nick Proverbs could have left these for the client and its designer to solve, but he didn't.

Issues he tackled included proposing a new type of screed to maintain the designed floor levels, finding a bespoke lift supplier, finding an innovative solution to address concerns over loading on a boundary wall and commissioning Corian covers for sink traps.

His approach to problem solving plus his uncompromising focus on site cleanliness, operations and quality resulted in a client representative who went from sceptical to impressed over the course of the works.

### commended

**Danny Branson** Morgan Sindall Construction & Infrastructure, Marina Centre. **Great Yarmouth** 

#### Other finalists

**Simon Godfree** Kier Construction. Southern, Hythe and Dibden Memorial Hospital

Alex Heath MCIOB Willmott Dixon. All England Lawn Tennis Club -Indoor Tennis Centre

**Martin Symonds** MCIOB Kier Construction, Devizes Health

Centre



#### **Education**



Winner Jeremy Eavis FCIOB,

Project: The Marshall Building, London School of Economics Scope: New building at the university's Lincoln's Inn Fields site **Client:** London School of Economics Form of contract: GC Works (with LSE Amendments) Value: £92.4m

#### This exceptional building for the

London School of Economics (LSE) required exceptional management to deliver it. Step forward Jeremy Eavis, a Mace project director with a 41-year career in construction to draw on.

The Marshall Building is home to several departments, with a sports hall in the basement, a ground floor Great Hall, two teaching floors with six lecture theatres and seven office levels including landscaped terraces.

Its most striking element is its six internal concrete trees, 6.5m tall



with 28 branches, which form the vaults of the ceiling in the Great Hall. Eavis persuaded the client to fund a prototype of the post-tensioned tree beams before the contract was signed, allowing any issues to be ironed out.

The facade, with its multi-layered precast panels, also came under early scrutiny. As well as organising prototype panels, Eavis proposed the recommended insulation be

replaced with a non-combustible product in a rainscreen, helping with programming and fire safety. He also engineered programme and cost savings by taking the helical staircase off the critical path.

The prototypes together with early completion of three offices and one lecture theatre meant zero defects and fewer than 20 minor snags at practical completion.

#### Other finalists

**Chris Baker MCIOB** Willmott Dixon. City Campus Manchester

**Rhvs Lewis** BAM Construction, Abbey Primary School

**Darran Snarr** Kier Construction, Sunningdale SEND School

**Gavin Ward MCIOB** McAvoy Group, Merstham Park School

**Andrew Weller** Kier Construction, Elmgrove Primary School



Winner Martin Standley, **Sewell Construction** 

**Project:** Broadacre Primary School Scope: New primary school building to replace existing one and extend pupil places Client: Hull City Council/ Hull Esteem Consortium

Form of contract: Design and build

Value: £8.2m

The new Broadacre Primary School

building has boosted the school's capacity by 210 places to 630 and includes a 52-place nursery and a 10-place space for children with

autism spectrum condition (ASC), the first of its kind in Hull.

In delivering Broadacre Primary School, Martin Standley set out to make the project a learning experience for all those involved. Before starting on site, he researched ASC with a University of Hull professor and made autism awareness part of every site induction. The aim was to communicate that this project was about more than just a building.

Standley's planning and management kept the project on track. With limited access in the early stages of the programme and a tight programme, Standley resequenced some of the works. And he devised a solution to get parts of the building watertight earlier to allow fit out to begin while external blockwork was still progressing.



#### **Public**





Winner Danial Moore MCIOB, Willmott Dixon

Project: New Bedfordshire Police

**Custody Suite** 

Scope: 22 detainee cells over two wings with associated facilities and office space

**Client:** Bedfordshire Police Form of contract: NEC3 Option A

Value: £19.2m

#### Danial Moore took a deep dive into

custody suites in preparation for this project, visiting several facilities alongside his Bedfordshire Police client team to talk to the buildings' users about their experiences. The information gathered helped inform the design of the new custody suite and set the tone for Moore's total attention to detail throughout the job.

Delivered under the Scape Framework, this project was unusual in that Bedfordshire Police chose not to employ any external consultants. Instead, the client team of four - a

senior estates manager, estates manager and two facilities managers - worked directly with Moore, a decision he attributes to the trusting relationship they had developed in the precontract stage.

The new suite, which was constructed in the middle of a live police station site, consisted of 22 detainee cells in a north and south wing, a charge desk at the centre of the facility, a two-storey office space, interview rooms, exercise areas, visitor rooms and various other facilities.

A late addition to the scope of the project was a forensics grade medical inspection room, which came just 12 weeks before practical completion. The conversion of a nurse's office required multiple changes, including the upscaling of the air handing unit.

However, in liaison with the Home Office inspector, with whom Moore had also established a rapport during the pre-contract stage, the necessary products and works were procured and installed without extending the programme.



Winner Katharine Cary, Sir Robert McAlpine

Project: The Covid Memorial, St Paul's Cathedral, London Client: St Paul's Cathedral Scope: Double-height, elliptical timber portico within the cathedral, a physical memorial to all those who died due to Covid

Form of contract: JCT minor works

with contractor's design

Value: £1m

#### Although she has worked on many

heritage projects, this was Kat Cary's first job as project manager for Sir Robert McAlpine. With a micro-team of two full-time site personnel, including herself, and five part-time staff, Cary was responsible for every aspect of the project from design management and programming to managing trades on site, cost control and administering the contract.

The memorial is a double-height elliptical structure - a glulam frame clad in English oak that visitors can walk within - in the North Transept. It is the first project of its kind to be built in St Paul's for 150 years.

As well as working around cathedral activities, Cary had to adapt the design to accommodate its sloping floor. With the nation's gaze upon her, Cary delivered a quality of structure that befits its purpose.

#### Other finalists

**Rob Bell** Henry Boot Construction, Heart of the City Phase 2 -Pound's Park

**Dermot Bradley MCIOB** 

Gilbert-Ash. The National Portrait Gallery

Jason Ellam-Brown MCIOB

Portsmouth City Council. Portsmouth International Port Terminal Annexe

Alex Stace Willmott Dixon Gloucestershire Constabulary **Operations Centre** 

Andy Taylor Galliford Try, South West Water AMP7 Framework



#### Restoration





Winner Jon Brock. **Beard Construction** 

Project: St John's College Library Refurbishment Scope: Refurbishment of libraries,

including Grade I listing Client: St John's College, University of Oxford Value: £9.45m

Form of contract: Two-stage JCT standard build contract with quantities 2016

Jon Brock, who began his career aged 17 as a carpenter and is a fellow of the Institute of Carpenters, considers this project a once-in-alifetime job.

It involved the refurbishment of the Old Library and the Laudian Library at St John's College, Oxford, and the reinstatement of the Paddy Rooms beneath the Old Library, which had been lost in a 1970s conversion.

The Grade-I listed Old Library is supported by 28 structural columns, forming the historic Canterbury

Quadrangle, which had to be removed and replaced, requiring the 400-year-old building to be supported on temporary props.

Among the technical challenges overcome by Brock, and the skilled team of trades contractors he assembled, was the replacement of 44 lengths of missing decorative carved oak tracery, which would have taken longer than the 91-week programme to carve. By using CNC machines at the limit of their capability and finishing by hand, the tracery was perfectly recreated.

Brock also devised an ingenious solution for running mechanical and electrical services below the ceiling while maintaining a fire barrier between first and second floors, by safely drilling through asbestos installed between ancient oak beams in the 1970s.

Achieving the high quality required was not a challenge, says Brock, because every one of the skilled people who worked on this project cared as much as he did about it. The project came in on time and under the tender value.





Winner Mark Tregelles MCIOB. **Beard Construction** 

Project: Cleveland Pools, Bath Scope: Restoration of disused swimming pools and Grade II\* listed buildings

**Client:** Cleveland Pools Trust Form of contract: JCT Intermediate

with CD 2016 Value: £6.85m

#### This project for Cleveland Pools

Trust saw the refurbishment of Georgian swimming pools and a crescent-shaped Grade II\*-listed building after 40 years out of use.

Sandwiched between two residential buildings, the main access to site was the River Avon. Some 95% of materials, plant and waste had to travel by the river, a constraint which ruled the programming of the works, construction sequencing and day-to-day activities on site.

Tregelles managed these complex logistics with constant communication and a flexible approach. The end result is a lido with its historic elements restored and the modern-day benefits of warm showers, a refreshment kiosk and accessible facilities.

#### Other finalists

Kiran Giri BAM Construction, Plaza Redevelopment

**Wayne Gray** Messenger BCR

Group, Oxburgh Hall

**David Hartley BAM Construct** & Ventures UK Project Icon, Selfridges Birmingham

**David Mills** Sir Robert McAlpine. 80 Strand

**Nick Sturge** Sir Robert McAlpine, Elizabeth Tower Restoration



#### **Rising Star** Sponsored by PROCORE





Jessica Haskett hit the ground running when she joined Kier Group's Construction division in 2021 as a graduate design manager. She had

studied an MEng in Architectural **Engineering at Heriot-Watt** University and, while there, had led a team to victory in an international sustainability competition which saw her travelling to Dubai to oversee the installation of a zero carbon prefabricated home that her team had also designed and manufactured.

