



Summer-Autumn 2026



KELLER insight

 **GEO
INSTRUMENTS**

 **PHI GROUP**
A KELLER COMPANY

1,350

ways we're
supporting
the future
of UK steel

See Pages 20 and 21

Plus...

The innovative system at the
root of Steve's career – see P10

Q&A with CEO James Wroath – see P8
Building towards net zero – see P12

Global strength and local focus

Every day, people around the world live, work and play on ground prepared by Keller.

We are the world's largest specialist geotechnical contractor. By connecting global resources and local knowledge, we can tackle the toughest building and infrastructure engineering challenges.

Whatever geotechnical problem you are trying to solve, Keller UK has the people, expertise and experience to provide the solution.

Contact us

- Mark Williams, Business Development Director, Keller UK
T: 07557 033271 E: mark.williams@keller.com
- Justin Greatorex, Head of HSEQ, Keller UK
T: 07769 165342 E: justin.greatorex@keller.com
- Robert Torrington, Business Development Director, Phi Group
T: 07753 573762 E: robert.torrington@phigroup.co.uk
- Piotr Konieczny, General Manager, GEO-Instruments
T: 07872 456295 E: piotr.konieczny@geo-instruments.co.uk

Some of the 1,350 piles which will be installed at Port Talbot where a new electric arc furnace is being constructed. See Pages 20 and 21 for more details.

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Joining forces

In a move to further improve the sharing of knowledge, expertise and plant, Keller's UK business has recently joined with colleagues in the Central Europe Business Unit to form the new North West Europe Business Unit. The new BU will be led by Manuel Stelte to deliver a new vision and growth strategy across the region on both sides of the North Sea. Andy Waghorn, pictured below, is the new branch director for the UK.

A fresh look for website

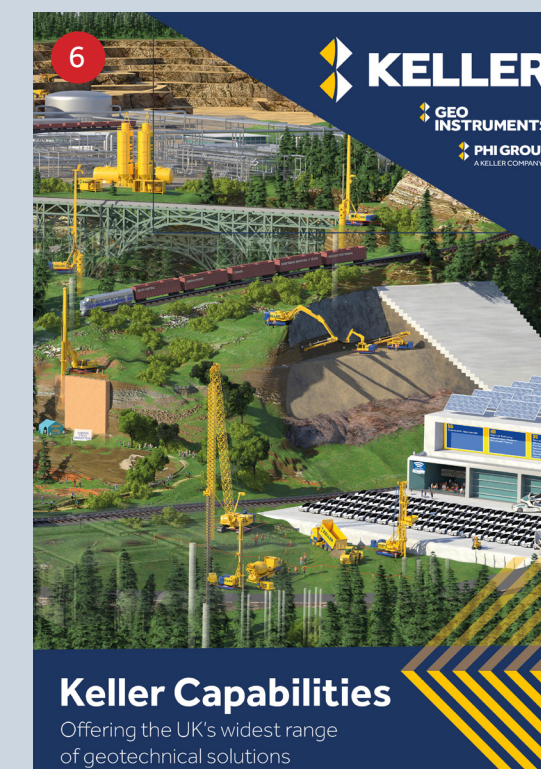
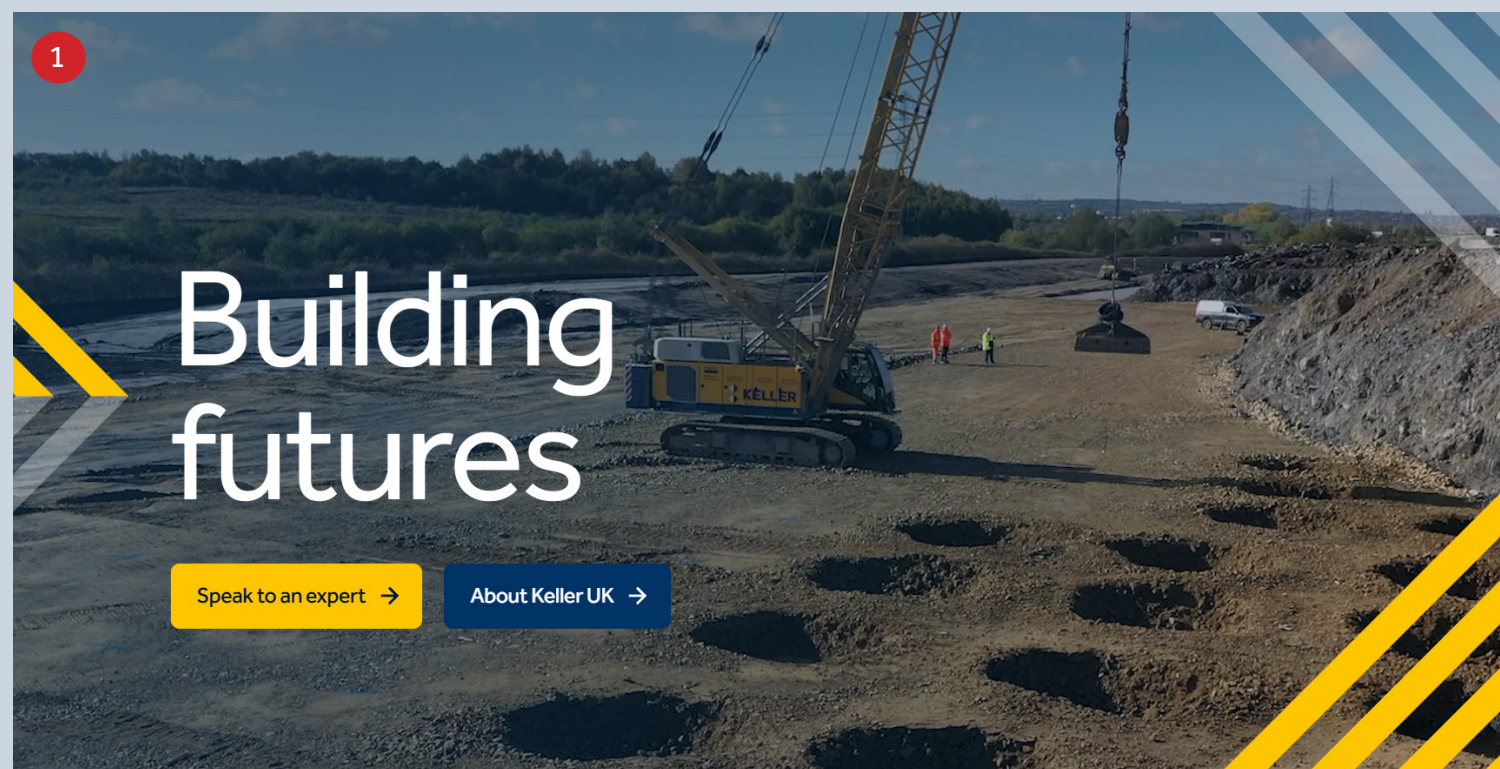
Keller UK has launched its new look website (1). The new site was created following a recent refresh of the Keller brand. It delivers a cleaner, more user-focused experience and strengthens how Keller's capabilities are presented. The new homepage helps customers navigate directly into the content they are looking for, while technical improvements ensure that accessibility goals are met. The changes also include groupings of related techniques to showcase Keller's expertise, while a revamped careers section gives a better sense of what it is like to work at Keller. It is also now easier to navigate to other Keller websites around the world. To take a look at the new-look site, [please click here](#).

Investing in plant

Keller has been continuing its investment in dedicated plant which strengthens its growing fleet and specialist capabilities. In recent months, it has taken delivery of the UK's first SR-45 Blue Tech Plus rig (2), a SEBHSA concrete pump (3) and a SF-65 Hydraulic CFA Rotary rig (4). The SOILMEC-built SR-45 and SF-65 are already busy on site, while the concrete pump has been purchased for Rigid Inclusions and CFA work.

