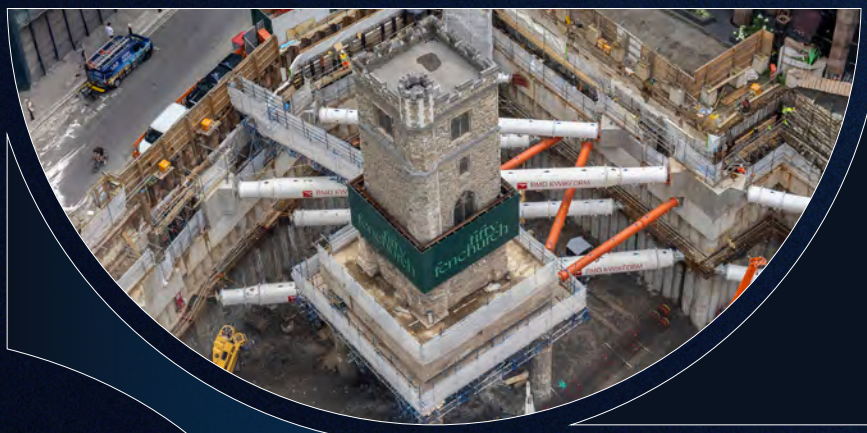


keltbray

Celebrating 50 years





50 years of Engineering Excellence

Keltbray 50th Aniversary


50 years of
Engineeri
Excellence

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Introduction



As Keltbray reaches its fiftieth year, it's a natural moment to pause and take stock. What began in 1976 as a small, focused operation has evolved into a business capable of delivering some of the UK's most complex engineering and construction work. That evolution didn't happen overnight, nor did it happen by chance. It's the result of consistent effort, sound judgement and the collective commitment of many people over many years.

The projects featured in this book tell part of that story. They represent technical challenges overcome, partnerships built, and environments transformed. Each project reflects a point in time where the organisation had to adapt, learn and raise its standards. In doing so, they have shaped not only the places we've worked in, but the company itself.

50 years of Engineering Excellence is an acknowledgement of that journey. Not a celebration of grand moments, but a record of steady progress – of the professionalism, discipline and problem solving that have defined Keltbray's approach from the start.

As the sole shareholder, I take pride in what has been achieved and remain clear eyed about the responsibility ahead. The next fifty years will demand the same qualities that carried us through the first: resilience, good decision making and a willingness to keep improving.

Thank you to everyone who has contributed to this story so far. I hope this book serves as a reminder of how far we've come – and of the foundations we continue to build on.

Brendan Kerr

Fifty Fenchurch Street

A foundation challenge unlike anything else in the City of London

| 2023 |

What does it look like when heritage preservation meets modernity?

Fifty Fenchurch Street was one of the most iconic projects we delivered, preserving the medieval Tower of All Hallows Staining, a Grade I listed building.

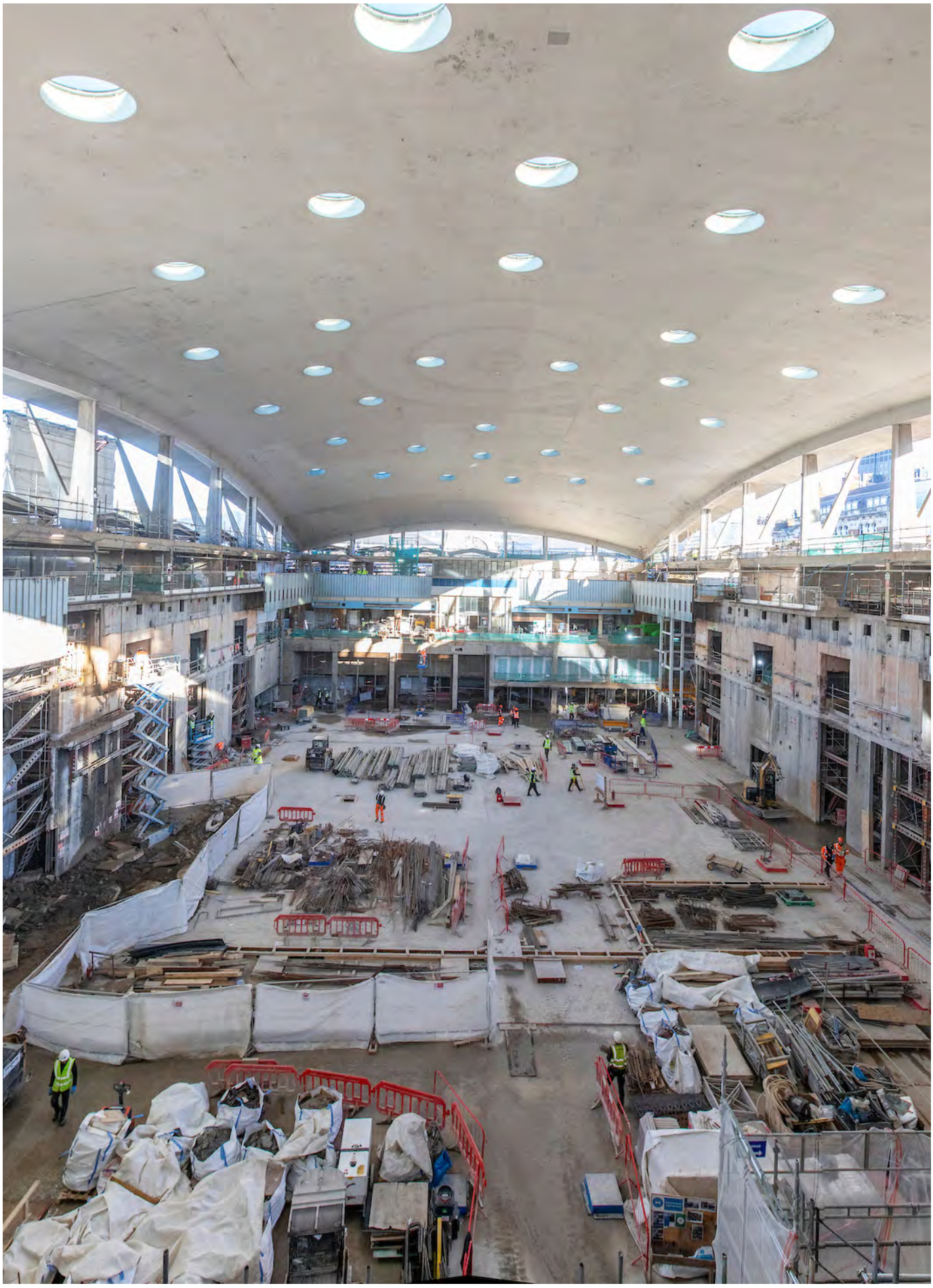
Working with Wentworth, the project involved the safe removal of existing buildings, with zero waste sent to landfill, followed by a complex basement excavation.

The final scheme will be one of the largest and greenest buildings in the City of London, providing 62,000 square metres of flexible office space. The Tower will also be open to the public, adding to the City's cultural attractions.