Haskett's aptitude for leadership and organisation meant that she soon moved from supporting design managers to leading design management teams for Kier Construction's London and Southern business, which she has done on four projects.

Among her standout technical achievements is managing and coordinating a fire-compliant solution for the enclosure of a six-storey atrium as part of a refurbishment project for the University of Portsmouth.

She also initiated and conducted a review of room sizes on a project for Dorset CAMHS, which showed they could be reduced while still meeting the necessary standards, saving the client £500,000.

Discovering that the Southern branch of the Chartered Institute of Building Services Engineers (CIBSE) Young Engineers Network had been disbanded, Haskett recently initiated its reformation and is now vice chair. She was nominated by her division's senior leadership team to be part of Kier's Construction Early Careers Committee, which sees her interviewing candidates and mentoring them through their first years with the company. She is a mental health first aider too.

Comments from senior colleagues and clients pay testament to Harkett's professional maturity and integrity. Ruth Wells, project manager at the University of Portsmouth, says: "Jessica is pragmatic and efficient in her approach, which is appreciated by us as a client. She is always well prepared and delivers on her promises... She is destined for great things in the future, and I hope that Kier will nurture and build on her talent."

#### Other finalists

Maddie Beech Kier Construction

Poppy Casson Willmott Dixon Interiors

**Bradley Cox** WG Carter

Juliana Maia Dobuild

Ben Mason

Mitchells & Butlers

Janika Niemela St George (part of the Berkeley Group)

**Nouman Qadir MCIOB** Quigg Golden

Jack Stevenson Kori Construction

**Vasmin** Struthers-Frost **BAM Construct UK** 

Lucy-Ann Wallace Hill Group

**Dilys White** ISG

**Ashley Williams** Pexhurst Services

#### **Team**



#### The project to build Ridgeley

Farmhouse, a striking new-build family home in Buckinghamshire, is a beautiful illustration of collaborative working at its best.

Clients Hertford and Vicky King wanted to replace two agricultural sheds with a home in two halves: one that evoked a timber-clad barn, the other which echoed an adjacent red-brick property, connected with a glazed link.

The buildings are timber framed and designed to be low carbon footprint in operation with high levels of insulation, beneficial solar gain and natural ventilation.

Barr Build, led by director David Noonan MCIOB, who was also the project contract manager, won the job through competitive tender. Hertford King - who is an experienced construction client - had already assembled a team of consultants with Jane Duncan Architects, Jane Duncan Interiors and client QS Greenway Associates.

Motivated by their client, all the companies involved were invested in achieving the best possible outcome, says Noonan. An ethos of fairness, underpinned by formal communication and project controls, meant that, when unforeseen circumstances occurred, parties worked together and compromised to overcome them.

Even before the project began on site Greenway Associates and the

Barr Build team faced budgetary challenges. A pause between contract award and start on site saw material prices inflate due to the impact of the Covid pandemic, so Barr worked to save costs through value engineering and the two companies worked together to establish robust provisional sums.

Among the issues arising during the build was a feature glazed bay window that didn't fit. Contractor and designer worked together keep the project on track, devising a solution involving additional foundations and an extended roof.

The end result is a stunning development together with a happy client, a happy architect, companies that actively want to work with each other again and a 'viable' profit margin for Barr Build.

#### **Other finalists**

Kier and York **Teaching Hospital Collaborative Team** Kier Construction

**MAB DART Team** Mitchell & Butlers

**New Victoria** Development **Project Team** VINCI Building



 Barr Build's team (clockwise from top left): David Noonan MCIOB; Adam Mullins; Chris Leigh-Cattrall; Lucy White; Tom Webb; Jon Donegan

#### Client of the Year

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#### The Ministry of Justice (MoJ) wants

to be an exemplary construction client as it delivers £3.8bn of capital works aimed to create 20,000 more prison places. Following the rules of the Construction Playbook, it is working to deliver value for money through deploying modern methods of construction, net zero carbon solutions and long-term contracting relationships.

MoJ procures projects above £30m via Crown Commercial Services using the FAC-1 Alliance and NEC4 contracts. For projects under £30m, it used the five-year Constructor Services Framework (CSF) and PPC2000 contracts.

In March 2023 it launched the fouryear CSF Framework A for projects up to £5m, which uses single source tendering with a preferred contractor, named professional services providers and MoJ representatives in each of the four MoJ regions.

On the Alliance 4 New Prisons (A4NP) programme, which will deliver four new adult male prisons, MoJ worked in preconstruction with Alliance members Mace, ISG, Wates, Kier and Laing O'Rourke to challenge the existing design. The Alliance identified 126 improvements to the typical houseblock design.

MoJ is working to improve efficiency through standardisation and modern methods of

construction (MMC). On A4NP, standardising components is driving economies of scale with targeted savings of 7%. A standardised design is also being developed for the Small Secure Houseblocks programme, using lessons learned.

MMC has been used across three programmes worth over £400m. These included prefabricated modular houseblocks and light gauge steel frame panellised houseblocks. Where buildings are being added to existing sites, moving works offsite reduces disruption to the live prisons.

By doing things differently, with collaborative forms of contract and frameworks, MoJ is driving wider changes in attitudes. Lessons learned on one programme are analysed for continuous improvement.

#### **Other finalists**

**Terence Magennis** Hammerson

Ceri Jardine Coleg Y Cymoedd in collaboration with Kier

**Richard Powell** 

Sarah McLeod Wentworth Woodhouse Preservation Trust

▲ HMP Five Wells, where Kier was main contractor





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#### **EDI Individual**







Having started her construction career as an apprentice quantity surveyor at an SME, Katy Robinson is keen to encourage others to follow her into the industry. Now a senior

project manager at East Riding of Yorkshire Council, she is working to make construction sites a more welcoming place for women and minority groups.

Robinson co-founded the Yorkshire branch of the National Association of Women in Construction (NAWIC) in February 2022. Since then, NAWIC has held over 15 school events involving over 4,600 young women from 55 different schools across Yorkshire.

Through NAWIC Yorkshire, where she is currently campaigns manager, Robinson created the School2Site programme, which gives young women the chance to visit construction sites. To date, 30 students from five schools have visited projects in Yorkshire and the scheme is now being replicated in other UK NAWIC regions.

One of the campaigns that Robinson is championing is ensuring appropriate PPE provision for women. At the council, she worked with procurement teams to make a range of PPE designed to fit women available. Through NAWIC, and in conjunction with Bold as Brass - a network for women in construction, mining, energy, highways, rail, engineering and environmental services - Robinson is spreading the message about PPE further.

Currently in her final year of studying for a degree in Construction Project Management at Sheffield Hallam University, alongside her day job, Robinson mentors undergraduates and postgraduates at the university, helping them to find placements and graduate jobs. She has also worked with multiple organisations including Women into Manufacturing and Engineering, Future Humber, Generation 4 Change, Young Entrepreneurs in Property, Primary Futures and STEM Ambassadors to encourage voung women to consider careers in construction.

Robinson is now recognised as an authoritative campaigner and authority, invited to take part in panels, conduct interviews and write articles.

#### Other finalists

**Bukola Adeove Balfour Beatty** Laura James

BakerHicks

Gurdeep Jandoo Morgan Sindall

#### **EDI Company**

Sponsored by Elecosoft



The equality, diversity and inclusion (EDI) team for BBVS joint venture -Balfour Beatty, Vinci and Systra - at HS2's Old Oak Common Station aims to go beyond legal and contractual requirements to demonstrate industry-leading practice and achievements.

The EDI programme, which began in 2020 with the project, aims to take best practice from each of the BBVS parent companies, test whether it works at Old Oak Common and then share successful measures with the HS2 Integrated Project Team (IPT) and supply chain partners.

For instance, its mental health programme drew inspiration from BEP Sellafield and saw more mental health first aiders recruited to reflect the diversity of the project's workforce.

The team has trained around 130 senior managers from BBVS, IPT and the supply chain in inclusive leadership, with training repeated every six to nine months.

It developed a RESPECT training programme aimed to train site supervisors and managers in how to engage their teams in conversations about inappropriate or unacceptable behaviours.

BBVS EDI team leader Alpa Kapasi led a workshop for over 40 tier 2 and 3 suppliers, which aimed to address the challenges in delivering and accrediting an EDI programme.

Having identified where there was under-representation, the team piloted a returner programme, in partnership with STEM Returners, aiming to bring more diversity to senior management levels. It also built a skills, employment and education strategy to open talent pathways into careers in construction to a wider variety of young people, creating a local intelligence plan to target activities and an online game to highlight careers in construction, as well as subsidising an online maths system to help identify local talent.