Keller strikes gold

Keller has been recognised for its commitment to keeping people safe at work by The Royal Society for the Prevention of Accidents (RoSPA). It has awarded Keller a prestigious gold medal (5) after receiving a



sixth consecutive gold award for its health and safety performance. Regarded as the ultimate symbol of excellence, the internationally-renowned RoSPA Awards are presented to organisations which show continued dedication to high health and safety standards and the wellbeing of individuals. Justin Greatorex, Keller's Head of Health, Safety, Environment and Quality (HSEQ) UK, said: "We're genuinely delighted to

receive the RoSPA Gold Medal Award. It reflects the consistent standards we apply across our operations and our ongoing commitment to health and safety. This award is a testament to the dedication of our site teams, whose emphasis on planning, collaboration and willingness to do the right thing every day helps create a safe working environment. Health and safety is not just a priority for us – it's a core value embedded in the way we all work and we're immensely proud to receive this recognition."

Capabilities brochure updated

Keller has updated its capabilities brochure (6) to showcase how it delivers the UK's widest range of geotechnical solutions. The document features ground engineering, retaining structures plus instrumentation and monitoring all in one place. It also details the markets Keller, Phi Group and GEO-Instruments work in, key contacts for the techniques offered and a solutions matrix. To download the new-look 16-page Keller Capabilities, [please click here](#).



Keller refreshes its values

Keller has refreshed and redefined its corporate values. The new values will help all Keller teams prioritise health and wellbeing, foster collaboration and accountability, strive for continuous improvement, and model transparency and fairness. They are:

- Safety – we do not compromise on health and safety
- People – we grow and value our people
- Excellence – we consistently deliver high performance
- Integrity – we always do the right thing

Keller's Code of Business Conduct has also been updated to reflect these new values, ensuring its commitments are clearly embedded in the way everyone works. To find out more about the new values, [please click here](#).



On the ball at the Keller Cup

Three UK teams travelled to France for the 13th Keller Cup. The annual football tournament took place at the Centre Tola Vologe, in Lyon, with 19 men's and eight women's teams battling it out for the trophy. Representing the UK were Keller UK Yellow, Keller UK Blue and Keller UK and GHO Ladies. Keller UK Yellow finished fifth overall after being beaten 2-1 by Swe Team 3 in the quarter-finals. Keller UK and GHO Ladies also finished fifth overall. A 3-1 triumph over Keller IT Women ensured a fifth/sixth play-off tie against Keller Women Warsaw 2 and they ran out convincing 3-0 winners. The Keller UK Blue team recorded an impressive 12-0 victory over Keller Warsaw Financial Services in one of their four group games, but they were beaten in the last 16 as they slipped to a narrow 1-0 defeat against Keller Fondazioni to take 10th spot overall.



Bailey Bishop, right, receives his five-year award from Jamie Knill.



Paulo Goncalves, left, receives his five-year award from David De Sousa Neto.



Bogdan Ivanovici, right, receives his five-year award from Piotr Konieczny.



David Perry, left, receives his five-year award from Reece Bowler.



Kevin Ryan, left, receives his five-year award from Paulo Goncalves.



Leon Murphy, right, receives his 10-year award from Rob Hawkins.



Dean Orr, right, receives his 15-year award from Dave Smith.



Michael Evans, left, receives his 20-year award from Eddie Donaghy.



Richard McTaggart, right, receives his 25-year award from Eddie Donaghy.

Keller recognising loyalty

Keller is proud to honour employees for their long service. Here are Keller UK team members who have achieved a five, 10, 15, 20, 25 or 30 year service award between 1 January and 31 July, 2026.

Five years

Heather Sales, Senior Design Engineer
Larisa Pandi, Monitoring Engineer
Dawid Bielawski, Senior Site Engineer
Bailey Bishop, Operative Grade 9
Mark Robinson, Site Supervisor
Alin-Gabriel Gheorghe, Senior Monitoring Technician
Alex Cade, Senior Quantity Surveyor
Lyndon Williams, Operative
Fred Oteng, Banksman and Concrete Pump Operative
Kevin Ryan, Autonomous Maintenance Coordinator
Bogdan Ivanovici, Senior Surveyor
Gary Kennedy, Operative Grade 10
Mark James, Senior Surveyor
Paulo Goncalves, Plant and Yard Manager
David Perry, Field Service Welder
Liam Dougan, IT Business Analyst
Mindaugas Tiskus, Senior Surveyor
Peter Beesley, Service Now Developer
Freddie Webster, Monitoring Technician

10 years

Tracy Pyatt, Training Manager
Leon Murphy, Site Supervisor
Fabian Ellis, Site Supervisor
Archie Tucker, Operative Grade 12, Chargehand, Kelly Bar
Dylan Davies, Operative Grade 18, Chargehand, Kelly Bar
David Ortega, Senior CAD Technician

15 years

Dean Orr, Operative
Tracey Shakespear, Depot Logistics Manager
John Brace, Project Manager
Edward Collis, Operations Manager - CFA
Bekah Eaton, Project Manager

20 years

Daniel Cairney, Commercial Director
Richard McTaggart, Operative Grade 12
Michael Leech, Operative Grade 11
Michael Evans, Site Supervisor
David Dixon, Operations Delivery Manager
Steven Phillips, Operative, Trainee Foreman
Richard Smith, Preconstruction Manager - Foundations

25 years

Dale Hawkins, Estimator

30 years

Stephen Lax, Operative Grade 13



Visit the Keller Group website [by clicking here.](#)

Keller is a strong business ... with a great story to tell

James Wroath is closing in on his first anniversary as Chief Executive Officer of Keller Group. Here, he shares his impressions of his time with Keller and the focus for the future.

Q What have been your impressions of Keller so far?

A I knew there was a lot of expertise here, but I've been bowled over by just how much. There's also a huge amount of passion – our people really care about their subject matter. And it's not just seasoned experts. We also have a rich pool of young talent who are given a lot of responsibility early in their careers. I've tried to get out and about as much as I can. On my visits I've found everyone to be welcoming and generous with their time. We work on some incredible projects and have some amazing stories to tell. One of the key challenges for us is how we tell the world more clearly what we do. Our inclination is often to explain what we do from a very technical engineering perspective. While that's obviously critical, our work also has a huge impact on society and people's lives, so I want us to also focus on the context and what we enable more.

Q What are the key elements of the Keller strategy?

A Our business is very successful. We've seen a substantial increase in profits, largely driven



Keller Group CEO James Wroath, below right, and with members of the Keller UK team during a visit to its head office in Ryton-on-Dunsmore, Coventry.

by margin improvement. The next stage needs to come from top-line growth. So, the big question for me is how do we grow without losing that margin focus? And to what extent do we need acquisitions to enhance organic growth potential? Firstly, there are opportunities to bring different techniques from around the world to markets in a way that a local competitor can't. Secondly, I believe we are in the right geographies, but there are still markets within these where there's opportunity. Thirdly, is sectors. There are still some end-market customer segments where our products and expertise can win us more business. Acquisitions could accelerate our growth strategy in all these areas. To be clear, our strategy isn't

about us suddenly doing something completely revolutionary – Keller is a strong business with great products in established geographies. It's now about strategically placing our investment in areas where we can drive growth.

Q What's your main focus in the coming months?

A Firstly, our people – talent, collaboration, communication and performance management. I want to ensure the whole

business is on the same page in terms of what we're trying to deliver, albeit sometimes in different ways in different places. Secondly, I want to ensure everyone's hard work is represented in the most positive, inspiring way possible. Keller has a great story to tell; we can do a better job telling it. I'd like people to understand more clearly what we do and where we add value because it will help us attract investors, customers and colleagues. I view my job in two halves: one is internal, driving our people to be more successful, and the other is being the face of our business to the investor market. I want to ensure that our team's fantastic work is properly represented to the market.