"*Maintaining the integrity of the historic Church Tower while excavating and constructing a four storey basement beneath it, all supported on just four plunge columns, made Fifty Fenchurch Street one of the most technically demanding and standout engineering projects we had delivered.*"

– Harvey White, Keltbray Project Manager


fifty
fenchurch
Keltbray RM
AXA Investment Managers
PART OF BNP PARIBAS GROUP
YardNine
RMD KWIKF
Keltbray



London Museum

What happens when one of London's most famous museums moves house?

| 2021 |

Transforming the historic Smithfield Markets into the new London Museum pushed Keltbray into the heart of one of London's most sensitive heritage sites, where every wall held a story and every discovery demanded precision.

Working alongside Wentworth, the team navigated fragile Victorian structures, unearthed long-sealed vaults and tracks, and carried out delicate structural manoeuvres – including the dramatic rescue of a historic chimney breast through a bespoke engineered lift.

"A project of this nature requires everybody to work as a team. Keltbray, alongside our Design Team were co-located in an on site office, enabling close collaboration and ensuring the Museum's quality, cost and programme goals were achieved."

– Joe Martin, Construction Director – London Museum

HS2: Curzon Street

Shaping Birmingham's future: the impact of HS2 Curzon Street

| 2023 |

Curzon Street will shape Birmingham for generations – a new HS2 station is set to transform Eastside, Digbeth and connect the city to the future. Working with Wentworth, Keltbray's role has focused on the foundations: enabling works, secant piling, the capping beam, and installing more than 2,000 piles across a vast and busy 50,000 m² city-centre site.

Working in such a dense urban environment brought real pressure. To keep the project moving, the team planned every step, using phased delivery, specialist techniques and digital tools to reduce disruption and improve quality.

"What makes me proud of working at Curzon Street is being part of a project that will transform Birmingham City Centre for generations, which is hugely rewarding. I'm also proud of the team and how we delivered such complex work in a safe, sustainable and collaborative way."

– Daniel Thomas, Project Manager, Keltbray

Curzon Street reflects the best of who we are: people working together to deliver complex, sustainable infrastructure that will improve everyday lives and help build a better Birmingham.





1 Undershaft

Reimagining a City landmark from the bottom up

| 2024 |

Demolishing a 118-metre tower in the heart of the Square Mile is challenging enough. Doing it bottom-up, on a building whose floors are hung from giant transfer structures at the top and mid-levels, turns it into one of the most complex demolition puzzles the City has ever seen.

Why Bottom-Up? Because the Building Left Us No Choice.

1 Undershaft's unique hung-floor design – where levels are suspended from enormous trusses at the top and mid-levels rather than supported from the ground – turned the tower into a structural riddle. What was daring architecture in the 1960s had become a barrier to modern compliance. And it meant that conventional demolition methods simply weren't possible. To unpick the tower safely, Keltbray had to reverse-engineer its entire load path.

Rebuilding the Tower Before Bringing It Down

Before a single major section could be removed, the team installed 600 tonnes of new steel, floor by floor, to create a new spine that would carry the loads once the original trusses were taken out of action. Essentially, Keltbray had to rebuild the tower's structure so it could be demolished.

The scale of this temporary works system:

- 10 km of steel props installed within the frame
- 20,000 sqm of scaffolding wrapping the structure
- Plant weighing up to 25 tonnes operating hundreds of feet above the street

Asbestos removal, soft strip and structural demolition all formed part of the package, but the engineering challenge defined the project.

A Landmark Making Way for a New Landmark

Once complete, the site will welcome One London – an architectural successor that will become the tallest building in the City of London, complete with a 2,500 sqm public gallery suspended high above the skyline.

HS2: The Viaducts

Balsall Common, Marsh Farm and River Blythe

| 2022 |

Encompassing three major viaducts – Balsall Common, Marsh Farm and River Blythe – our HS2 BBV SL2b FRC Viaducts scheme is a standout delivery.

The Balsall Common Viaduct, 425 metres long and 10 metres high, carries two HS2 tracks over Bayley's Brook and Truggist Lane. Constructed using precast T-beams with an in-situ reinforced concrete deck, it is supported by 13 piers and abutments on piled foundations, with spans of 25 metres.

The Marsh Farm Viaduct extends 141 metres and also employs precast T-beams with an in-situ reinforced concrete deck. It is supported on piers and abutments with piled foundations, featuring spans ranging from 19.75 to 25.75 metres.

The River Blythe Viaduct, 487 metres long, is built with precast I-beams and an in-situ reinforced concrete deck. Supported by 19 piers and two abutments on piled foundations, its spans vary between 23.5 and 25.2 metres.

The teams overcame the challenges of working in a remote environment, developing and applying bespoke solutions for each situation, demonstrating creativity, collaboration and technical expertise.

What we've achieved to date?

We have cast all 35 piers on the River Blythe and Balsall Common viaducts, completed the Marsh Farm Viaduct, installed 400 precast T-shaped concrete beams, placed 2,000 tonnes of rebar and poured 6,000 m^3 of concrete, as well as commenced installation of 800 architecturally designed parapets.

We are proud to see the project progressing, driven by our integrated approach and expert team.









HS2 C1 Shafts

Delivering deep shaft structures in Buckinghamshire

| 2023 |

Keltbray delivered the reinforced concrete works for five HS2 C1 Shafts in Buckinghamshire, taking on the challenge of constructing complex structures reaching 65 metres below ground in tightly constrained conditions.

The programme centred on installing deep base plugs and large tunnel interface collars, which stabilised the diaphragm walls and created safe passage for the TBMs while allowing for future tunnel breakthrough.

To manage programme and logistical risk, Keltbray used slipform construction for the main shafts, operating 24/7 to maintain certainty. This approach ensured steady progress in an environment where delays could have major knock on effects.

With expertise, collaboration and precise execution, Keltbray delivered a technically demanding scope on a nationally significant infrastructure project, ensuring the works were completed safely and to a highest standard.

Emirates Stadium

Laying the foundations for a new home in football

| 2005 |

Keltbray had the pleasure of contributing to the revitalisation of the Emirates Stadium, a venue of real significance for the UK. As part of the early works, our team delivered the enabling and substructure package across a large brownfield and part industrial site in Highbury.

This included extensive site clearance and the removal of contaminated soil and asbestos affected ground – essential steps to ensure the land was safe, stable and ready for construction to begin.

Supporting the formation of a venue that stands as one of the city's most recognisable sporting spaces, and continues to bring people together, is a milestone that we are truly proud of.


EMIRATES STADIUM
Emirates
EMIRATES STADIUM
Gates C - K
East & North Entrance
North Bank Bridge
Arsenal Museum
Gates A - B, M - S
South & West Entrance
The Armoury Shop
Holloway Road
(Closed on Match days)
CCTV in operation
This scheme is controlled by the Arsenal Football Club for further information contact 020 7704 4539



Battersea Power Station

The rebirth of a forgotten icon

| 2015 |

The famous Battersea Power Station has always occupied a place in the public imagination. An architectural icon of British modernism, the power station was once responsible for supplying a fifth of London's electricity, before sitting unused for years and eventually becoming the heart of a major regeneration scheme.