The Clear Company has been auditing BBVS's progress in EDI since 2020. It moved quickly through the levels of maturity: Bronze, Silver and then Gold by 2022, demonstrating the maturity of its EDI programme.

#### Other finalists

**BakerHicks** Belonging, BakerHicks

Dobuild Team, Dobuild

Women at GRAHAM. **GRAHAM** Construction

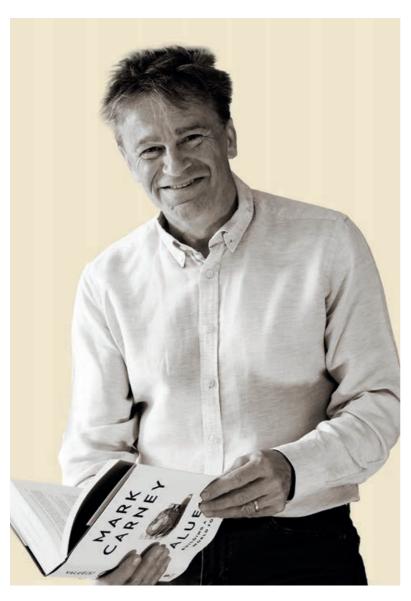
**Kier Wales Social** Value Team, Kier Construction

Women in RED & IDEA Initiative. **Red Engineering** Design



#### Sustainability







#### With a 40-year career in

construction to build on, Saul Humphrey is on a mission to embed sustainable practice into the industry. He is doing this with a multi-pronged attack: as a sustainability consultant, advising pioneering projects; as a part-time professor and academic; as a business owner who is walking the walk; and as an influencer and speaker.

Through his consultancy, which recently attained B Corp status,

Humphrey is currently advising nine projects on issues across the United Nations' 17 Sustainable Development Goals (SDGs). These include three ultrasustainable care villages for Castlemeadow Care; The Phoenix in Lewes for Human Nature (Places), a 750-home development which aims to be the greenest in Europe; and Dial Corner, an earth-sheltered dwelling which will have better than net zero emissions.

Humphrey has achieved net zero carbon for his own business, requiring a carbon offset of 11 tonnes. However, he says that his main focus is on reducing his Scope 3 emissions - that is the projects that he can influence through his input. To this end he has created a dynamic tracker across the 17 SDGs for all the projects he works on, benchmarking them against norms.

With his decades of construction experience - including 33 years with RG Carter, where he was a regional director - Humphrey is sharing his knowledge with future generations as a part-time professor, teaching sustainable construction at Anglia Ruskin University. He is also working on research projects with the University of East Anglia, the University of Suffolk and the Suffolk Sustainability Institute, and Cranfield University.

With over 25,000 followers on LinkedIn, Humphrey delivers keynote lectures and presentations and is involved with a host of academic, business, charity and construction organisations. A chartered environmentalist as well as a chartered builder, Humphrey recently joined CIOB's Sustainability Advisory Panel.

#### Other finalists

Ian Armstrong ARCO2 Architecture Rakesh Chavda VolkerFitzpatrick

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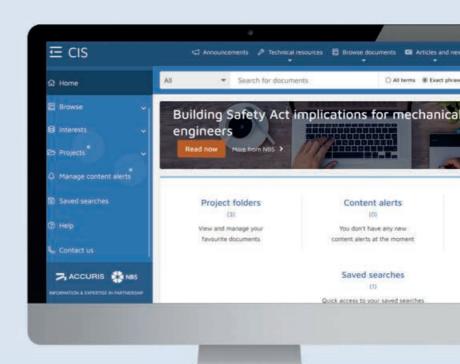
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#### **President's Award**



## Promoting change in policy and industry

CIOB president Sandi Rhys Jones chose Paul Morrell as recipient of the 2024 President's Award for his work at government and business level to encourage change and innovation in the construction industry

The CIOB President's Award is a way for us to recognise an individual who has made a significant impact on the industry, and it is my pleasure to present it to someone I have known for more than 40 years.

This recipient's professional skill and understanding of the reality of business, combined with their longstanding commitment to improving performance and raising standards through pro bono service, have had a profound impact on a challenging and complex sector.

A chartered quantity surveyor, they were formerly senior partner

Their philosophy and work chimes with the values and objectives of CIOB, demonstrated by their valued support as a client champion

and international chairman of Davis Langdon (now part of Aecom), where they had worked since graduating from the University of Reading until they retired at the end of 2007.

They were subsequently appointed as the government's first chief construction adviser in November 2009, with a brief to champion a more coordinated approach to affordable, sustainable construction.

A founding member of the British Council for Offices and commissioner at the Commission for Architecture and the Built Environment (CABE), they have long advocated for low carbon construction, better use of IT in the sector and the need for a government construction strategy.

They continue to combine analysis and practical proposals – along with their wit and humour - to promote change within both government and industry on issues ranging from the future of industrial training boards to the critical need for construction product testing to save lives.

Their philosophy and work chimes with the values and objectives of CIOB, demonstrated by their valued support as a client champion, their belief in the need for modern professionalism, their input into policy changes and, reflecting my presidential theme, the power of collaboration to challenge.

It is with great delight that I announce the recipient of the President's Award is: Paul Morrell OBE.



## oscar evo-blade ceiling trim

World-famous fashion brand, uses Oscar Evo-Blade for their global store design.

Evo-Blade transforms bulky ceilings into wafer-thin surfaces, providing dramatic shifts in height & sharp, recessed lighting features, recreating the brands established chequered design in its ceilings.

Designed & manufactured in Great Britain, the Evo-Blade works with a variety of configurations, from regular plasterboard, to acoustic sprays & plasters such as Oscar Elite & SonaSpray.

Search Oscar Evo-Blade on YouTube to find out more.

Tom D Morgan Photography.





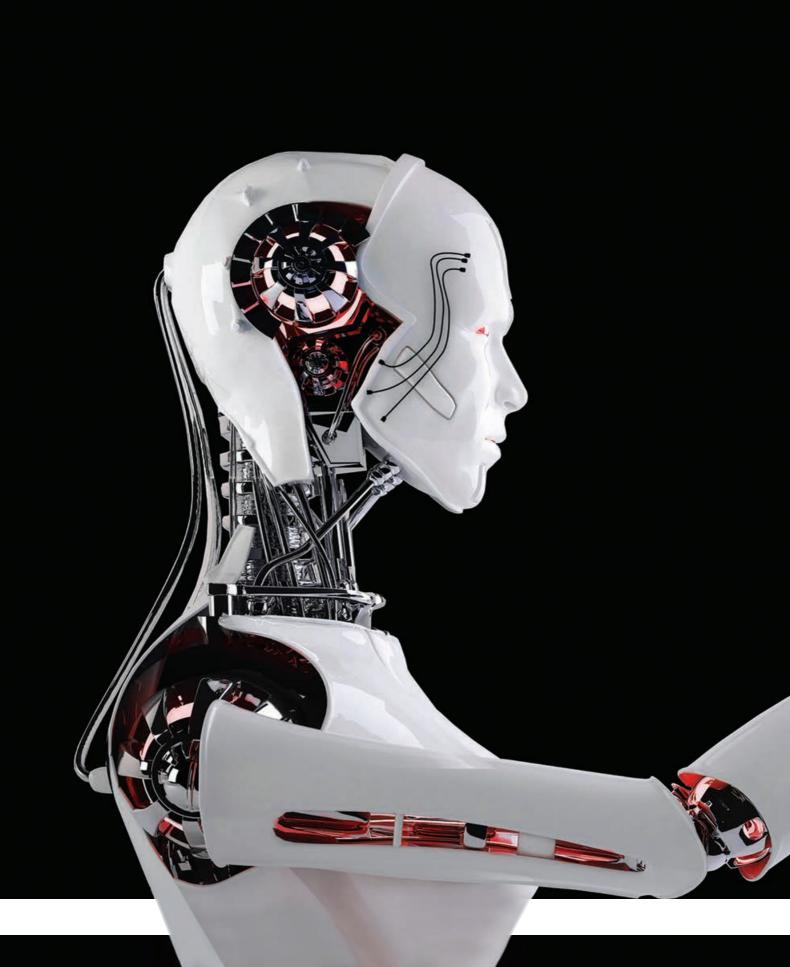














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**Judith Schulz** 



Simon Bateman

## How Arup's timber office addresses fire safety

A timber-framed industrial building designed by Arup shows that sustainability and fire safety can go hand in hand, write Judith Schulz and Simon Bateman



▲ The five-storev **Charlton WorkStack** has a CLT frame

Ithough demand for office space in UK cities is higher than before the pandemic, high rates for residential rent have been slowly forcing industry further and further out. However, this becomes unsustainable for many people who cannot afford - or don't want - to relocate.