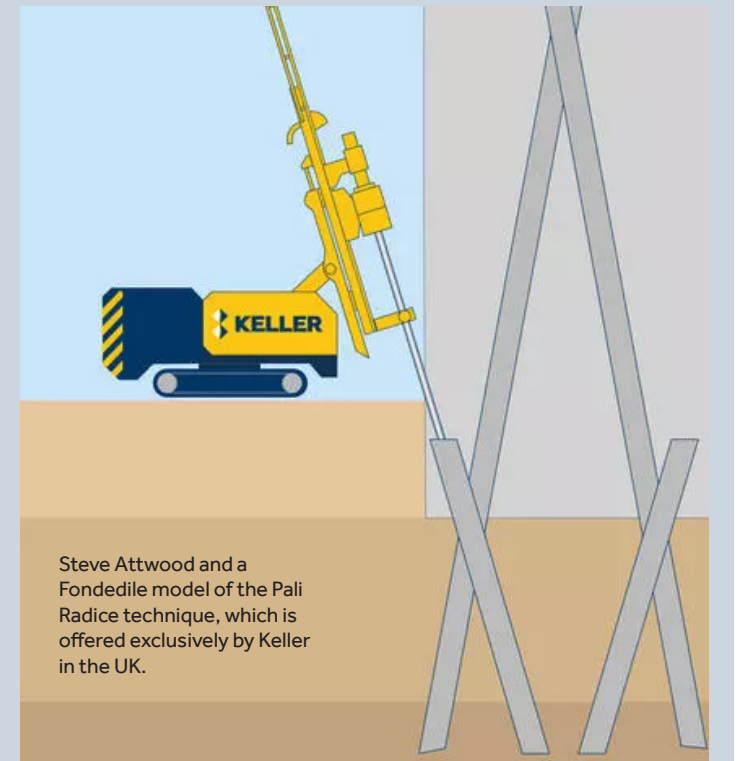


KELLER people



Find out more about the Pali Radice technique [by clicking here.](#)

The innovative system at the root of Steve's illustrious career



Steve Attwood and a Fondedile model of the Pali Radice technique, which is offered exclusively by Keller in the UK.

In a geotechnical career spanning more than five decades, Steve Attwood has helped to strengthen and stabilise some of the country's most recognisable landmarks.

The Palace of Westminster, the Tower of London, the Royal Academy of Arts, London Coliseum, the National Portrait Gallery, Cutty Sark Dry Dock, The Shard, Harrods, Liverpool's Albert Dock, Claridge's Hotel and Ely Cathedral are just a handful of the iconic venues he has worked on.

And they all have one thing in common – Pali Radice. Steve is regarded as the leading expert in Pali Radice, the innovative system used to help restore and stabilise buildings and monuments, which is exclusively delivered by Keller in the UK.

Pali Radice, meaning root piles, is a versatile foundation system using small-diameter cast-in-situ bored piles. It has been extensively employed throughout the world to underpin or strengthen existing foundations which are settling or required to support increased loads.

Developed in the 1950s by the late Italian engineer and founder of the Fondedile organisation, Dr

Fernando Lizzi, the technique has been at the heart of Steve's career ever since he stepped foot into Fondedile's London office in September 1974 after graduating from Sheffield with a BSc in Civil Engineering.

This followed an opportunity to work for Fondedile as a student which stimulated Steve's interest in its appealing portfolio of projects and its offer for him to join the organisation. The rest is history.

"I did have the opportunity to join my father's precision mechanical engineering business," said Steve, "but I was not attracted to the factory working environment."

Instead, Steve then spent 31 years at Fondedile Foundations Ltd, an association between Sir Robert McAlpine and Fondedile S.p.A, of Naples, where he held various roles including engineer, project manager, and senior projects manager moving progressively into design solution development, estimation and contract oversight.

In November 2005, the Fondedile franchise and plant were sold to Systems Geotechnique, and Steve became its Consultant Technical Manager

for the Fondedile processes and other specialist restricted-access geotechnical work. Keller then purchased Systems Geotechnique in April 2007, with Steve continuing in the same role.

Throughout the years, however, one thing has remained constant – Dr Lizzi's technology.

Steve said: "Dr Lizzi's groundbreaking geotechnical engineering system is internationally recognised to this day – and commonly used in a widening field of allied applications.

"I met him periodically from the 1970s to the early 2000s. He was a brilliant engineer, with a formidable, focused character – sometimes charming, but insistent on going the extra mile.

"His influence on my career was the importance of meshing conceptual engineering with commercial advantage – and profitability!"

Steve has seen many positive changes in geotechnics during his 52-year career, including the digital age 'revolutionising many branches of the industry' while there have been 'improvements in health and safety with a focus on methodology,

risk assessments, manual handling, training, and accountability'.

He said: "Foundation engineering, particularly in relation to inner-city developments, has upped its game significantly, especially with the increasing redevelopment of existing buildings. In lieu of demolition, this is becoming more common, with positive environmental impact and reuse of existing foundations.

"The development and use of CFA piling has grown exponentially and is a dominant system in a now highly competitive industry environment."

As for the future, Steve predicts a 'continuing trend towards specialisation' and a 'rethink of accepted pile design methods and standards to provide more efficient solutions'.

And what would Steve say to the next generation of geotechnical engineers who are thinking of following in his footsteps? "If you are prepared to work hard, with attention to detail, you can enjoy a very worthwhile and satisfying career."

Perhaps one just like his own.

 **KELLER** feature

Building towards net zero

Keller has published its 2026 Carbon Reduction Plan, which outlines its ongoing commitment to cut emissions.



by **Luke Deamer**
Keller Group Sustainability Director

Construction is an incredibly carbon intensive industry – so reducing our emissions is a big task.

Yet thanks to the shared vision and ingenuity shown by Keller staff, the UK team is making huge strides towards the goal of achieving net zero across all three scopes by 2050.

While that's a commitment driven, in part, by existing and upcoming legislation, client, public and investor demands – and even our own employees – the reality is that we must decarbonise for the sake of our planet and future generations.

It's not going to be easy. We work with carbon-intensive materials like cement and steel, and we use heavy diesel equipment every day. Still, the scale of the challenge brings opportunity. It forces us to rethink how we work – and to make sustainability part of every decision.

Everyone can contribute

At Keller, we've been throwing a lot at this challenge – innovation funds, biofuel trials, university partnerships, all showcased in lunchtime learn sessions and toolbox talks.

Innovation can come from anywhere – whether it is on site, in our Coventry yard or on a project halfway across the world. One team figures something out, shares it, and it scales.

Which is why sustainability is not just the responsibility of one person or team – everyone has a part to play.

Across the Group, people are sharing what works, what doesn't, and what's next. They might be

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operating rigs. They could be in an office, planning schedules or designing jobs.

Every decision has a ripple effect – on cost, on efficiency and on carbon. Sustainability isn't a separate task – it's part of everything we do.

Despite the clichés, it's also not about just planting a few trees and calling it a day. Offsetting has its place, but it's not a solution on its own.

The focus now is investing in our own capabilities, equipment and knowledge to reduce emissions at source. There are many excellent examples of that taking place, which are highlighted in our Carbon Reduction Plan 2026, including:

- Investing in new plant and rigs. All now have state-of-the-art Tier 5 engines, delivering improvements in carbon emissions, reliability, noise pollution and air quality.
- Hydrotreated Vegetable Oil fuel trials were

“ What makes this so exciting is we're not just responding to change, we're helping shape it ”

conducted in our yards and on special projects. Last year, we used 76,075 litres of HVO in the UK, saving 203 tCO₂e compared with diesel.

- Embedding the carbon calculator within our estimating spreadsheets to demonstrate the carbon saving of redesign to our clients.
- Expanding the yard's solar panel array, improving savings on office lighting and educating employees about energy-saving initiatives.
- Optimising our use of ordinary Portland cement, increasing our use of alternative binders and coarser cement mixes.
- Collaborating with industry partners to identify and share carbon reduction best

practices through client meetings and representation on the Federation of Piling Specialists and the European Sustainability Committee.

- And sharing our knowledge and carbon reduction strategy with schools, colleges and university students through our STEM programme to help develop this focus in future generations.

These initiatives, among others, equate to at least a 3,036 tCO₂e reduction against the 2019 baseline, while our overall emissions have fallen by 17% since 2019.

But we're not stopping there. In the future we

hope to implement further carbon reduction measures such as:

- Expanding our use of HVO fuel on special projects and when accepted/specified. (Scope 1)
- Introducing a rig decarbonisation strategy into our existing rig renewal programme, with more hybrid and electric equipment. (Scope 1)
- Decarbonising our maintenance yard and office space with a number of specific initiatives. (Scope 2)
- Engaging our supply network, both upstream and downstream, to capture and reduce our Scope 3 carbon emissions.