Keltbray supported several phases of the project, from demolition and piling to complex concrete works.

"*Reviving this landmark required technical skill, close collaboration and a deep respect for its history. It was a privilege to be part of something so significant.*"

– Oliver Long, Operations Director, Keltbray

Today, Battersea Power Station has evolved into a dynamic riverside quarter, where homes, offices, shops and cultural spaces coexist within its restored brick walls, embracing London's modern life while preserving its architectural treasures.

Sellafield

Setting the ground at Sellafield

| 2023 |

Working inside the secure perimeter of Sellafield, Keltbray delivered the first phase of enabling works for the ILW East Zone, preparing the ground for future developments.

We established secure boundaries, fencing and wheel wash systems to meet strict environmental and safety expectations. We then moved into excavation, drainage works, new access routes and extensive ducting, supported by temporary surface water controls and essential infrastructure.

Operating in a High Security Nuclear Environment influenced every stage of delivery. Each activity required rigorous planning, assessment and formal authorisation, with daily coordination alongside the client's security and health physics teams to ensure plant, people and materials moved safely through controlled zones and radiological clearance systems.

According to David Sloyan, Keltbray's Regional Director of Major Infrastructure "***The successful delivery of ILW Major Earthworks & Drainage Package epitomised true collaboration from a team committed to safe delivery and best for project decision making***".

This collaborative approach kept the programme steady, created a strong platform for what comes next, and we are looking forward to seeing this project progress.


FLANNERY
FLANNERY
FLANNERY



Tower of London

A space worthy for the Crown Jewels

| 1991 |

In the early 1990s, the Tower of London faced a new challenge: to create a secure, world-class home for the Crown Jewels within the historic Waterloo Barracks. The solution had to combine high security with heritage sensitivity and an exceptional visitor experience.

Keltbray was entrusted with structural alterations to enable this transformation. Our team delivered enabling works that safeguarded the building's integrity while accommodating modern requirements for security and visitor flow.

Every detail, from load-bearing stability for heavy display cases to the integration of moving walkways, was designed to blend advanced systems with historic architecture.

The Jewel House opened in March 1994, offering visitors a unique experience of Britain's Crown Jewels in a setting that marries history with innovation.

Keltbray's contributions to this project were recognised at a royal reception, where we received a commemorative medallion, a proud symbol of trust and achievement.

Windsor Castle

From ruin to renewal at Windsor Castle

| 1992 |

On 20th November 1992, Windsor Castle faced one of its greatest challenges. A fire tore through the historic building, destroying centuries of craftsmanship and leaving St George's Hall in ruins.

Following our successful work at the Tower of London, Keltbray was among the first to be called upon to support the restoration. Our role was to stabilise and safeguard the damaged structures, working closely with conservation architects and specialist craftspeople.

We facilitated the creation of the Lantern Lobby and prepared St George's Hall for its magnificent hammer-beam roof, crafted from English oak using traditional methods.

Guided by a philosophy of balance, honouring the past while embracing the future, we delivered temporary works and sequencing that set new benchmarks for heritage projects.




Newham

Olympic Stadium

Building the groundwork for a national icon

| 2007 |

Delivering the foundations for the Olympic Stadium is a defining achievement for Keltbray.

We played a central role in developing the new stadium, working as part of the successful team led by Sir Robert McAlpine on a project that lasted more than four years.

The scope of works covered reduced level excavation, new foundations, deep drainage and extensive service duct installation, together with access roads, public avenues, river outfall works, delivered across three stages. Close collaboration with the wider project team and specialist contractors ensured steady progress on a complex and high profile scheme.

The Olympic Stadium development reflects the strength of coordinated delivery and the impact of skilled teams working together to realise a national landmark.

1 Victoria Street

A closed-loop breakthrough

| 2024 |

1 Victoria Street proved that large-scale circularity isn't just possible, but commercially and environmentally transformative.

At a point where less than 1% of construction glass is typically recycled back into new glass products, the project challenged us to rethink how materials travel through a building's lifecycle.

Working with Saint-Gobain, we pioneered closed-loop glass recycling, carefully dismantling nearly 1,820 windows and recovering more than 110 tonnes of high-quality cullet. Instead of being downcycled or lost to landfill, this glass was remanufactured into new architectural products, preserving material value and cutting carbon at every stage.

But the story didn't end with glass. From thousands of floor tiles to fixtures, fittings and furniture, more than 50,000 items were rehomed with charities, community groups and schools – proving that circular thinking can deliver both environmental and social value.

For Keltbray, 1 Victoria Street wasn't about making a statement – it was about doing the right thing. The project taught us to look harder for value in the materials we work with, to collaborate more openly, and to learn from the communities who benefit from these choices. It reminded us that progress often starts with small, practical steps – and that meaningful change comes from staying curious, committed and willing to do things differently.


06


mace
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keltbray

Salisbury Square

A new era for the City of London Police

| 2022 |

Set to become the new home of the City of London Police, Salisbury Square is one of those projects that will leave a lasting legacy for everyone involved.

Known for its scale and premium location, this £600 million development remains one of Keltbray's largest undertakings to date. The project comprises an 18 metre deep basement, substructure and superstructure, covering an area four times the size of St. Paul's Cathedral.

With completion scheduled for early 2027, we are proud to be playing a defining role in the future of the City of London.

"*Few projects match the impressive scale and technical ambition of Salisbury Square. Its complexity has brought out the very best of our integrated teams, proving what true collaboration and expertise can achieve.*"

– Anthony Walsh, Operations Director, Keltbray

Chesham Data Centre

Building the foundations for a new digital hub

| 2022 |

Set on a challenging brownfield site, Chesham Data Centre required a thoughtfully designed foundation before any digital infrastructure could be built.

Keltbray delivered the full enabling and foundations package, establishing a stable platform for the new facility. Works included a 250 metre contiguous piled wall, a 70 metre sheet piled perimeter and 80,000m³ of bulk excavation, supported by a combined temporary and permanent propping system.

The team installed 1,200 CFA piles, around 150 pile caps and two tower crane bases, along with all permanent drainage, ducting and underground tanks. The result was a safe, structurally robust platform delivered to programme.





Ferrybridge Power Station

Controlled collapse at an industrial scale

| 2018 |

The demolition of Ferrybridge ‘C’ Power Station was one of the most dramatic controlled blowdowns in Keltbray’s history.

As Principal Contractor and Principal Designer, we brought down two 198-metre chimneys, the main boiler house and the bunker bay in a single, precisely engineered event across a vast 700-acre site. The team tackled complex challenges – from major asbestos removal to heavy steel demolition and hyperbolic cooling tower removal – while managing air quality, vibration, dust and hazardous materials with rigorous environmental controls.

More than 250,000 tonnes of concrete and brick were crushed and reused on site, setting a benchmark for sustainable industrial decommissioning. Ferrybridge became a defining moment for Keltbray, showcasing our ability to plan, control and safely execute one of the UK’s largest and most complex blowdowns.