A solution to this problem is the WorkStack: a distinctive five-storey workspace structure that uses a cross-laminated timber (CLT) frame. and is the first of its kind in this building type in the UK.

Designed by Arup, dRMM and Webb Yates for the Greenwich Enterprise Board (GEB), the WorkStack maximises sustainable material choices, enabled through a bespoke performance-based fire safety strategy. In London, the Charlton WorkStack is already used by local businesses.

#### Material choices to reduce emissions

The CLT structure uses a renewable resource, replacing traditional materials such as concrete or steel. By exposing the eye-catching timber frame, the project team also reduces the need for finishes, further reducing the embodied carbon footprint of the structure by 'building less'. This has the added benefit of enhancing occupant wellbeing, given interactions with natural materials are associated with improved mental health.

The use of timber contributes significantly to the building's A rating under the Structural Carbon Rating Scheme. The project falls 44% below the RIBA 2030 embodied carbon targets for whole life carbon, and 21% less than LETI 2030 design targets.

#### Tailored fire safety measures

Nonetheless, the choice of timber - a combustible material - came with the need for enhanced safety considerations, with fire safety fully integrated into the design of the project, from conceptualisation through construction into operation.

The fire safety strategy seen in the WorkStack is informed by Arup's history in delivering timber buildings

The project falls 44% below the RIBA 2030 embodied carbon targets for whole life carbon

The building has a tailored multi-layered fire strategy with enhanced provisions for firefighter access





There are generally three compartments per floor, subdividing the building much more than in a traditional building configuration, helping to limit fire spread

globally, alongside involvement in independent research and testing of the fire performance of mass timber.

In addition, the project team worked closely with the London Fire Brigade and regulatory authorities to develop a design approach that speaks to the building's location, specific geometry and user profiles to maximise fire safety.

The resulting fire strategy comprises multi-layered fire protection measures tailored to the WorkStack. These include a smoke ventilation system with bespoke performance criteria defined for this development, demonstrated through computational fluid dynamics (CFD) software analysis, and enhanced provisions for firefighter access to enable rapid firefighting intervention, both from the outside, and from the inside supported by a dry riser.

The design carefully considered and controlled the location and extent to which combustible materials are exposed and set stringent fire safety performance criteria for the CLT panels, the structural connections, and other systems that need to interface with the CLT panels, such as fire doors and fire dampers.

#### Large-scale testing

The arrangements in this building resemble those found in residential buildings that are internally highly subdivided, but without the sleep risk occupancy. Other commercial



and light industrial buildings typically have large open plan arrangements.

To expand knowledge of building safely with timber, Arup, in collaboration with Imperial College London and CERIB - a fire test facility in France - conducted a series of experiments, called CodeRed.

A 380 sq m size combustible test compartment representing an office

▲ The WorkStack's fire safety design considers systems that need to interface with the CLT panels, such as fire doors and fire dampers

of approximately 40 people allowed Arup to study how fires and spread in larger spaces and explore the effectiveness of protective features on fire dynamics. Arup uses these results to drive numerical modelling of the fire behaviour of exposed timber.

For Charlton WorkStack, compartments are comparatively small, as loadbearing walls separate the rental units, which are designed as separate compartments. There are generally three compartments per floor, subdividing the building much more than in a traditional building configuration, helping to limit fire spread.

External walls are encapsulated in non-combustible materials so that the loadbearing mass timber structure is used within the bounds for which its performance has been evidenced through testing and analysis. The ground floor and higherrisk plant rooms are also constructed from non-combustible materials.

Charlton WorkStack is a prototype future urban industrial building, helping to solve social challenges through imaginative architecture and multidisciplinary engineering. It is proof that sustainability and safety can go hand in hand, laying the foundations for further adoption of mass timber construction.

Judith Schulz is director for fire safety engineering and Simon Bateman is senior engineer for structural engineering at Arup.



Thomas was providing constructability support to the team building the Ontario Line, a C\$12bn (£7bn) new subway line for Metrolinx

◀ The site of Toronto's **Exhibition station** upgrade on the Lakeshore West line

> A new overpass crosses Steeles Avenue East at Milliken GO station

hen lain Thomas moved from UK to Canada in 2021, he didn't quite expect to be helping to lead the biggest expansion of a transit network in the Americas.

"My wife and I travelled the world for a year when we first met, and I'd always wanted to live abroad," he explains.

"I was working for SYSTRA in the UK, leading major project delivery. SYSTRA had acquired my previous employer, TSP Projects and, in a weekly MD's briefing, it was mentioned that in the new business there were opportunities globally, even for project managers in Canada.

"I jumped at the chance, expressing my interest in April 2021, and by August we had sold our house and were heading to Toronto to start our new lives."

With SYSTRA Canada, Thomas was initially providing constructability support to the team building the Ontario Line, a C\$12bn (£7bn) new subway line for Metrolinx with 15 new stations running 15.6km south west to north east through the downtown core out to the Ontario Science Centre.

He was also involved in the final tender stages, and the collaborative behavioural assessments, in its bid to be the programme delivery partner on the GO Expansion programme, a massive new transit project in southern Ontario.



**GO** Expansion is Metrolinx's biggest ever undertaking. and the most extensive transportation investment in the province's

history lain Thomas.

MCS

"In March 2022 we found out our joint venture - Mace, Comtech, and SYSTRA (MCS) - had been successful," Thomas says.

"Our client is Metrolinx, an agency of the Ontario provincial government created to improve the coordination and integration of all modes of transportation in the Greater Toronto and Hamilton Area.

"Estimated at C\$18bn (£10.5bn), GO Expansion is Metrolinx's biggest ever undertaking, and the most extensive transportation investment in the province's history. The final budgets associated with both the early and complementary works (E&CW) and the on-corridor works are still to be finalised."

Thomas was appointed head of projects and construction, an MCS role.

#### The Greater Golden Horseshoe Historically, transport planning

in Toronto focused on getting commuters in and out of downtown.

Now, the scope has widened to mobility across what's called the 'Greater Golden Horseshoe', a vast area wrapping around the western end of Lake Ontario, taking in cities and towns from Oshawa in the east, Barrie to the north, Guelph and Kitchener in the west, and Grimsby and Niagara Falls to the south.

Thomas jokes that he was "not the only one who fancied coming here".

From 1996 to 2021, the Horseshoe's population increased by 57%, from 6.5 million to an estimated 10.2 million.

Metrolinx's planning is for 2051, when the area's population is expected to reach 14.9 million. ▶

More than C\$11bn (£6.5bn) of early works and off-corridor projects are already underway

We're bolstering Metrolinx's processes, including systems, technology and people, so they're prepared to deliver megaprojects in the future lain Thomas, MCS

#### **Programme overview**

More than a rush hour commuter service, GO will offer more services with faster trains, more stations. and seamless connections to the regional rapid transit network.

"Regionally, Metrolinx wants all-day services with trains every 15 minutes or better," says Thomas. "They typically have higher-speed electric trains that can reach a maximum speed around 120km/h, with fast braking and acceleration to cut the time spent in stations.

"There is no precedent for the GO programme; it's unlike anything seen before in Canada."

More than C\$11bn (£6.5bn) of early works and off-corridor projects are already underway, including station improvements, grade separations, bridge and tunnel expansions and maintenance facilities.

There are also numerous improvements to the historic Toronto subway (see box, right).

The works started five years ago and will continue for 10-15 years.

#### Programme delivery role

As programme delivery partner, MCS has two main jobs, Thomas explains.

"First, we're bolstering Metrolinx's processes, including systems, technology and people, so they're prepared to deliver megaprojects in the future," he says.

"We base our approach on a 'sunset model'. This means that at the end of our contract engagement, our MCS team walk off into the sunset leaving a streamlined and experienced Metrolinx organisation to drive forward with future megaprojects. >

Demolition as Toronto's Union station is expanded





▲ Work on site at the Hazel McCallion Light Rapid Transit

#### **Toronto subway expansion**

Toronto commuters have not been forgotten and the expansion of the city's historic subway system stretches comprehension.

As well as the brand new Ontario Line, the Scarborough Subway Extension will push the Toronto Transit Commission's (TTC) Line 2 subway nearly 8km farther into Scarborough.

The Yonge North Extension will take TTC's Line 1 north from Finch Station to Vaughan, Markham and Richmond Hill, an extension of around 8km with five stations.

Mixing underground and overground, the Eglinton **Crosstown Light Rapid** Transit (LRT) scheme is a 19km-long midtown light-rail link between east and west Toronto with 25 stations. It is set to cut the time that journey takes now by 60%, with 10km of the route underground.

In the west, the Eglinton **Crosstown West Extension** 

will run 9.2km mostly underground from the future Mount Dennis LRT station to Renforth Drive, to give one LRT line from Scarborough in the east to Mississauga in the west through midtown Toronto.

**Boring machines Renny** and Rexy are currently digging the twin tunnel east along Eglinton **Avenue West toward** the Humber River.