Keller has successfully converted a seven-year-old diesel-powered rig to run on a fully electric-powered system supported by an HVO biofuel generator.

The rig was initially powered by two diesel engines – one to operate the hydraulic system and the second attached to an alternator to supply electric energy to the vibrator. Both engines had high fuel consumption and required significant maintenance.

The rig engine and generator were replaced with a single fuel-efficient 250kVA generator running on biofuel.

The new generator can now drive the electric motor, which runs the hydraulics, vibrator, and an electric air compressor via two frequency inverters.

A new driver interface and operating system had to be developed to run all the functions and give the driver feedback.

The project gave a second life to components of the rig, including the chassis, crawlers and cab, which were still in good condition, rather than scrapping the entire rig.

It can run on either mains electricity or HVO biofuel and has lower fuel consumption when operating on the generator.

It is also more efficient and experiences fewer breakdowns than before.

- Undertaking lab trials of low carbon cements to understand how they behave in different ground conditions. (Scope 3)
- Trialling additives and admixtures to decrease cement volumes and embedded carbon. (Scope 3)

That's what makes this moment so exciting. We're not just responding to change – we're helping shape it. For me, that's the most rewarding part of all: taking the research, the theory, the big ideas – and seeing them come to life. We're building sustainability from the ground up. Literally.



To read Keller's Carbon Reduction Plan, [please click here](#).



KELLER expertise

Designed to deliver... bringing your vision to life

The co-founder of tech giant Apple, Steve Jobs, famously once said: "Design is not just what it looks like and feels like. Design is how it works."

It's a philosophy which closely reflects Keller's ability to deliver effective value engineering.

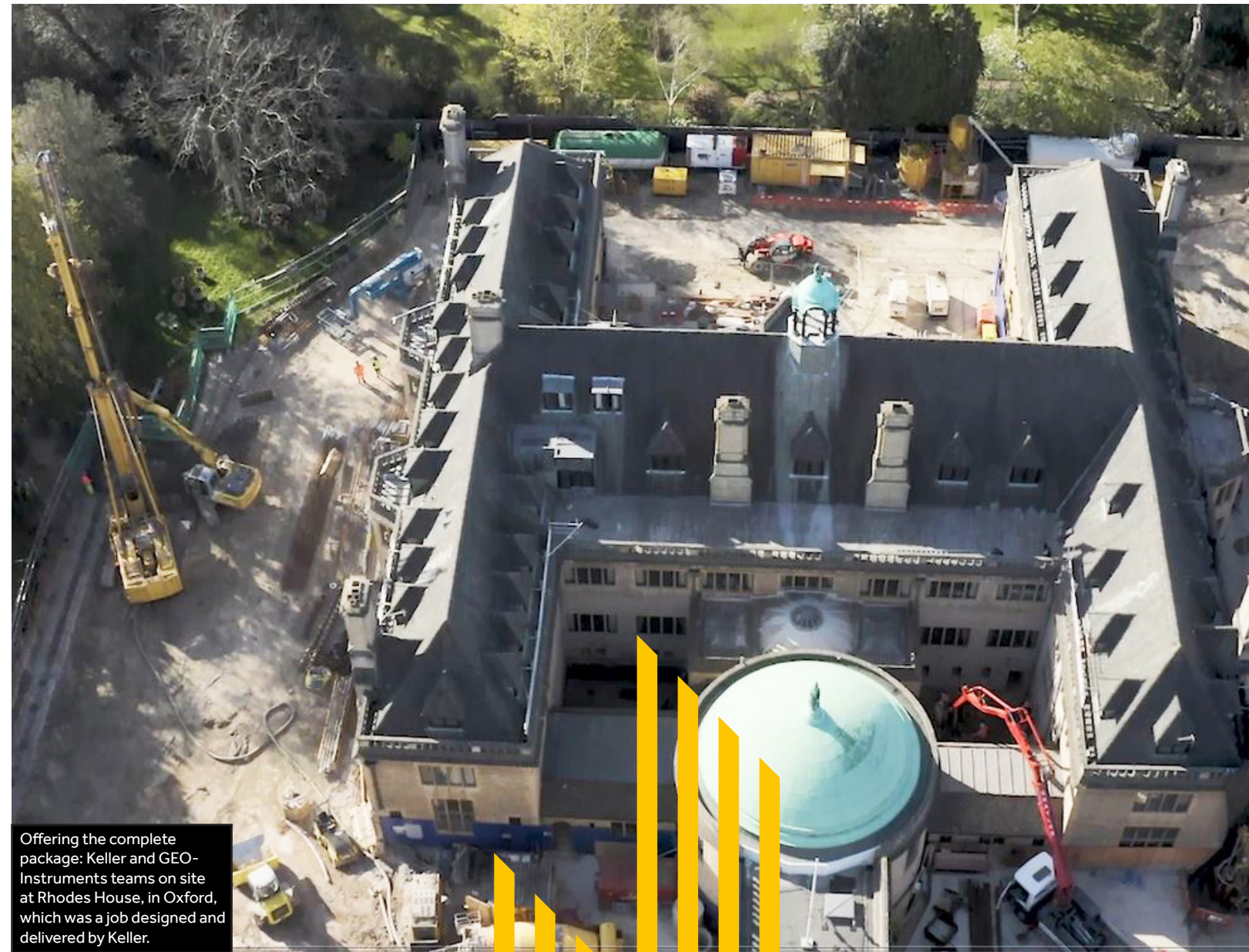
In the geotechnical world, no two projects are ever quite the same. Site conditions vary from job to job, meaning there is never a one-size-fits-all approach to reinforcing the ground we all live, work and play on.

Keller, however, is perfectly placed to turn those concepts into reality.

Whether it's developing an idea from a client or being asked to start from scratch, Keller's experienced team of in-house design specialists always assess a range of options before recommending the most appropriate approach.

Andrew Heathcote, Keller UK's Technical Director, said: "The challenge is not just finding a solution that works, but finding one that delivers the best outcome for the project as a whole.

"One of the biggest advantages of having design and delivery under the same roof is that we're able to combine engineering expertise with real-world construction experience. That can make a real difference. Value engineering isn't just about saving money. It's about understanding the project requirements and exploring different ways to



Offering the complete package: Keller and GEO-Instruments teams on site at Rhodes House, in Oxford, which was a job designed and delivered by Keller.

achieve the same performance standards more efficiently.

"The best solution isn't always the one that was originally specified. But because we have access to a wide range of techniques, we can challenge assumptions, explore alternatives and often identify opportunities that bring additional value to the project."

Keller has a team of five designers and three



Read more about the techniques and solutions we offer [by clicking here.](#)



CAD technicians who work closely with the pre-construction teams. The proposed value engineering solutions are inherently practical, buildable, and aligned with real construction conditions, reducing health and safety risk and improving overall certainty.

Additionally, Keller's large internal plant resource and experienced delivery teams enable market-leading programmes to be offered for all types of schemes.

Andrew added: "This combination of technical expertise, product range, and self-delivery capability allows Keller to act as a proactive partner, consistently identifying and implementing value engineering solutions that enhance both cost efficiency and programme outcomes.

"By connecting design and delivery from the outset, we can develop practical, efficient solutions for our clients that help projects move forward with confidence."

The big picture

A throwback to work we carried out for Tesco in the Lincolnshire coastal town of Mablethorpe.