“*Ferrybridge pushed us to the limits of what controlled demolition can achieve. It was precision, teamwork and trust on a scale few projects ever demand – and a moment our people will never forget*.”

– Project Director, Keltbray

2 Aldermanbury Square

Precision at the City's edge

| 2022 |

At 2 Aldermanbury Square, Keltbray took on one of our most intricate engineering challenges: separating the 20-storey City Tower from its neighbour using hydro-demolition – a precise, low-vibration technique that cut through concrete while protecting the original reinforcement.

In the tight confines of London Wall, this delicate operation proved our ability to deliver complex work with absolute control in sensitive urban environments.

Along the way, the team recovered 1,800 tonnes of steel, repurposed 22,000 floor tiles, and earned two City of London Gold Awards for care and collaboration.




Pacific Green
Storage

Richborough Energy Park

Supporting the UK's energy transition

| 2023 |

Richborough Energy Park is a blueprint for sustainable engineering at scale. Designed to support solar, wind and battery storage development, it highlights our abilities to apply complex engineering and strategic delivery to decarbonisation.

Keltbray was appointed by Pacific Green on a design-and-build contract to deliver a Battery Energy Storage System (BESS) with an instantaneous power output of 249MW and a nominal energy capacity of 375MWh. Connected to the National Grid at 400kV, the scope includes full design, procurement, installation, construction, commissioning and testing.

The embedded low-carbon thinking across this programme drives long-term value for our stakeholders, our customers and the communities we serve. The scale and ambition of this Battery Energy Storage System reflect our approach to delivering infrastructure that is resilient and purpose-built to accelerate decarbonisation, advancing the UK's energy transition.

Heathrow

Delivering infrastructure in a busy aviation environment

| 2025 |

Being involved in work at one of the largest and busiest airports in the country is a significant achievement.

For Heathrow Airport, Keltbray has delivered a series of essential infrastructure packages across airside and landside areas, including pavement renewals, drainage upgrades, stand improvements and enabling works that help maintain the airport's capacity.

Working in a live, high security environment brought clear challenges. Our teams operated within tight night time possession windows, coordinating closely with operational teams to ensure no impact on aircraft movements or passenger services. By combining specialist engineering with our self delivery capability, we maintained programme certainty and met the rigorous quality standards expected in an international aviation setting.

Heathrow Airport showcases our ability to deliver major works in demanding conditions - we are pleased to be part of a project that will contribute to the UK's ongoing story.


Flight Connections
Terminal 2
via stairs
Lifts
Team Heathrow
Keltbray


CHURCHILL WAR ROOMS
Automatic doors

The Old War Office

Preserving Churchill's historic War Office

| 2015 |

The Old War Office in Whitehall is one of London's most significant government buildings, the place where much of Britain's World War II strategy was coordinated and where Winston Churchill once had his office.

Any intervention required a careful balance between essential remediation and the preservation of a Grade II listed Edwardian landmark. Keltbray delivered a year long programme beginning with the soft strip of fixtures and fittings across the 54,000 m² building, followed by full asbestos removal carried out while maintaining the character of the 1,000 room structure.

Working closely with English Heritage, the team preserved 75% of the original mosaic and terrazzo flooring. To protect the building fabric, Keltbray developed pilot enclosures for approval and used the quilling method to remove insulation beneath encapsulated paintwork, safeguarding the original brick walls in the basement corridors.

The team delivered the works safely and sensitively, ensuring that once the redevelopment is complete, Churchill's office will remain accessible to the public, a tangible connection to the building's past.

The Oval

Retaining a London landmark

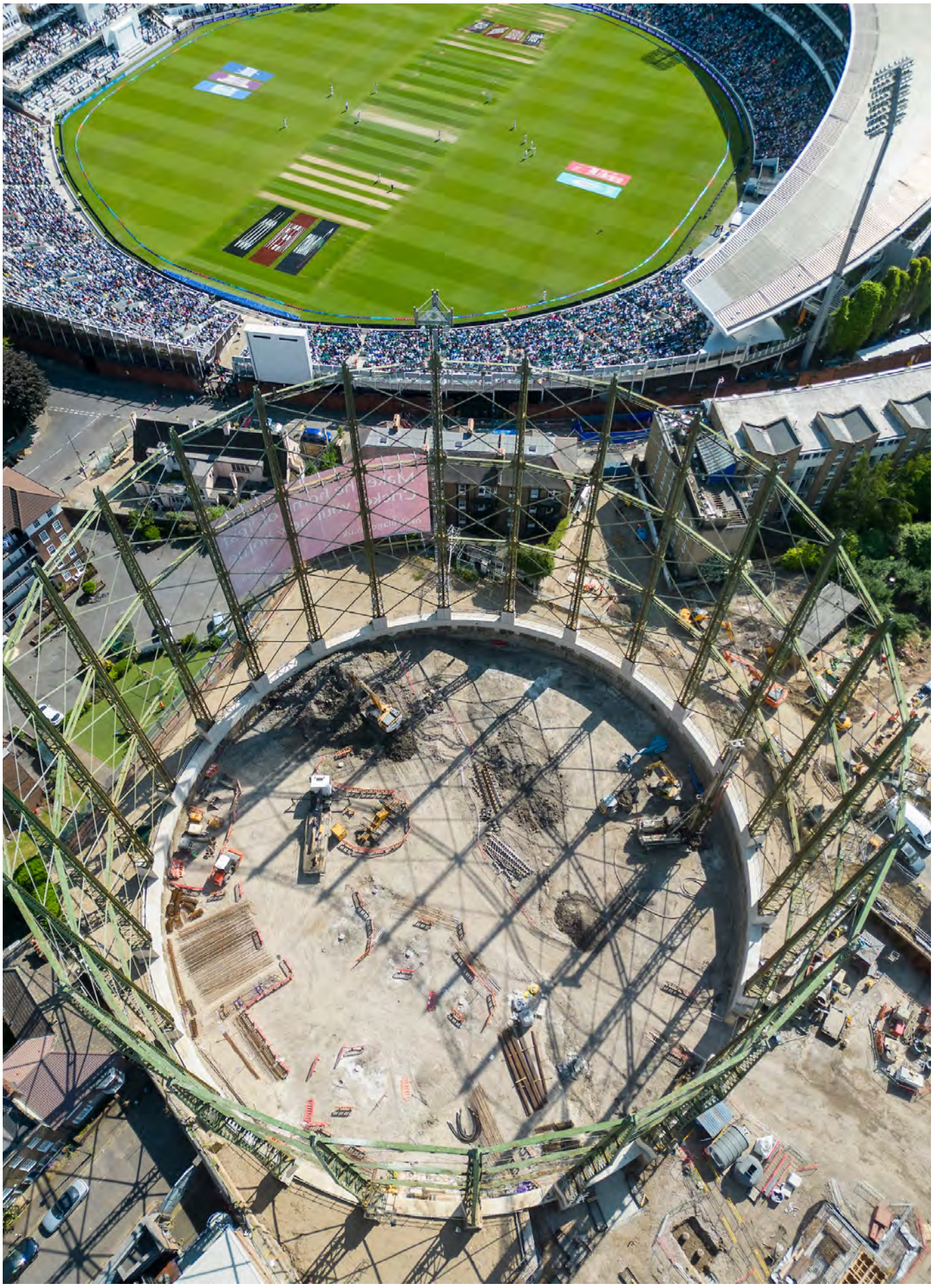
| 2022 |

Oval Village transformed a two hectare former gasworks in Kennington into a new neighbourhood of more than 700 homes, with Gasholder No.1 retained as its Grade II listed centrepiece. The fragile wrought iron frame guided the engineering approach from the start.