North of that, the 18-stop, 10.3km-long Finch West LRT will run along Finch Avenue West from Keele Street to Highway 27, turning south from there to Humber College near Pearson International Airport.

Farther west, the Hazel McCallion LRT will run 18km north-south between Brampton and Mississauga.

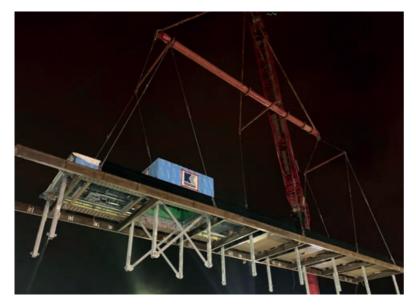
In many cases, these subway and LRT extensions will link up with regional railways serving the Horseshoe.

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Kenaidan cranes a canopy into place at night

and teams to proactively drive delivery, Thomas adds.

"It's become a global effort," he says. "To name a few tier 1s working on GO: SYSTRA and Alstom of France; Mace from the UK; Dragados, Ferrovial and Sacyr from Spain; and Deutsche Bahn from Germany.

"There is a huge opportunity for experienced expats to get involved and make a big difference.

"I have strong connections with the British Consulate, who are pushing forward with UK-Canada trade agreements and events to show the opportunities for UK firms.

"Perhaps we'll see you in the Golden Horseshoe before too long!"

"Second, we must deliver the E&CW for GO Expansion. We're the controlling mind for E&CW projects, ensuring they're on time and budget to enable the upgrades."

The team gets involved where it's needed most, says Thomas. He has been acting project director for the Lakeshore East-West grading works, an approximately C\$400m (£233m) project widening the rail corridor to accommodate four tracks instead of three.

"Every day when I wake up over the next six months or so, I'll be thinking about driving delivery of site works, and improving health, safety, and quality performance on sites," Thomas explains.

"Also on my mind is how I can coach and mentor the existing teams to improve through the rollout of Lean control boards, Last Planner (a Lean construction methodology), and other techniques.

"We also need to engage more of the wider construction industry because the sheer quantum of work here is massive. We need to widen the pool of tier 1 and 2

contractors, making sure contracts aren't too complicated for tier 2s to consider committing themselves."

#### New ways of working

GO has given Metrolinx the chance to try innovative construction techniques, such as offsite fabrication.

"One of our contractors, Kenaidan, recently built a platform canopy beside the tracks, then lifted it into place in sections over a few nights when the railway was closed," Thomas says. "It such was a much safer and quicker delivery approach with less impact on the railway and local community, as fabrication works were undertaken on dayshifts.

"Also new technologies being proactively trialled here are automatic train warning and lookout systems. Widely used on Network Rail in the UK, they improve the quantum of time available to work on the corridor."

Because of the sheer scale of the programme for Metrolinx, they need support from abroad to develop their systems, methods



We need to engage more of the wider construction industry because the sheer quantum of work here is massive lain Thomas, MCS



#### Iain Thomas CV

- Head of project and construction delivery, GO Expansion, SYSTRA, Mace and Comtech (MCS) joint venture, Toronto, 2022 to present
- Senior project manager major projects, SYSTRA Canada, 2021-22
- Programme manager major projects, SYSTRA UK, 2020-21
- Principal project manager, TSP Projects, 2019-20
- Regional operations manager, Story Contracting, 2017-18
- Project manager, VINCI Construction UK, 2008-17
- Site agent/project manager, Morgan Sindall Education, 2001-08
- University of Northampton, **BSc Construction, Economics** and Management, 1993-98

## Ensure you're compliant as a Principal Contractor

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#### **Just Stop Oil trespassers** are targeting our site. What can we do?'

This month's contract clinic question comes from a contractor worried about climate protestors disrupting the construction programme. **Steven Woolnough** looks at the legal position

#### THE QUESTION:

What can we do to tackle Just Stop Oil trespassers who are coming on to our site?

#### THE ANSWER:

The last thing you would want when arriving on site is to find the walls of your newly constructed project covered with bright orange paint and a group of protestors chained to your scaffolding. The chances are your completion date will be under threat, and there will be increased costs that you may incur.

Calls to your insurers will be required and, while it will always depend on the specific facts as they arise, your contract may be not much assistance to you, as the standard forms do not have provisions that deal with relief for trespass.

If that was not enough, then you as the contractor currently occupying the site may fall foul of the Occupiers Liability Acts of 1957 and 1984. This imposes a duty of care upon the 'occupier' (you) to all persons on the land including

trespassers to not suffer injury on the premises. Any injuries sustained on the site may become your responsibility, resulting in you having to pay out on any injury claims and potential sanctions under the Health and Safety at Work etc Act 1974.

Stop trespassers getting on site Before anyone finds their way onto your site, the advice is to ensure you stop people from entering in the first place.

A proactive starting point would be to get in touch with the local police crime prevention officer and get them to visit site and provide solutions. But in the interim, some things you should consider are:

Perimeter barriers: Erecting security fencing around the site is an effective step. Most of us are more than familiar with 'Heras' fencing by now. A perimeter fence should be at least 2m high but, depending on location, it may need to be higher. The fence needs to be difficult to climb and not have holes for hand or footholds.



Any injuries sustained on the site may become your responsibility, resulting in you having to pay out on any injury claims and potential sanctions

- Surveillance systems: CCTV cameras around the site are useful deterrents and can also provide evidence of any events that take place and measures taken to mitigate risks.
- Security guards: Having security personnel on site can be a deterrent. Depending on your site, this could either be on a visiting basis or as a continuous site presence. One thing to note is that if you are to implement this step you must ensure that for the guards there is safe access, a well-lit route, and that lone working procedures are put in place if required.
- Lighting: In addition to lighting for security staff, lighting can be used to ward off potential trespassers. Motion-activated lighting may be a suitable option.
- Storage: Construction sites are home to large plant and machinery. To stop items being used as climbing frames or go-karts, site compounds should be made large enough to store plant, materials and equipment.



Question for contract clinic? Email construction-management@atompublishing.co.uk



■ Just Stop Oil protestors march in Whitehall, London

**Employers should** ideally have requested in the scoping documents that contractors include security measures in their prices

#### **Costs for security measures**

As these measures relate to the whole site, not just one specific activity, they should be covered in the preliminaries section of your costing. Employers should ideally have requested In the scoping documents that contractors include these types of security measures in their prices. If not, as the contractor you should include what you feel is sufficient, with a narrative explaining your evaluation.

If your project is already on site and it becomes known that there is a potential security risk that was not covered in the employer's documents, and not known at the time of tendering, then it would be prudent to begin discussions with the employer on how you can provide the necessary measures to the commercial satisfaction of all parties. The potential impact of the risks of Just Stop Oil protestors materialising on your site may far outweigh the costs of any preventative steps taken.

Steven Woolnough is senior consultant at Decipher.



The majority of reed used in thatching comes from Europe

#### What are you working on at the moment?

I am in the third year of a part-time PhD, researching stakeholder conflict and its impact on the management and use of reedbeds within the UK. My family background is thatching and, while I didn't end up as a thatcher, it's a craft I find fascinating. This interest extends into the supply chain.

As a boy, a lot of my weekends were spent travelling up to How Hill in Norfolk to collect loads of reed with my dad, grandad and brother. As we got into the 1990s the number of trips decreased significantly, with us now getting reed delivered directly to the yard, with the vast majority being imported from continental Europe.

While I was completing my undergrad dissertation I discovered that UK-grown reed now accounted for only 10% of overall consumption. My appetite was whetted but at the time I wasn't in a position to take this further. Thankfully, when I started work at Solent University, my line manager was supportive of me undertaking a PhD to investigate these causes and the impact.

#### Why is this important to the UK construction industry now?

There are a variety of reasons. The vast majority of thatched buildings in the UK are listed. Historic England has a like-for-like policy when it comes to rethatching listed buildings: ie, if reed was on the roof then it needs to

#### Why thatched roofs have carbon concerns

Andy Dodson MCIOB from Solent University is researching the supply chain issues concerning reed – crucial for repairing thatched roofs. By **Nicky Roger** 



A thatched roof should be extremely sustainable however, with 90% of reed having thousands of carbon miles attached to it, it detracts from its sustainability

Andy Dodson MCIOB, **Solent University** 

be rethatched with reed. This means there is an ongoing demand for good quality reed. A thatched roof should be extremely sustainable - however, with 90% of reed having thousands of carbon miles attached to it, it really does detract from its sustainability.

Having a greater understanding of the causes of conflict will help the different stakeholder groups develop solutions to these problems, which should equate to more jobs. Over the past few years global events such as Covid, the war in Ukraine and the Houthis attacking merchant shipping in the Red Sea mean that reed prices have fluctuated significantly. A more consistent and greater UK supply will help settle the price of reed.