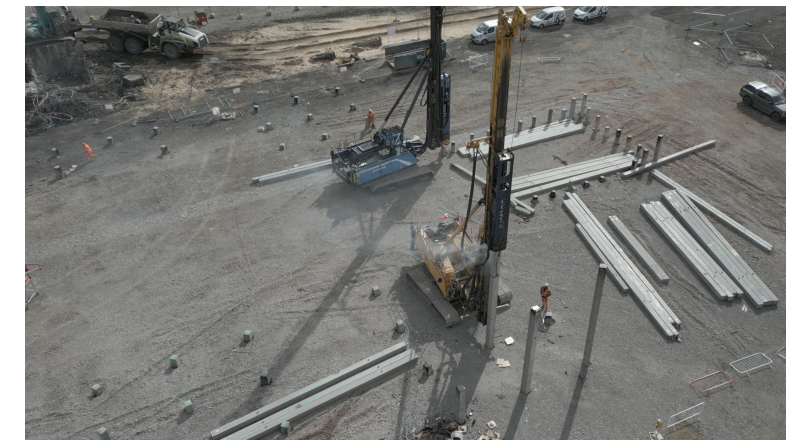


KELLER case study



Watch a Tata Steel video about the foundations work [by clicking here](#)

The 1,350 piles supporting future of steelmaking in UK



Pictures: Tata Steel

Keller is laying the foundations for a £1.25 billion transformation of the UK's largest steelworks into a state-of-the-art low-carbon facility.

Tata Steel UK is developing its Port Talbot site, in South Wales, as it switches from traditional ore-based production to a 'green' scrap-steel-fed electric arc furnace.

As part of Project Invictus, Keller is installing more than 1,350 piles in total to support the construction of the electric arc furnace, fume extraction plant, and the Consteel conveyor.

Once operational in 2028, the new facility will produce around three million tonnes of high-quality steel per year.

Keller was appointed by Tata Steel UK to carry out the 'significant' foundations work alongside principal contractor Sir Robert McAlpine.

Richard Smith, Keller's Preconstruction Manager – Foundations, said: "These foundations will support a major investment in steelmaking in the UK, and everyone at Keller is thrilled to have been part of such an important project.

"This is a challenging and complex project that requires several piling methods within a single, coordinated programme. Close collaboration with the wider project team is key to delivering the works safely and efficiently.

"We are proud to play a significant role in preparing

the site for the construction of the new electric arc furnace, which will help secure the long-term future of steel manufacturing at Port Talbot."

A combination of rotary bored, continuous flight auger (CFA), driven precast concrete and restricted access piles will be installed.

The initial work has seen more than 660 standard precast piles of varying sizes installed, along with rotary bored preliminary test piles.

In the second phase, which started in July, Keller is installing 140 large-diameter rotary bored piles, reaching depths of up to 36.5 metres.

The CFA piling works will form a significant part

of the scheme, with more than 330 piles installed across multiple diameters, some reaching depths of more than 31 metres.

Keller will also be installing more than 200 restricted access piles in areas with limited working space.

Richard added: "By offering multiple foundation and ground improvement techniques, Keller is not constrained to a single approach and can instead select or combine methods that best meet project-specific constraints.

"This flexibility allows us to optimise designs, reduce material usage, and improve efficiency while maintaining performance requirements."

KELLER projects in focus



Kestrel Park Avonmouth, Bristol

Ground improvements to support the construction of new warehouses on 135,000 sq ft of previously undeveloped land have been successfully completed by Keller.

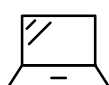
Six new industrial warehouse units with fully-fitted first floor offices are due to open at Kestrel Park, Avonmouth, Bristol, later this year.

Keller was appointed by Barnwood Ltd to prepare the 'complex' ground at the plot ahead of the development being constructed.

Weak soil, made up of very soft clays with layers of peat, required a robust technique to ensure that strict performance criteria to limit settlement were met.

Rob Herring, Keller's Estimating Manager, Ground Improvement, said: "This was a technically demanding site due to the depth and variability of the weak soils, but our rigid inclusion design provided a solution that met the performance requirements."

Two rigs were used throughout the project, which took four weeks to complete.



Read more about the work carried out at Kestrel Park and download the project summary [by clicking here](#).



Tooting police station London

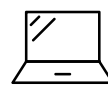
Keller has carried out specialist geotechnical work for the 'sensitive redevelopment' of a former art deco police station into apartments.

The structural upgrades at the Grade II listed Tooting police station were required as part of the scheme to turn the building into 62 high-quality residential units with additional community facilities.

Designed by Metropolitan Police architect Gilbert Mackenzie Trench and constructed in 1939, the five-storey building needed extensive foundation strengthening work to support the transformation.

The redevelopment saw a new floor added to the building, two new lift and stair cores introduced and the foundations upgraded to support the structural changes.

All the work had to be completed within the constraints of the existing basement and heritage structural framework, while shallow groundwater, legacy infrastructure and variable ground conditions added to the challenges facing the team.



Read more about the Tooting police station project and download the project summary sheet [here](#).



Catholic Apostle Church Maida Vale, London

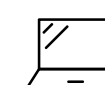
Expert intervention from Keller has successfully underpinned and stabilised the foundations of a Grade I listed church.

The Catholic Apostle Church, in Maida Vale, London, had been suffering from progressive settlement and structural cracking – and previous structural repair work to the building's West Tower had failed to halt the movement.

Keller was appointed by Realtime Civil Engineering to underpin the deep mass concrete foundations and worked in collaboration with Campbell Reith to develop a tailored solution which respected the church's architectural and heritage constraints.

The protection of the listed masonry was addressed during the installation of 72 Pali Radice mini piles, while care had to be taken to cause minimal disruption to the church's functionality and its surrounding environment.

The Project Manager for Realtime Civil Engineering said: "The importance of maintaining outputs while working in a Grade I building without causing any damage is a huge credit to how you guys undertake and deliver your works."



Read more about the work at the Catholic Apostle Church and download the project summary [by clicking here](#).



Grandidges Quay Birkenhead, Merseyside

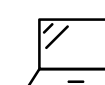
Keller has delivered a combined ground improvement and piling approach to support a 163,000 sq ft 52m clear span warehouse build for a specialist wood manufacturer in Birkenhead, Merseyside.

Having originally designed this warehouse on piles, Keller was asked to offer an alternative that would accelerate the build and reduce carbon emissions. A heavily loaded crane base area positioned immediately next to an existing dock wall and through some very coarse backfill was also required for the project.

A combination of rigid inclusions and CFA piling was used for the scheme through up to 17m of very low-strength tidal flat deposits, whilst limiting settlement to <25mm and 1:500.

Keller was also able to switch between the RI and CFA tools using the same rigs, which avoided additional mobilisation costs. The works were completed swiftly, with the substructure activities following immediately behind.

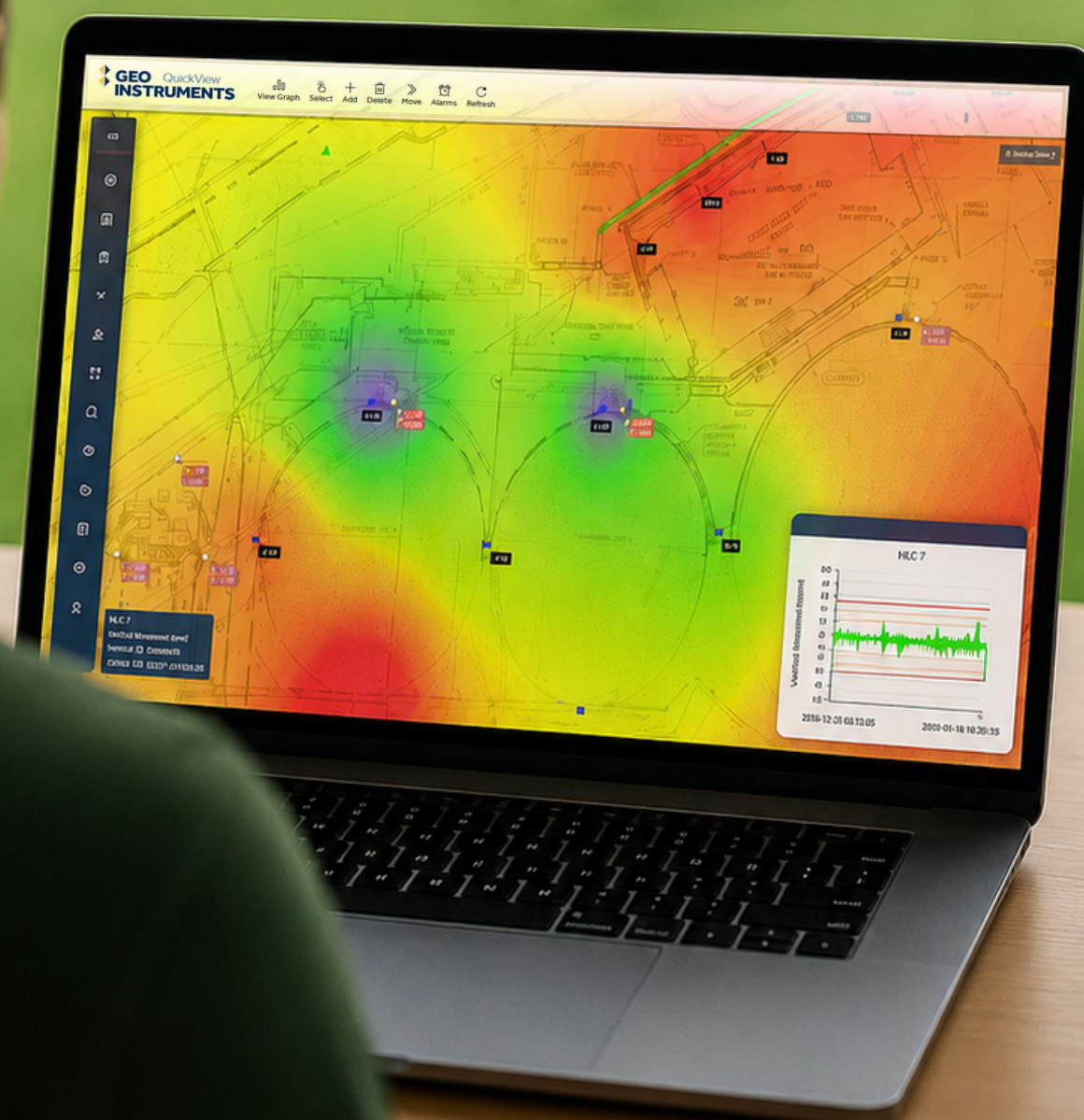
This afforded the main contractor the opportunity to accelerate their programme.