Wentworth, Keltbray's in-house engineering consultancy, was engaged several years before construction to develop the retention strategy. The team carried out structural assessments under wind loading, set out the temporary works sequencing, and designed the jacking system required to transfer the frame's weight during the tank wall reduction and new capping beam construction.

Rather than dismantling the structure, Wentworth designed reusable support towers needled through the future capping beam position to the existing tank wall. This in situ solution protected the listed frame and maintained a stable load path throughout the works.

Oval Village is now complete, with the retained gasholder standing as a defining landmark for the community.





London Bridge Station

Rebuilding London's oldest station

| 2013 |

London Bridge Station, first opened in 1836 and used by 55 million people a year, had long outgrown its original design. Even after the upgrades delivered around the Shard, the station still remained crowded and poorly connected.

Between 2013 and 2017, Keltbray and Wentworth worked with Network Rail on the sequential demolition of the existing station (formed of mansory arches) . Each phase operated as a mini project, moving from demolition and track protection to the handover of new operational platforms within tight timeframes.

Our works included asbestos removal, soft strip, structural demolition, façade retention, temporary works, arch demolition & retention, ground works and piling mat installation. We also removed the roof structure and part of the concourse to enable the new track systems. In total, more than 200,000 tonnes of brick, concrete and fill were taken out, the equivalent of over 40 Olympic sized swimming pools.

The station stayed open throughout, relying on tight coordination to keep critical workers safe and disruption low. A transformation delivered in constant motion, marking a decisive upgrade to one of London's busiest gateways.

Earls Court

Dismantling one of London's most iconic exhibition centres

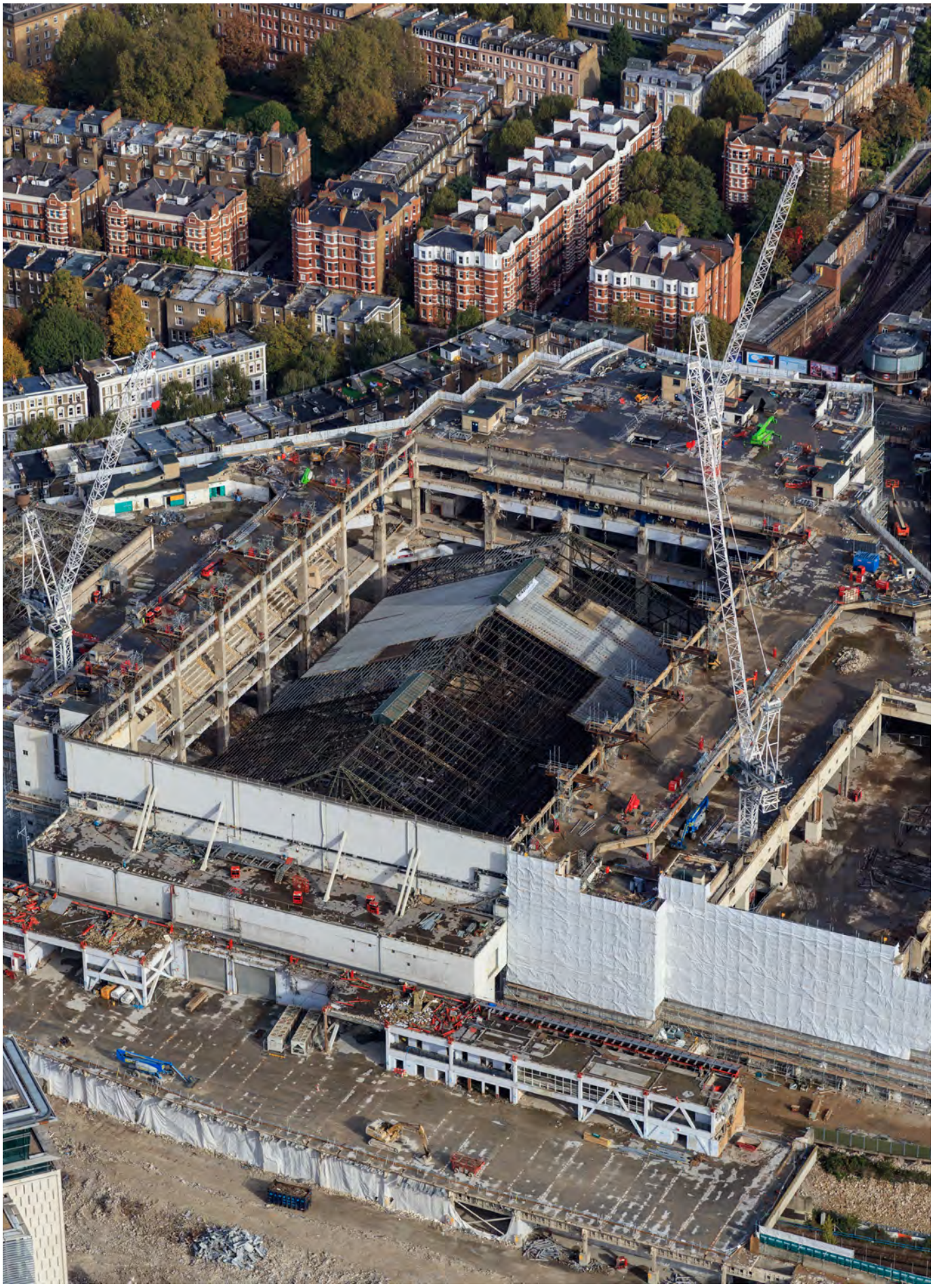
| 2014 |

Earls Court wasn't a straightforward demolition. The vast exhibition hall sat directly above six live Underground tunnels, turning the work into a complex piece of urban engineering.

As principal contractor, Keltbray managed everything from hazardous materials to heavy lifting. The scale was extraordinary: a 126 metre roof weighing 1,700 tonnes and portal beams exceeding 1,000 tonnes.

The most challenging phase involved removing 61 portal beams above active rail lines. By lifting each one from a single position, we significantly accelerated the programme and reduced disruption.

Earls Court was a revolutionary project that changed how we approach lifting.




8 Bishopsgate
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ROAD CLOSED
ROAD CLOSED

8 Bishopsgate

Engineering ambition above a live city

| 2017 |

8 Bishopsgate began with a bold idea: replace two ageing office towers with a new 50 storey landmark in one of London's most constrained urban settings.