#### What is new about this research?

The vast majority of research to date on reedbeds has either focused on it as a habitat or ecosystem, for sewage and wider waste water treatment or for different uses for the cut reed. A lot of research does acknowledge the presence of conflict and outlined some of the causes, but there has yet to

be any in-depth research on how these conflicts are impacting on the management and use of reedbeds.

Given the age of current policy surrounding the use of UK reedbeds and requirements around stakeholder engagement for environmental land management payments, this will provide new insights.

#### How wide is the gap between research and industrial application? How important is it to maintain the links between academia and professional practice? How can we meet these challenges?

I don't believe the gap is significant but the biggest challenge is effective dissemination of research. The majority of the industry aren't reading academic journal articles or attending conferences so we need to look at how we can convey our work to those at the coal face so it can be utilised.

Academia does also need to remember that there is always an opportunity cost to trialling new ways of working and that, if it doesn't work, it can cost a company a lot of money.

It is really important to keep the links alive so we can continue to support industry solving the broad range of challenges that it is facing.

#### How has becoming an educator helped you in your career?

I came into academia after 20 years in the Royal Engineers, so the past seven years have been a bit of a whirlwind. I initially came into

#### CV: Andy Dodson **MCIOB**

- Course leader. Built Environment, Solent University, 2020-present
- Senior lecturer, Solent University, 2020-present
- Programme delivery manager, Chartered Surveyor degree apprenticeship programme, University College of Estate Management, 2019-20
- Unit leader, University College of Estate Management, 2017-19
- Clerk of works (construction), Royal Engineers. 2005-17
- Plant operator mechanic, Royal Engineers, 1997-2005
- 1996-97: Apprentice thatcher, Clive **Dodson Thatchers**

education teaching Level 3 surveying technician apprentices, prior to becoming a programme delivery manager for the Chartered Surveyor degree apprenticeship and moving to Solent University just before lockdown, as a senior lecturer.

Now I'm leading all of the construction management, quantity surveying and civil engineering courses. It's certainly provided a lot of opportunity for personal growth and development. You do have to be at the top of your game and you do need to be willing to be challenged.

It's been extremely rewarding, both in terms of educating the future of the industry as well as being a member of the trailblazer groups for both the construction site supervisor and construction site manager apprenticeship standards.

While understandably there is a lot of focus at the operational level of teaching, you have to think strategically about the future needs of the industry, how you develop your courses to meet those needs and how you position yourself in the market. If you're interested in academic membership visit ciob.org/ membership/become-a-member/



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educator.

#### **CIOB Community**



#### CIOB updates code of practice for programme management

Second edition of publication will expand on industry themes including smart technologies and sustainability

#### CIOB has updated its Code of

Practice for Programme Management in the Built Environment. This second edition has been created to reflect developments in the sector, providing alignment with contemporary industry practices, standards and regulations.

The first edition was published in 2016 and covered governance,

reporting and ethics. The updated edition ties in with emerging themes such as smart technologies, modern methods of construction, building safety, quality, sustainability, costing, procurement and project funding.

This latest version covers the latest practices and legislation to help deliver high quality and sustainable projects and programmes.



The new edition is available now

The landscape of project management continues to evolve, with a surge in larger-scale programmes, comprising numerous component projects Dr Gina Al-Talal, CIOB

Dr Gina Al-Talal, CIOB head of technical and standards development, said the update recognises the vital role of programme managers: "The landscape of project management continues to evolve, with a surge in larger-scale programmes, comprising numerous component projects, and it underscores the need for a comprehensive update to our programme management guidelines.

"We updated the Code of Practice for Programme Management in the Built Environment alongside our Code of Practice for Project Management for the Built Environment. Our commitment extends to supporting practitioners and academics alike, ensuring comprehensive guidance at every level," she said.

The code is a natural progression from the CIOB Code of Practice for Project Management for Construction and Development, which was first published in 1992 and is in its fifth edition.

To order your copy of the code visit www.ciobacademy.org.

#### Sustainability plan event for company members

CIOB's Amanda Williams will introduce its action plan

Amanda Williams, CIOB head of environmental sustainability, is set to provide an introduction to CIOB's global activities under the sustainability theme at a memberexclusive online event in June.

Williams will discuss the CIOB **Environmental Sustainability** Action Plan, which sets out goals across eight key areas: leadership and governance; membership; education; policy; marketing and communications; the Academy; client development; and operations.

She will touch on initiatives, products and services being developed to support members.

The session takes place on 19 June at 1pm. It will include an opportunity for company

members to highlight challenges and indicate support needed.

The event is exclusive to CIOB company members and prospective company members. Contact: kpercival@ciob.org. uk or visit www.eventbrite. co.uk/e/sustainability-at-ciobfor-company-members-tickets-871079902437?aff=oddtdtcreator.

▼ Maidstone Hub chair Oma Megbele MCIOB with guests including CIOB vice president Paul Gandy FCIOB and David Gower OBE

#### **Telford business wins** innovation award

CIOB company member Buildfifty5 Living recognised for sustainable practices

#### CIOB company member Buildfifty5

Living scooped a Federation of Small Business (FSB) Award for Innovation 2024, for the West Midlands.

The firm won the award for its innovative approach to procurement, sustainable building practices and customer service.

Established five years ago, Buildfifty5 Living is based at the e-Innovation Centre on the Wolverhampton University campus in Telford. The Innovation Award is presented to businesses where bold, new business models and innovative products are delivering dramatic results.

"We are thrilled and honoured to receive the FSB for Innovation in the West Midlands," said Kieran Danby, director at Buildfifty5 Living.

"Recognition for being innovative in business - not just within the construction industry – is testament to the hard work and creativity of our team, who continuously strive to be different in construction and housing delivery."

In May, the company will progress to the UK national awards in Blackpool, where it will compete with fellow award winners from across the country in other categories for the national award.

Buildfifty5 Living is actively seeking brownfield development opportunities and refurbishment sites. By repurposing underutilised land and revitalising existing structures, its mission is to create affordable, sustainable housing solutions at the heart of communities in need.



#### CIOB Student festival headline

CIOB Student Festival - the annual virtual two-day event for all CIOB student members worldwide - took place in early March.

The festival brings together students, industry experts, thought leaders and academics from diverse communities in the construction environment on a global scale.

It serves as a platform for networking. collaborative learning and gaining insights into the latest trends, developments and future careers in the construction industry. View this year's discussions at www.ciob.org/ events/studentfestival.

Kieran Danby, director of **Buildfiftv5 Living** 



#### **Hub dines out** in Maidstone

Kent's construction professionals gather for annual Maidstone dinner and awards ceremony

Maidstone Hub chair Oma Megbele MCIOB welcomed guests including CIOB vice president Paul Gandy FCIOB to this year's CIOB Maidstone Construction Professionals' Dinner.

The Marriott Tudor Park Country Club. just outside Maidstone, was the setting for this year's event.

The dinner, held in March, was attended by companies and construction professionals from across a wide range of disciplines throughout Kent and the south-east.

Magicians Rob Neal and Neil Granger provided entertainment and the after-dinner speaker was former England cricketer David Gower OBE.

The event was sponsored by BAM Construct UK, Coniston, Chartway Civil Engineers, Quigg Golden and DGA Group (part of TSA Management).

Finalists for the CIOB Maidstone **Emerging Talent and Motivational** Leader Awards were celebrated, and the results were announced during the evening (see p50 for more details).

Award sponsorship and judging came from Baxall and GVF Commercial Solutions. The event also raised over £2,600 for the Lighthouse Club in a raffle with prizes donated by companies attending the dinner.

Emerging Talent finalists with Matt Clark of GVE Commercial Solutions and Lindsey Platt MCIOB, Maidstone Tomorrow's Leaders representative

#### CEO's tour of Essex takes in best practice in the county

Caroline Gumble takes a tour of sites around Essex with the Chelmsford and Ipswich hubs



#### **CIOB CEO Caroline Gumble joined**

Chelmsford and Ipswich hubs on a multi-day tour of various site visits throughout Essex.

The first day saw a visit to a distinctive housing development from Rooff in Felsted, a trip to Colchester Institute to learn about its offer to built environment students and how it is responding to feedback from regional employers to ensure the curriculum is meeting needs, and a site visit with Rose Builders to a project delivering 440 homes working with the Building Heroes programme.

The second day of visit started at British Offsite, learning about principles from factory processes being brought into improving built environment processes.

The next visit was to Limebrook Primary School and Nursery in Maldon to talk to some of the Morgan Sindall team about its sustainability initiatives and work on public sector projects. Among the many innovations is an 'immersive learning programme' which uses VR to deliver health and safety training.

The final visit took the CEO and Hub team to the Anglia Ruskin University campus in Chelmsford. This included the retrofit training workshop, run with the New Model Institute for Technology and Engineering (NMITE), and included a presentation by Human Nature outlining its plan for The Phoenix in Lewes, which aims to deliver the "largest timber neighbourhood" with "radical affordability".