Read more about the work which took place at Grandidges Quay [by clicking here](#).

GEO
INSTRUMENTS feature

Discover a QuickView to reliable data



Construction projects now produce more data than ever – but GEO-Instruments has the solution to ensure it is all manageable and accessible.

On modern construction and civil engineering sites, instrumentation and monitoring have become vital tools.

From structural movement and ground settlement through to environmental impact and effectiveness of control measures, the need for reliable data has become essential.

Even the smallest projects can generate large volumes of information, often in diverse formats and from varied sources – so to make informed decisions under tight deadlines requires a software system which interprets that insight fast.

Thankfully, GEO-Instruments UK has the answer. Its internationally-renowned QuickView platform has been designed to bring together large, complex datasets and present them in a way that is easy to understand and act on.

Used across hundreds of projects worldwide – including in France, Spain, Poland, the United States, Canada, Africa, Türkiye and New Zealand – QuickView helps project teams make informed decisions from raw data.

Piotr Konieczny, General Manager of GEO-Instruments UK, said: "QuickView provides the means to process, manage and visualise collected data so it becomes clear, meaningful and easy to interpret. Significant investment has gone into the continuous development of the software since its launch in 2015 to regularly implement new features to meet the diverse requirements of clients and projects all over the world.

"Monitoring is only as valuable as the decisions it supports. QuickView bridges the gap between data collection and real understanding – helping engineers move forward with confidence, whether it's a small site or a major infrastructure project.

"One of QuickView's biggest strengths is its flexibility. Construction projects rarely follow a standard template, and monitoring requirements can vary hugely, but QuickView is built to cope with that. In a world where projects are getting more complex, having a clear view of what's happening on site is a necessity."

QuickView, developed and maintained by the GEO-Instruments UK team, has grown far beyond its original role as just a tool for monitoring data.

It also provides a shared platform where teams can exchange knowledge, adopt proven approaches, and learn from each other's experiences across the business – ultimately benefitting clients using the software.

Piotr added: "Since its introduction, QuickView has been adopted by most GEO-Instruments branches, including the UK, Canada, Poland, France and Spain.

"This has helped strengthen links between teams, encouraging regular collaboration and making it easier to share new ideas and improvements that benefit users wherever they are working."

QuickView offers a range of advantages for its users including:

Versatility

Capable of handling data from almost any source and displaying it alongside all other project

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"In a world where projects are getting more complex, having a clear view of what's happening on site is a necessity **"**

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information e.g. automated, manual, 3D, environmental, and geotechnical datasets.

Ease of Use

Browser-based and easily accessible from anywhere. Simple and quick to set up, intuitive to navigate, and equipped with extensive automation options for data processing and presentation.

Scalability

A software capable of managing thousands of sensors and millions of readings, yet simple and cost-efficient enough for small-scale projects.

Customisation

A large suite of data management tools and options allows QuickView to be tailored to specific project requirements or clients' individual needs.

Reliable and secure

Robust data backups and encryption, secure processing protocols, and multi-factor authentication ensure complete data security.

QuickView's software is cloud-based, can be accessed from any device via a browser and is not limited by corporate IT constraints. It has been instrumental in a number of projects including:

London Power Tunnels 2, South London

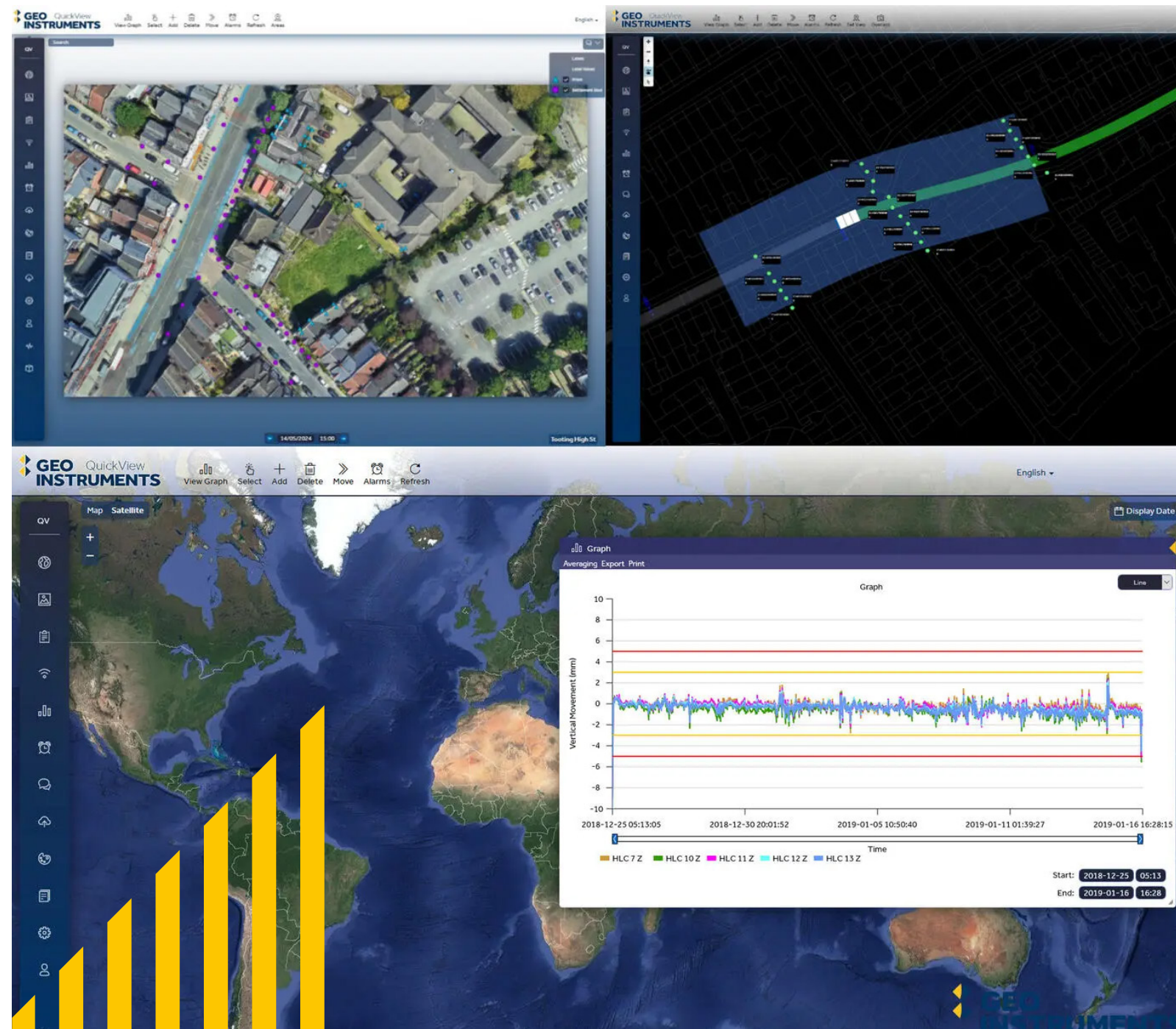
This was a major National Grid infrastructure scheme to build 33km of new energy cable tunnels underneath a large part of London and upgrade the city's power network. QuickView was used to track the progress of five Tunnel Boring Machines simultaneously as well as manage data for thousands of sensors monitoring the tunnel routes, critical structural assets and railway crossings. The real-time visualisation of Tunnel Boring Machine Zones of Influence and asset locations enabled fast, informed decision-making.