Keltbray was tasked with laying the foundations for that transformation, delivering demolition, enabling works, piling, basement construction and reinforced concrete structures with accuracy and control.

The team worked within tight boundaries and live city infrastructure, dismantling the existing buildings while maintaining essential services. Every step demanded coordination, creativity and trust across disciplines.

"*What we delivered at Bishopsgate goes far beyond structures and sequences; it reflects the determination and ingenuity of a team committed to raising the bar. It's a project we'll look back on with real pride for years to come.*"

– Keltbray Project Manager

Western Yards

Building a skyscraper in one of London's most most high-profile locations

| 2024 |

Planned as a fifty-storey residential tower adjacent to Blackfriars train station, the Western Yards project exemplifies how we are left a lasting legacy on London's skyline.

Keltbray was responsible for delivering the concrete frame, steel elements, slabs and perimeter columns, while managing the logistical complexities of central London.

Every site activity and delivery was carefully coordinated to maintain schedules, maximise efficiency and minimise waste. A standout innovation on the project was the M-Tech Rig: a hybrid technology that combines jump core and slip form systems, still rarely used in the UK.

The scheme also carried ambitious sustainability goals: zero-diesel construction with a fully electric self-climbing jump form system; low-carbon PT strand; and significant circular economy benefits through material reuse.

Sustainable, precise and forward-thinking, we are proud to have been part of Western Yards, a development set to become a true London landmark.





Blackfriars (Thameslink)

How do you transform one of London's busiest transport hubs while keeping business as usual?

| 2009 |

Blackfriars is one of those places that never pauses: trains, commuters and the Thames all moving in constant rhythm. Transforming the station as part of the Thameslink Programme meant doubling capacity and modernising connections, all while keeping that movement alive.

Keltbray and Wentworth worked on both sides of the river, removing the old roof, platforms and major steelwork on the North Side. To the South, we dismantled the brick arch approaches to Blackfriars Bridge in stages, keeping the remaining arches stable and the live lines running just metres away.

Keeping the station operational needed night and weekend works, advanced 3D modelling for approvals, and creative logistics. But the result couldn't make us prouder, a real impact on the thousands of people who use the station every day.

Euston Station - Maria Fidelis

Proving the Power of HIPER Pile

| 2021 |

HIPER® Pile Integration marked the first full-scale deployment of Keltbray's HIPER® pile technology, combining foundation, energy generation and reusability in a single system. Delivered for the HS2 Euston Station Welfare Building, the scheme saw Keltbray appointed as specialist contractor alongside Wentworth as structural engineer, designing and constructing a piled raft foundation supported by 40 no. 900mm diameter HIPER® piles beneath a 600mm thick concrete slab.

The hollow, impressed piles reduced concrete volumes by 41% and delivered an overall embodied carbon saving of 35% compared with a conventional solution. Each pile acted as a ground source heat exchanger, safely integrating thermal loops within the central void and eliminating construction risk to services. Manufactured both in situ and offsite, and installed within a highly constrained site over sensitive live infrastructure, the project demonstrated the successful integration of pioneering low carbon technology on a major UK infrastructure scheme, setting a benchmark for future foundation and energy systems.


HA15 RTJ PRO
Keltbray



Lostock

Engineering the transition to a cleaner future

| 2023 |

The Lostock Sustainable Energy Plant in Cheshire marks a significant step towards the UK's carbon-neutral targets. Designed to process 600,000 tonnes of waste annually, the facility will generate 60MW of electricity, enough to power roughly 125,000 homes, while creating hundreds of jobs and reducing reliance on landfill and fossil fuels.

Keltbray managed the structural steelworks package for the main boiler house. This included the installation of the de-aerator framing, hopper deck, firewall, and fire floor.

Our approach prioritised logistical efficiency. By reducing reliance on heavy craneage, we freed up vital resources for the concurrent installation of the boiler and plant, significantly optimising the site's workflow. This methodology accelerated the delivery programme and earned commendation for safety, quality, and management excellence.

Hammersmith

Engineering a new West London

| 1988 |

"*Decades later, I still look back on this project with pride: a blueprint for complex urban deconstruction and a transformation that helped build our reputation.*"

– Project Manager, Keltbray

Hammersmith was a Keltbray's first-ever retained façade project back in 1988. Alongside the façade retention, we also carried out the demolition and enabling works.

The ambition was to deliver a state of the art shopping centre integrated with a major transport hub, a pioneering move at the time, requiring us to balance high risk structural engineering with the sensitivity of local heritage.

When the Hammersmith Broadway complex finally opened in 1994, the identity of the area was redefined, becoming the modern district it is today.





Silvertown Tunnel

Complex Piling for London's new river crossing

| 2021 |

Piling & Tunnel Boring formed a critical early phase of Transport for London's new river crossing, designed to relieve congestion at Blackwall and strengthen East London's road network.

Appointed by Riverlinx CJV, Keltbray delivered the complex piling works on the Silvertown side, constructing foundations across four zones including the launch and retrieval chambers that enabled the tunnel boring machine to pass beneath the Thames and return to its launch point.

At the heart of the works was the construction of the launch chamber, formed from interconnected shafts and large counterfort structures built using overlapping 2.2m-diameter piles excavated under polymer.

These technically demanding operations required bespoke temporary works, specialist lifting solutions and tightly controlled concreting logistics. Delivered beneath live infrastructure and within restricted headroom, the works demonstrated Keltbray's capability in high-risk, high-precision environments and played a pivotal role in the successful delivery of one of London's most significant new transport assets.