Caroline Gumble (third from right) at Felsted's Rooff development

**Among** the many innovations is an 'immersive learning programme' which uses VR to deliver health and safety training



**CIOB Maidstone** awards celebrate talent and motivation

Dinner recognises industry entrants and leaders

The Maidstone Hub committee and

Tomorrow's Leaders announced the winners of the Maidstone 2024 **Emerging Talent and Motivational** Leader Awards at their recent Construction Professionals' Dinner.

The awards celebrate the new talent coming through the industry, together with those leaders who inspire, motivate and encourage it.

Shannon Park, assistant quantity surveyor at Kier, won the Emerging Talent Award. Matt Clark, director at Award sponsor GVE Commercial Solutions, presented her trophy.

Highly Commended awards were presented to Holly Falzon, management trainee at Willmott Dixon, and Oliver Noctor, commercial apprentice at Baxall.

The Motivational Leader Award, awarded in memory of Maidstone Hub committee member Steve Turner FCIOB, went to Helen Rowe MCIOB, highway structures and tunnels asset manager at Kent County Council. Malcolm Clarke, MD at Baxall, and Carol Turner, wife of Steve, presented her trophy.

Lyndsey Cann FCIOB, design manager at Invvu Construction Consultants, received the Highly Commended award.



#### 'Al won't take your job, but the people who know how to utilise it might'

Collaborative Conversations brought a group of experts together to discuss Al

#### Construction professionals in the

West Midlands learned at an event in March how the industry is exploiting machine learning and Al solutions.

Collaborative Conversations West Midlands - Exploring Al Solutions, a cross-institute event with a diverse panel, was chaired by Gbenga Oludotun, MMC lead at Systra UK & Ireland. The panel included Harrison O'Hara, BAM UK & Ireland head of

From left: Aleksander Gil, Mar 7umaquero Gomez, Euan Mills, Harrison O'Hara, Gbenga Oludotun

advancing technology and innovation, who shared the company's strategies for leveraging AI technology.

Aleksander Gil, founding director at Parametrix, talked through the cutting-edge concepts around teaching a machine how to understand a building, with a case study on Queen's House, Greenwich.

Mar Zumaquero Gomez, global director and innovation management at Arcadis, showed Al in action through case studies in contract management. design data automation and sustainability-driven revenue streams.

Finally, Euan Mills, urban designer, digital planning advisor and co-founder of Blocktype, offered a live demonstration of Al's practical applications - working out the site capacity, viability and policy implications for a site in Birmingham.

Following a lively Q&A, the panel was asked for one takeaway point. The most pivotal was: "Al won't take your job, but the people who know how to utilise Al might."

#### NEWS IN BRIEF

Students impress at North East Hub challenge A record 13 teams competed for the North East Hub 2024 Student Challenge this year.

Teams from Hartlepool College, Middlesbrough College, Gateshead College, New College Durham and Home Group acted as contractor on a modular extension to a special academy for pupils with severe learning difficulties, navigating challenges around planning, biodiversity and social value.

The winners were Home Group Apprentices: Amin Rohman, Matthew Mason, Latoya Stapleton, Amariah Lawal, Rachel Vu and Laura Nkomo. Hartlepool College was highly commended. Gateshead College won Best Innovate Idea. Scarlett Freeman of Middlesbrough College won Best Leader.

#### Northampton Hub tackles contract administration

Navigating contract administration was the focus of a recent event held by the Northampton Hub, with expert speakers from Driver Trett.

In The Perfect Storm - Contract Administration, Mark Reeves MCIOB, Simon Cowan and Alistair Cull tackled issues from the view of both contractor and subcontractor.

They discussed administration of a framework contract, with tender negotiations, incorporation of main contract terms, instructions, weather delay and damages.

#### **Norwich Hub looks into** the Building Safety Act

The legal and insurance ramifications of 2022's Building Safety Act were up for discussion at a recent Norwich Hub event.

Colin Jones from HCR Hewitsons took attendees through the

legal aspects, highlighting the act's profound impact on the construction sector.

Jason Baston and Paddy Synnott from Miller Insurance examined the impact on insurance and risk management, focusing on financial lines insurance markets.

#### **Nottingham Hub tours** Cawarden reclamation yard **Nottingham Hub members** attended a site visit to Cawarden

Reclamation, one of the UK's largest building reclamation yards.

Attendees were given a tour, witnessing timber and stonecutting equipment and Cawarden's sustainable biomass and solar facilities, powering all onsite forklift trucks, offices and showrooms.

Cawarden's Lydia Parrott spoke on the benefits of reusing bricks, with some very thought-provoking carbon emission data.

#### One to watch

#### Maddie Beech

Quantity surveyor, Kier Construction Southern



#### What made you choose construction as a career choice? What else might you have done?

I didn't know what I wanted to do when I left school, so I travelled and worked in various roles, eventually falling into an admin role at a main contractor. After working with a team of quantity surveyors, I knew this was something I was interested in and I was eventually supported through the degree programme. I moved to Kier Construction and have since completed my degree and have been promoted to quantity surveyor and commercial lead on a local framework.

#### What are your ambitions for vour career?

The sky's the limit! I plan to keep challenging myself and pushing myself to take the next steps in my career with no cap in sight. I also have huge ambitions for our industry as a whole and aim to be a part of the positive, tangible change on the horizon to make construction an industry for everyone.

#### You are very active in TL. Why, and what does it deliver for you?

I've met the most wonderful and inspiring people - my network has vastly expanded thanks to the events I've helped to organise and attended. It is important to keep learning and developing yourself while you are working and to be able to shape these events and opportunities for others is a real privilege.

#### What do you do in your spare time? I love being creative and channel this

through a lot of DIY projects doing up my house, I'm hoping to take on a fixer upper soon to really test my DIY and design skills. I love the satisfaction of completing a project and I'm in the perfect industry to get the best tips and tricks.

# As you develop, so does your career

Whether you're a student or a seasoned professional, prepare for every step of your career journey with the best breadth of courses in construction.

Here are just a handful of our courses that can help boost your career:

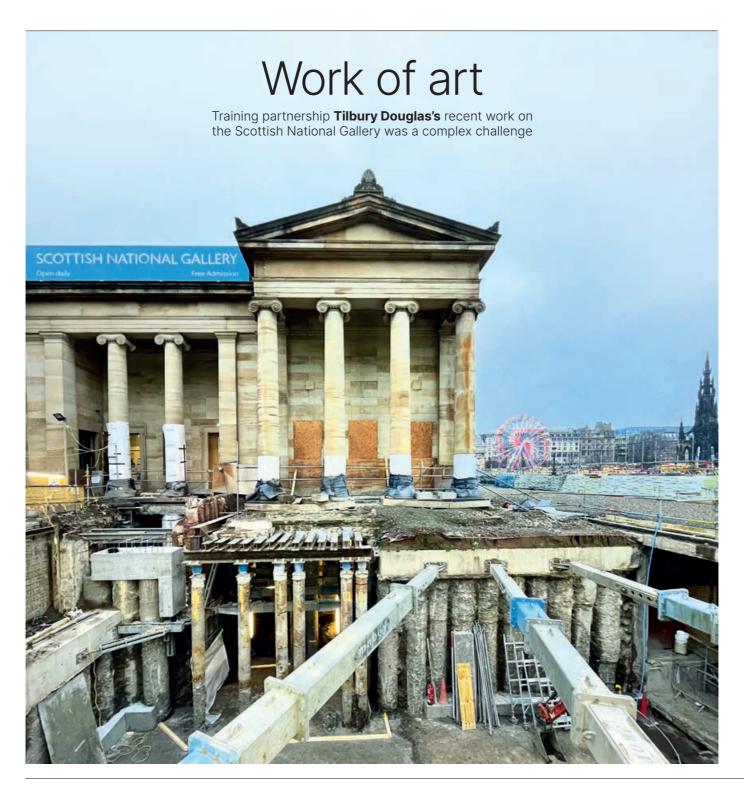
- Certificate in Site Management
- Chartered Membership Programme and Professional Review
- CIOB Level 6 Certificate in Fire Safety in Construction
- CIOB Level 6 Diploma in Building Safety Management

Learn from industry leaders at the CIOB Academy. ciobacademy.org









## 4.50

While up to 4,500 tourists visited the Galleries daily, the Tilbury Douglas team was tunnelling, contiguous piling, hydraulic jacking, mini piling, deconstructing and soil nailing

#### Sitting in a World Heritage Site in

the heart of Edinburgh, adjacent to Princes Street Gardens, the Scottish National Gallery (SNG) is A-listed and one of the most visited tourist destinations in the city.

Recently, while up to 4,500 tourists visited the galleries daily, the Tilbury Douglas team was tunnelling, contiguous piling, hydraulic jacking, mini piling, deconstructing and soil nailing, making the safety of the building and the public a primary concern. And, in what has been described as one of the most complex engineering projects undertaken in a heritage building in Scotland, being located above railway tunnels only added to the challenge.