S19 Expressway project, Poland

A nationally and EU-backed priority infrastructure scheme building a vital new expressway through eastern Poland. The 2.2 km long, 15.2m diameter tunnel required a complex instrumentation and monitoring scheme. QuickView was used across the project to process, store and visualise data from thousands of sensors. The software underwent significant development to add new features specific to the needs of the project.

Railway Ground stabilisation, Browney Curve

Extensive automated track monitoring during



ground reinforcement works adjacent to an active mainline railway. An ATS network and more than 700 prisms were used to record 3D movement of 500m of dual tracks. QuickView visualised track prism data, generated virtual sensors to calculate the twist and cant of the rails, distributed automated reports, and managed live alerts.

Wood Wharf, London

Large mixed-use regeneration project in London's Canary Wharf, building new offices, homes, retail, and public spaces above two existing rail tunnels.

Extensive live tunnel monitoring was required for the London Underground Jubilee Line below the development. A large network of Automated Total Stations measured hundreds of prisms in the tunnels. QuickView allowed project teams to easily display the vast amount of data, generate tunnel cross-sections and automate reporting.

QuickView comes with an ever-expanding suite of tools and features, including:

Bespoke Project Presentation

Manage multiple projects from one platform. With options for displaying monitoring data on background images, CAD drawings, documents, satellite imagery and maps.

Data Graphs

Diverse array of graphing options including time and spatial graphs, trigger levels, annotations, fully customisable per project and per user.

Journal

Track project progress and changes on site, create entries shared between users, tag sensors and integrate with graphs to easily interpret and portray the relationship with recorded data.

Alerts

Robust automated alerting and alarm features. Get notified when values cross specified thresholds and sensors lose data. Full control of distribution and mailing lists.

Reporting

Create bespoke, highly customisable PDF reports and manage automated distribution via email. Includes graphs, layouts, and alert summaries.

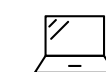
Users and access

Unlimited users, tailor levels of access for clients and site teams. Secure personal accounts with phone number and email address.

Project-tailored features

Track live progress for multiple Tunnel Boring Machines and monitor structures within their Zone of Influence. See interfaces with assets and responses of sensors as tunnelling advances.

Piotr added: "QuickView gives a level of control and visibility that simply wasn't possible before. It's about making better decisions, faster – and ultimately delivering safer, more efficient projects."



To find out more about QuickView's capabilities, [please click here](#).

GEO INSTRUMENTS project focus



Coastal defence works Pevensy and Eastbourne

The UK GEO-Instruments team is working with the Environment Agency to monitor noise, vibration and air quality during coastal defence improvement works in East Sussex.

The scheme involves extensive beach regeneration and maintenance works covering 15 kilometres from Pevensy Bay to Eastbourne.

The current phase of works involves moving 5,000 m³ of shingle and installing timber to improve wave screens along the Pevensy frontage. Large trucks are being used to relocate the shingle and a bulldozer is then used to distribute the material across the beach.

The operation requires up to 96 trips a day, so has the potential to generate significant noise, dust and vibration.

To measure the potential impact the works might have on local residents and businesses, GEO-Instruments supplied a modular battery-powered monitoring setup comprised of a noise sensor, a vibration sensor and an air quality station, assembled on a movable tripod to enable deployment in regularly changing locations.



Find out more about the coastal defence works and the technology used [by clicking here](#).



Dovetail Building London

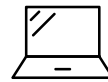
A comprehensive instrumentation and monitoring programme has been installed by GEO-Instruments at a new office development in central London.

The work at the Dovetail Building combines manual surveying, automated 3D surveying, geotechnical, and environmental monitoring to measure the impact of construction works on the surrounding buildings, nearby streets and underground tunnels.

These instruments provide continuous data, helping the project team ensure activities remain within required limits.

The Dovetail Building, a 23-storey office development, is designed as a flexible and sustainable workplace and includes amenities, retail, and public realm spaces. The project involves significant demolition and excavation works that require a thorough monitoring scheme.

The combination of automated instrumentation, manual surveying and environmental sensors provides a detailed picture of the project's effect on nearby buildings and the transport network.



Read more about the detailed work carried out at the Dovetail Building [by clicking here](#).



Hertford College Oxford University

GEO-Instruments has provided the monitoring scheme for the redevelopment of Hertford College, which is part of Oxford University.

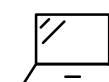
The college is located in the historic centre of Oxford, among other University buildings and directly next to the iconic Bodleian Library.

The redevelopment will significantly upgrade the library, archive, study and meeting spaces of the college. In order to meet project specifications, detailed, non-intrusive monitoring of the historically significant buildings was required.

GEO-Instruments' monitoring scheme combined manual 3D surveys undertaken weekly with manual inclinometer readings and automated 24-hour vibration monitoring.

For a complete picture of three-dimensional movement of the structure, more than 150 retro-reflective targets were placed on the exterior walls of the college and around the interior courtyard.

Manual and automated monitoring is expected to continue alongside the redevelopment works until late 2026.



[Click here](#) to discover more about the monitoring work used during the Hertford College project.



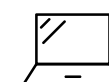
Housing development Seaton

For more than a decade across multiple project phases, GEO-Instruments has been involved in a housing development project in Seaton, Devon, as part of an ongoing collaboration with Vertase FLI.

Due to soil conditions on site, it's necessary to prepare the ground before construction can begin on each phase of the project. Specifically, the ground must be consolidated to minimise ground movement or settlement that could occur during or after construction.

In this case, a surcharging method is used to achieve the necessary consolidation and stability of the soil. The ground is covered with an earth mound greater in mass than that of the final planned development, and this is left in place for a period to allow the soil to compress and settle.

To measure progress and ensure that the expected settlement is achieved, GEO-Instruments installed a monitoring system, consisting of nine VW Liquid Settlement plates, around the area to be surcharged. This settlement monitoring scheme is a critical part of ensuring that the ground is adequately prepared before construction begins.



Find out more about the work that has taken place at the Seaton housing development [by clicking here](#).



The retaining structures behind UK's

Whether it's supporting a new road or modernising a busy rail route, Phi Group is helping to keep some of the UK's biggest infrastructure projects on track.

The market leader in design, supply and installation of retaining structures has been applying its expertise to several major projects throughout 2026.

Arguably the biggest is the Skanska £1bn A428 Black Cat to Caxton Gibbet improvement scheme between Bedfordshire and Cambridgeshire – one of the most important highways projects currently under construction in the East of England.

More than 8,800m² of reinforced soil structures spread across 16 separate locations are being delivered by the Phi team in one of the group's most logistically-challenging jobs. In total, 21 wingwalls, three retaining walls, and two bridge abutments will be constructed by Phi Group – but the scale of the task extends way beyond the physical work on site.

Julian Fletcher, Phi Group's Managing Director, explained: "The A428 is one of the largest reinforced soil packages we're delivering, but the challenge isn't just building the walls themselves.

road and rail construction projects

It's managing the interfaces, logistics and sequencing across a live infrastructure project of this scale."