Woolgate Exchange

When engineering meets sustainability

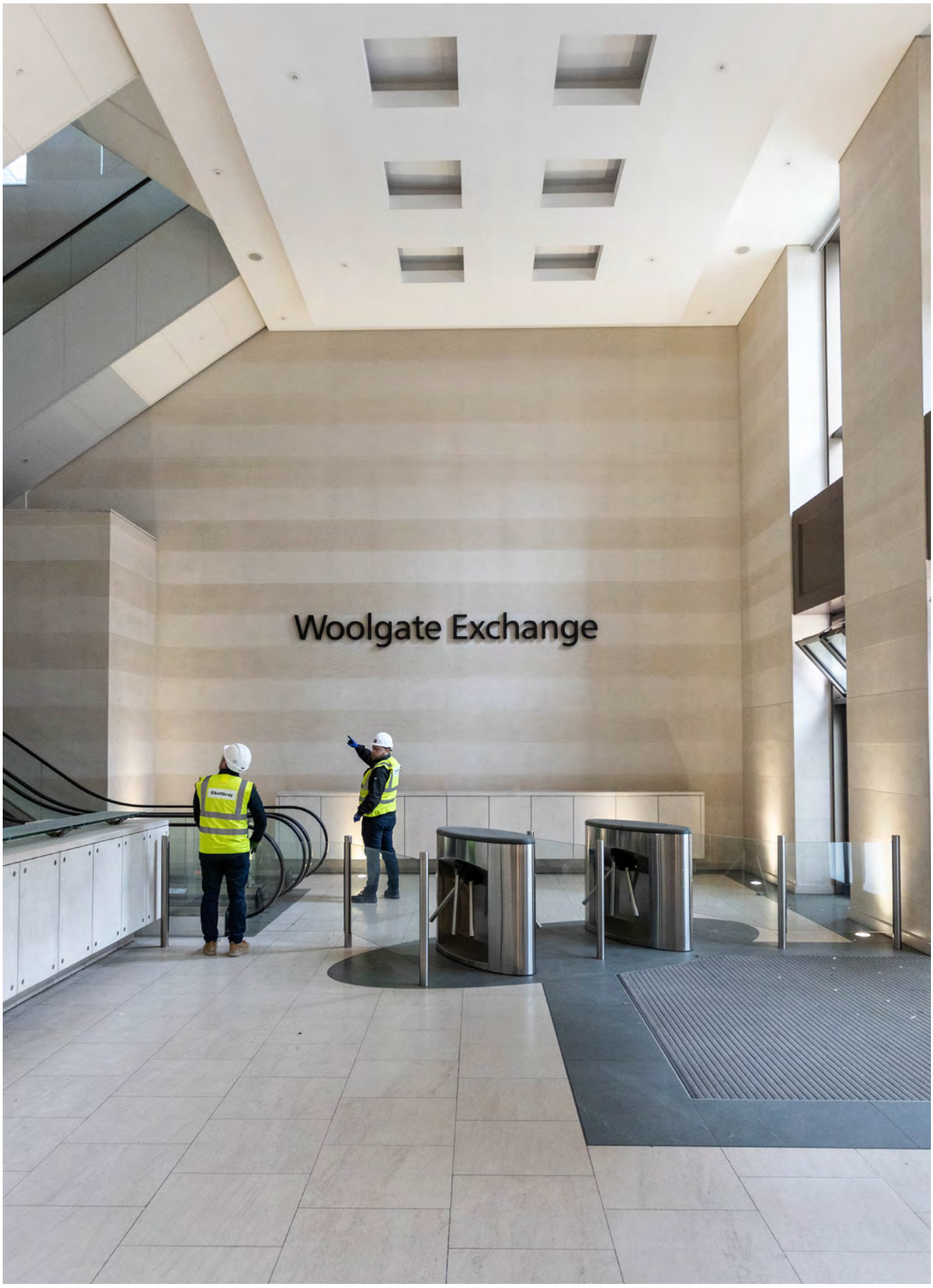
| 2022 |

In the heart of the City of London, behind the preserved façade of Woolgate Exchange, Keltbray undertook the challenge of stripping out and enabling works for the nine-storey building.

Sustainability was a key part of the project: over 100 operatives removed more than 3,000 tonnes of material without sending a single kilogram to landfill. Every item was recycled or reused, with significant portions repurposed through circular economy partnerships. Carpet tiles were donated to charities such as Hawa Trust to furnish schools and hospitals abroad, while raised access flooring was salvaged for neighbouring projects, saving thousands of kilograms of carbon emissions.

Limited vertical transport meant operations were extended out of hours, supported by strict maintenance regimes to keep lifts running. At the same time, evolving design requirements demanded close collaboration with architects and engineers to maintain progress – which required creative solutions.

Woolgate Exchange was more than an enabling works project; it highlights how sustainability and engineering can work together, making a positive impact far beyond the city.


Woolgate Exchange


COFFEE & JU CE
Keltbray

334 Oxford Street

Delivering groundworks on one of London's busiest streets

| 2023 |

For the landmark redevelopment at 334 Oxford Street, Keltbray delivered a complex groundworks package right in the heart of London's retail district.

Our integrated approach ensured seamless coordination across deep rotary bored piling and secant wall construction, the installation of plunge columns for basement access and spoil removal, bulk excavation and basement formation, foundation strengthening and temporary works, as well as providing guidance on the selection of low carbon construction materials.

Working within a tightly constrained site also required careful logistics planning and disciplined sequencing, ensuring plant movements and deliveries were managed efficiently without disrupting the surrounding streets and businesses.

76–78 Upper Ground

Transforming South Bank

| 2022 |

76–78 Upper Ground was reimagined from IBM's former London headquarters into a contemporary commercial building. The completed scheme expanded the building from 200,000 sq ft to 300,000 sq ft, delivering modern office space with retail and an enhanced public realm on London's South Bank.

Keltbray delivered complex enabling, demolition and superstructure works within an exceptionally constrained setting. Innovative temporary works and over 300 new mini piles enabled major structural change while protecting historic fabric, and extensive material reuse achieved embodied carbon savings of more than 210,000 $kgCO_2e$.

Close collaboration with the local authority, community and the National Theatre ensured minimal disruption and a successful, sustainable transformation.





150 Bishopsgate

Engineering efficiency through innovative temporary works design

I 2015 I

Delivering the substructure for a 43 storey tower in the middle of London meant working in one of the city's most constrained environments, surrounded by live transport, power infrastructure and major roads.

Keltbray formed the basement from the capping beam to B4, supported by a temporary deck and carefully managed basement works in line with strict monitoring requirements.

The defining challenge was the temporary works. Working alongside the client, Wentworth designed an innovative approach that allowed the permanent slabs to carry temporary loads during excavation. By configuring them to act as overlapping beams, Wentworth provided the stiffness needed to control movement without relying on sacrificial works.

With a large opening required for the core, the design kept the structure stable and the programme efficient. Stuart Vaughan, Wentworth's Director, says - *"The design of the top-down propping slabs in the temporary condition was complicated by folding slabs and complex perimeter geometry. Wentworth's analysis and design delivered efficient slab configurations within ground movement limitations. This geo-structural engineering was delivered in parallel with the re-framing and structural alteration of the masonry/timber/steel Devonshire Row buildings as part of the same project".*

NHS Nightingale Hospital Car Park

Built at speed, delivered with purpose

| 2020 |

When the country called, we answered – without hesitation. In March 2020, as COVID-19 tightened its grip on the UK, Keltbray was asked to help create one of the unseen but essential structures behind the NHS Nightingale Hospital at London's ExCeL centre: a 2,000-space car park for the staff who would be working around the clock.

Within a day of receiving the call, our teams and machinery were on site. By day three, the first 200 spaces were ready. By the end of the first week, 1,000 more. In just two weeks, the full car park network stood completed—built in partnership with Lendlease, Wilson James and the Royal Engineers, and delivered at cost as part of the national effort.

The work itself demanded speed, adaptability and collective resolve. Twenty of our people, supported by excavators, dumpers, rollers and dozers, cleared vegetation, built haul roads and shaped the ground into something purposeful. Just as the world was changing daily, so too did the guidance we worked under – requiring new safety measures, new distancing practices and new ways of looking after one another. Welfare Hire's Eco units and lighting towers helped us create safer, smarter working environments at a time when every precaution mattered.

Looking back, the project was more than a car park. It was a reminder of what we can achieve together, under pressure, with shared purpose. And though the Nightingale Hospital itself was a symbol of national resilience, the quiet work around it told its own story of care, courage and contribution when it mattered most.