#### Delivering our client's vision

The outcome has transformed the building to provide world-class facilities for the innovative display of the Scottish Art Collection. The main objectives were to increase the physical display space, improve circulation areas, entrances and amenities, and enhance the general flow and comfort of visitors. Access is now available to the Scottish Art Collection directly from the gardens.

The project manager was Stuart Burgess, and regional director Barry O'Hagan FCIOB was heavily involved in the latter half of the project. Our works included extensive remodelling of the embankments and constructing new sandstone steps and paths, and soft landscaping. Over an eight-week period, we moved over 1,200 HGVs across the Mound Precinct – one of the busiest live pedestrian areas of Edinburgh.

The key project vision of improved circulation within the gallery could not have been realised without creating a tunnel under the South Portico. Our team developed bespoke temporary

Bored piles support the vertical load

▼ New facades have improved the visitors' experience

The gallery can now be accessed from the gardens works solutions that allowed the 6m deep excavation of the link tunnel directly under the listed porticos to progress safely while evidencing that movement, vibration and masonry strain did not damage the historic fabric.

Needle beams were installed by drilling horizontal cores through the 1850s foundations before pressure grouting. Bored piles were installed to support the vertical load of the structure and retain the adjacent ground under large surcharge loads from the listed portico facade.

Hydraulic jacks were used to provide a safe and controlled load transfer between temporary and





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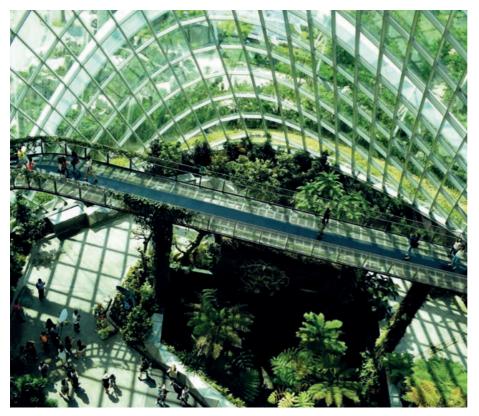
permanent works. By modelling thousands of points of data, we were able to quickly predict differential movements or strains. Low vibration demolition techniques recognised the sensitivity of the building. The complex tunnelling excavation works were successfully completed with no adverse movement.

To protect the priceless exhibits, we worked with specialist partners to develop a dust extract scheme which utilised proprietary equipment to comply with exacting criteria agreed with the gallery's advisers.

Work included rebuilding facades to improve the visitors' experience. The new elevation to Princes Street Gardens East improves views from and towards the galleries and emulates a solid, traditional masonry wall rather than a veneer of cladding. External areas, including the Spanish War memorial and the iconic Playfair Walkway, both listed, have been restored using materials sympathetic to the history of the building.

#### Collaborating with stakeholders

The location and nature of the works demanded proactive collaboration with a large number of client bodies and stakeholders. These included City of Edinburgh Council and the organisers of the Winter Festival and the Fringe Festival, Network Rail whose tunnels leading to Waverley Station are located immediately below – and thousands of runners taking part in the Edinburgh Marathon who ran through our site.



### Show your net zero worth

How to get involved with CIOB's virtual sustainability conference

One of the key dates for the CIOB calendar

is our new sustainability conference, coming up on 4 September 2024. We will be holding the event through our online platform, gathering delegates from across the world.

Our inaugural conference, Accelerating Towards a Net Zero Built Environment, will gather policymakers, sector leaders, professionals, contractors and clients to hold discussions around the industry's targets, innovations and the challenges to overcome to achieve our net zero target for 2050.

Our new app, CIOB Connect, will provide plenty of opportunities for attendees to ask questions and get involved in the discussions held throughout the day.

#### **Exploring sustainable construction**

CIOB head of sustainability Amanda Williams and incoming CIOB president Mike Kagioglou will bring together discussions on all methods of becoming a net zero industry, including biodiversity, the circular economy, retrofit and more.

Sponsoring one of the sessions at CIOB's sustainability conference is a perfect way to raise the profile of your organisation - putting you at the heart of an important conversation

We'll also be taking the time to cover the climate crisis, the impact this will have on the future of construction and how we mitigate against the change in climate and severe weather.

We have drawn together expert speakers from across the globe to share stories, sustainable practices and insights, enabling delegates to make informed decisions in workplaces and projects to help tackle the crisis. As the conference is online, attendees from all over the world can gain access to all of this valuable content.

#### Participating in the conversations

If your organisation has a specific interest and is keen to support the movement towards net zero, there is an opportunity to sponsor or exhibit at the conference.

Some of the activities available are:

- presenting a sponsor case study;
- providing expert opinions to our roundtable discussions;
- hosting a session; and
- exhibiting your brand at the conference.

Sponsoring one of the sessions at CIOB's sustainability conference is a perfect way to raise the profile of your organisation - putting you at the heart of an important conversation and demonstrating an alignment with the CIOB values of professionalism and excellence to those who are working in the sector.

Further details can be found at: www.ciob.org/events/acceleratingtowards-a-net-zero-builtenvironment-870906473707. For more information about sponsorship, please visit: www.ciob.org/sponsorships.

## CIOB People

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Apprenticeships
Social Value
Wellbeing
Learning & Training
Employee Engagement
HR Tech
Maternity & Paternity

Leadership
Flexible Working
Tomorrow's Leaders



#### **Diary dates**

Highlights of the CIOB Calendar for the coming month

#### The Future of Heritage **Conservation conference**

▶ 9 May, 9am-4pm, London CIOB's annual heritage conference, in partnership with English Heritage, brings you the latest in conservation, redevelopment and expert thought leadership, and addresses key topics affecting the heritage sector.

The conference traditionally welcomes a variety of attendees, and comprises talks, discussion panels and case study presentations with plenty of opportunity for delegates in the audience to participate in the discussions.

Register: www.ciob.org/events

#### The Misconceptions of the **Skills Gap in Construction**

▶ 14 May, 5.30-7.30pm, London Join an outstanding panel as they explore the possible 'misconceptions' of the skills gap in construction and find out what needs to be done to address it.

They will discuss the challenges and solutions to connect skilled people with the right employers. If you're an employer, join us to identify and retain the right people. If you're an employee, find out how to make yourself stand out.

On the panel will be: Christine Gausden (panel chair), University College of Estate Management; Kashyap Shah, former student, University of Westminster; Shams Ali, apprentice site manager, Berkeley Group; Karina Stamburska, head of contracts and operations, Salter Grange; and Susan Szyszko, director of talent development and inclusion, Mace Group. Contact: glovell@ciob.org.uk

#### Site Visit No 1 to Guildford Crescent project, Cardiff

≥ 21 May, 4-6pm, Cardiff This 31-storey residential project is going to be a landmark building on the Cardiff skyline: it will be the tallest building in the city and the second tallest in Wales - and the UK's tallest precast structure.

This is a unique opportunity to view the project from start to finish, with four visits planned at critical stages in the process. This first visit will view the first floor transfer deck which completes the 'onsite' part of the programme and marks the beginning of the next 29 floors of precast construction.

The project will provide 30 floors of private residential housing with a level 27 communal terrace and ground floor amenity areas, and will feature the rebuilding of Guildford Crescent to replicate the facade demolished, which will be replaced with new retail outlets.

The building will be constructed using modern methods of construction (MMC), with 29 floors of offsite-constructed superstructure delivered to the site fully finished - with windows, plenums/grilles and services installed at the factory in Ireland. Contact: vcoxon@ciob.org.uk

#### Northern Ireland Hub **Annual Dinner 2024**

▶ 24 May, 7-11.30pm, Belfast The CIOB Northern Ireland Hub Committee is delighted to announce its 2024 Annual Dinner on Friday 24 May at the Hilton Hotel Belfast, offering an opportunity to network with the leaders of the Northern Ireland construction sector.

Entertainment is provided by comedian Paddy McDonnell, with John Campbell – economics and business editor at BBC Northern Ireland - acting as MC.

Tickets cost £995 for a table of 10, or £100pp for individuals. Contact: assist@ciob.org.uk

#### CIOB and CE site visit: **Schwarzman Centre for** the Humanities

▶ 4 June, 5-6.30pm, Oxford Laing O'Rourke is delivering the Schwarzman Centre for the Humanities at the Radcliffe Observatory Quarter for the University of Oxford. The visit will start with a short presentation.

Delivered using MMC and featuring box-in-box acoustic spaces to Passivhaus standards, it will be the first new building within the university which will be open to the wider community.

Together with academic facilities, the centre will include performance and public engagement spaces - with a 500-seat concert hall, a 250-seat theatre and film screening area, as well as the Bate Collection of Musical Instruments.

Contact: ecatalano@ciob.org.uk

For a full list of events and to register visit www.ciob.org/events.



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