The A428 project is certainly vast. It is classed as a Nationally Significant Infrastructure Project, which means it's a complex scheme that will ultimately benefit the entire country.

Due to open in 2027, the improvements see a new 10-mile dual carriageway being built and upgrades to the Black Cat and Caxton Gibbet junctions. It will help ease congestion and

cut journeys at peak times by an expected 10 minutes.

Although reinforced soil wall construction is now a well-established technique, the A428 project presents some unusually demanding obstacles.

Many of the structures sit within constrained corridors where existing roads, waterways and property boundaries dictate awkward shapes and alignments.

As a result, walls often incorporate tight curves, corners and changes in direction.

"For us, geometry is often the hardest part," Julian said. "Corners mean grids going in

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Engineering wall-to-wall solutions

From Page 31

different directions at different elevations. It's buildable, but it takes planning and care."

However, Julian said Phi's early involvement in the project has paid dividends as they continue to work closely with main contractor Skanska.

"Early collaboration really works," he said. "We know Skanska well, and that relationship really helps when you're dealing with this level of complexity."

The majority of the structures use the TensarTech TW3 reinforced soil wall system. Constructed using flint-coloured modular concrete blocks, the system combines high-strength geogrids with compacted engineered fill placed in layers behind the wall face.

“Clients value our technical expertise and our ability to integrate with wider project teams”

Phi is also installing vegetated reinforced slopes using the TensarTech NaturalGreen system, creating engineered earth structures that blend more naturally into the surrounding landscape.

The A428 scheme has also given Phi the opportunity to introduce a new approach to handling wall-facing blocks.

TensarTech TW3 units used on the project weigh almost 40kg each and would traditionally require a two-person lift – so to reduce manual handling risks, Phi trialled specialist Probst vacuum lifting equipment mounted on compact tracked carriers.

The company expected some loss of productivity



Work taking place on the A428 project. Below left, completing a structure on the A47 for Galliford Try. Below right, the Transpennine Route Upgrade scheme where a Tensar TW3 reinforced soil bridge abutment was installed.



– a necessary trade-off for a reduction in manual handling – but, instead, the opposite happened. Julian said: "We actually expected the machines to slow us down. Instead, productivity has gone up considerably. The gangs worked out better sequencing and the whole operation just flows."

The results were convincing enough for Phi to invest in a second machine, which is also being used.

Aside from the ongoing A428 work, Phi Group has also installed several structures on the A47 scheme for Galliford Try.

On the Blofield to North Burlingham section of the project, more than 1,000m² of the Tensar TW3 system was installed, acting as wing walls for two new bridge structures.

In addition to this, Phi Group has also successfully completed work for BAM Construction on its Transpennine Route Upgrade Scheme.

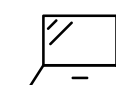
This significant, multi-billion-pound railway improvement programme aimed at enhancing connectivity across the Pennines between Manchester, Huddersfield, Leeds, and York has seen Phi install a Tensar TW3 reinforced soil bridge abutment at the Colne Bridge Road section of works.

Access to the site was tight, but the work was completed on time and on budget.

Julian said these projects highlighted the experience and flexibility of Phi Group.

"Whether we're working on a major highways scheme or a rail upgrade, the principles remain the same," said Julian. "And that's delivering a safe, buildable and efficient solution that supports the wider project."

"Our experience across both sectors allows us to bring proven engineering approaches to a wide range of infrastructure challenges. What clients value is not just our technical expertise, but our ability to integrate with the wider project team and help solve problems before they impact programme or cost."



For cost-effective, sustainable and buildable solutions, visit the Phi Group website [by clicking here](#).

PHI GROUP project focus

A KELLER COMPANY



Hafodyrynys Road scheme Caerphilly, Wales

Caerphilly County Borough Council approached Phi Group to assess suitability and options for the widening of a carriageway and footpath on Hafodyrynys Road, which had been one of the most polluted streets in the UK outside of London.

Phi Group were appointed to carry out the detailed design of the Textomur slope to enable the project to be tendered and were then appointed by the successful contractor, Walters Group, to carry out the supply and installation.

The main challenge for this scheme was creating access down to the works area while minimising disruption to the busy road above.

As levels were being raised on site, the use of a reinforced soil solution was deemed the most appropriate. The Textomur slope was 190m long and up to 4.80m in retained height, with a face area of 830m².

Walters said: "It has been a pleasure working with you. Brendan and the boys were great on site and that has led to the remaining works going pretty smoothly so it's much appreciated."



Read more about the work that took place at Hafodyrynys Road [by clicking here](#).



Farleigh Hill Tovil, Kent

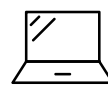
Phi Group helped deliver a cost-effective solution for several large retaining structures required to support a development at an old quarry site.

As part of an enabling contract, On Grade, an earthworks and stabilisation specialist, was appointed to prepare the Farleigh Hill site, in Tovil, near Maidstone, Kent, for Vistry Group to commence construction.

There were large areas of the site that needed to be filled to create a level development plateau. For cost and environmental reasons, Vistry wanted to use material from other areas of the site to raise levels in the required areas.

Phi Group's experience and technical knowledge, combined with On Grade's expertise in the treatment of site-won materials, proved to be an effective solution.

Phi Group proposed the use of the Textomur reinforced soil slope system, installed at an angle of 70 degrees. In total, Phi Group carried out the design, supply and installation of four Textomur slopes, retaining up to 13.50m in height, 495m in length and with a face area of more than 3,000m².



Find out more about the Textomur reinforced soil slope system [by clicking here](#).



A40 Llanddewi Velfrey to Redstone Cross

Phi Group's Textomur reinforced soil slope system has been used to great effect on a major highways scheme in West Wales.

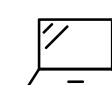
Principal Contractor Alun Griffiths (Contractors) Ltd appointed Phi Group to supply and install two Textomur reinforced soil slopes, whilst also providing design input for Jacobs, the scheme engineers.

There were two Textomur reinforced soil slopes required on the scheme:

- Wall 1: 67m long, up to 9.60m maximum height, 555m² face area.
- Wall 2: 150m long, up to 19m maximum height, 1,786m² face area.

The Textomur slopes were designed in-house by Phi Group, with geogrid lengths and strengths ascertained and the designs then adopted by Jacobs as part of the overall scheme design.

The Textomur system has been widely used on a number of high-profile highways schemes but is also suitable for commercial and residential projects, especially where the re-use of site won material is an option.



Read more about the work on the A40 Llanddewi Velfrey to Redstone Cross [by clicking here](#).



Saxon View Nuneaton, Warwickshire

Phi Group was approached by Barratt Homes following problems with an existing retaining wall system on site.

The topography of the site meant that extensive lengths of retaining walls with substantial retained heights were required to enable effective development and maximise space.

Coming into a project that is already under development is not always easy, and in this case there were areas where house foundations and even brickwork had been constructed prior to the wall collapse.

The Andacrib concrete crib retaining wall system was chosen as the preferred solution. It is robust, with a 120-year design life, and quick to construct.

In total, Phi Group designed, supplied and installed five Andacrib concrete crib retaining walls, which totalled 750 m in length, retained up to 7.90 m in height, and had a face area of 4,500 m².

In addition, installed climb-prevention mesh and fencing was installed, and more than 20,000 m³ of backfill material was placed.



Watch a video about the work carried out at Saxon View for Barratt Homes online [by clicking here](#).

global strength
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www.keller.co.uk
www.phigroup.co.uk
www.geo-instruments.co.uk

Keller UK Head Office

Oxford Road
Ryton-on-Dunsmore
Coventry
CV8 3EG
T: 02476 511266
E: foundations.uk@keller.com

Phi Group Head Office

Montis Court
Bouncers Lane
Cheltenham
GL52 5JG
T: 01242 707600
E: southern@phigroup.co.uk

GEO-Instruments

Tower Bridge Business Centre
46-48 East Smithfield
London
E1W 1AW
T: 0207 709 2030
E: info@geo-instruments.co.uk