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Market Gate

Building a pedestrian link over live rail

| 2022 |

Keltbray delivered the 61-metre Market Gate Pedestrian Bridge over the Sheffield–Leeds railway line, supported by reinforced concrete abutments and completed alongside improvements to the surrounding roads and public spaces. It was a project that brought together teams from across the business, drawing on our self-delivery model to prefabricate the bridge deck, design the temporary works and install 24 CFA piles for the foundations.

In May 2023, our lifting specialists positioned the three steel bridge sections – each weighing up to 75 tonnes – across the live rail line using complex tandem crane lifts. With the structure in place, we completed the civil works, onsite fabrication and cable installation.

The project challenged us in ways that shaped how we work. Discovering a major gas main forced us to rethink the programme, and the need for swift Network Rail approvals required close coordination across disciplines. Each hurdle reaffirmed the importance of collaboration, clear planning and calm decision-making.

Market Gate Bridge now stands as one of the structures that shaped us – not only in its physical form, but in the way it strengthened our ability to solve problems together and deliver with care in a demanding environment.



Upper Don

Flood Alleviation Scheme (Phase One)

| 2022 |

Upper Don Flood Alleviation Scheme (Phase One) delivered vital new flood defences across 15 sites along the River Loxley, protecting the communities of Hillsborough, Malin Bridge and Owlerton in Sheffield. Keltbray designed and constructed 1.5km of linear defences on both riverbanks, combining new and strengthened retaining walls, embankments, sheet pile walls and demountable barriers to significantly reduce flood risk while working within a constrained urban and riverside environment.

The scheme balanced engineering delivery with environmental responsibility. Works were carefully phased to protect wildlife, manage invasive species and respond to unexpected ecological constraints, including the safe accommodation of a badger sett. Low vibration piling techniques minimised disruption, while innovative hybrid power solutions cut fuel use, noise and carbon emissions on site. By adapting designs to avoid demolition and working collaboratively with environmental stakeholders, the project delivered resilient flood protection with reduced environmental impact and lasting benefits for the local community.

Nova East

Powered by teamwork in the heart of a challenging city build

| 2020 |

At Nova East, Keltbray built the deep foundations in one of the most challenging corners of London – tight against Victoria Station, beside the Victoria Palace Theatre and above a web of tunnels, sewers and live infrastructure. It demanded accuracy, calm thinking and real teamwork.

We installed some of the deepest piles ever constructed in the city and adapted quickly when the ground didn't behave as expected, changing methods to keep the project moving and deliver value for the client. Even as COVID-19 arrived, our teams kept standards high and finished piling four weeks early.

Nova East reminded us of what we do best: solving problems together, quietly and confidently, in the places where London is at its most complex.


Nova
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ANGEL BUILDING

Angel Building

Structural transformation in a busy corner of North London

| 2013 |

The redevelopment of the Angel Building involved transforming an existing reinforced concrete structure to support a new architectural vision in one of North London's busiest areas.

Keltbray and Wentworth delivered enabling works, soft strip, structural alterations, demolition, temporary works, groundworks and tree protection. An important part of the project was the preservation of several mature trees located close to the confined site access.

The project's structural alterations were significant, including breaking out the lift cores and fully removing the top floor. Extensive temporary works, designed by Wentworth, ensured the building remained stable throughout demolition and reconstruction.

The works were completed without incident, and Keltbray received the site's 'Contractor of the Month' award for seven consecutive months. We were later honoured with BAM's regional Gold Safety Award, a proud recognition of the team's commitment and consistently high standards on a constrained project.

BBC Television Centre

A new chapter for a British broadcasting icon

| 2003 |

The transformation of the BBC Television Centre was an opportunity to work in one of the country's most recognisable broadcasting sites. Keltbray supported the redevelopment by delivering a targeted demolition package, including asbestos removal, soft strip works, structural dismantling, and the removal of pedestrian bridges and a boiler house chimney.

The former studios required particularly careful handling. These large spaces carried decades of technical legacy and presented challenges such as widespread asbestos contamination and restricted high level access. To manage this safely, the team installed a birdcage scaffold to reach the roof trusses and used controlled enclosures to remove asbestos from ducts, vents and screed.

The Grade II listed Helios building received a heritage sensitive approach, while the main Zone 1A areas involved more substantial removal of raised flooring and internal blockwork.

We are proud to have supported the next chapter of a place that has shaped British culture.


Television Centre


CHELSEA BARRACKS
TARMAC
A CRH COMPANY

Chelsea Barracks

The evolution of a flagship Westminster development

| 2013 |

Chelsea Barracks was one of London's most high profile regeneration schemes, and Keltbray participated across several major phases of delivery.

Our involvement spanned demolition, enabling works, bulk excavation, environmental controls, piling and reinforced concrete structures, a coordinated sequence that prepared the site for its new super prime residential neighbourhood. The demolition of former barracks buildings, including two large towers, was carried out with strong environmental sensitivity, ensuring minimal disruption for neighbouring residents and listed structures.

Keltbray then delivered the enabling and excavation works for the three level basement, followed by the secant piling package and the RC substructure and superstructure for Phase 4. Despite strict access constraints and the complexities of working in Westminster, the programme advanced efficiently.

Chelsea Barracks is a site with deep historical significance and a prominent place in London's urban fabric, and contributing to its regeneration will stay in our team's memory.

Heron Tower

Early works package for a major skyscraper

| 2007 |

Located in the City of London, Heron Tower is a major building and represents an important achievement for Keltbray. Our scope covered asbestos removal, soft stripping, structural demolition, archaeological attendance, temporary works, pile enabling, and bulk excavation,

The programme progressed with a clear sequence: floor-by-floor demolition of two existing office buildings, installation of temporary works, pile enabling, and advancing the top down basement excavation as the new steel frame rose above. Excavation continued beneath the emerging structure using compact plant at the workface and a modified 40 tonne excavator at street level.

Completing the Heron Tower early works package was a rewarding challenge for Keltbray, and it is great to see how we helped shape the City's skyline.


ASSENHEIMS56
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Three Quays

Piling works at the heart of a historic riverside setting

| 2011 |

Keltbray supported the Three Quays development on Lower Thames Street, delivering a major piling package in one of London's most historically sensitive locations.

The project faced a mix of structural, archaeological and geotechnical challenges, from existing piles and quay wall obstructions to tidal groundwater conditions. Keltbray resolved these through targeted removal techniques, adaptable engineering design and coordination with heritage specialists, ensuring the works progressed safely and responsibly.

Contributing to a development set against the backdrop of the Tower of London was a special moment for Keltbray.

According to Stuart Norman, Director of Hiperenergy, "*This project marked the point at which our Piling division began to challenge the established elite, ultimately leading to unprecedented success, multiple industry awards, and recognition as genuine market innovators.*"

Keltbray 50th Aniversary

Redefining sustainable development

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Celebrating 50 years

Keltbray 50th Aniversary