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PASSION | INTEGRITY | EXCELLENCE Issue two | Summer 2021

An NG Bailey magazine

NG Bailey in**focus** // All the latest news from NG Bailey // Contract wins // New appointment – John Kelly // POC-MAST[™] Installation // Projects in**focus**





centenary year!

A snapshot to celebrate what we've achieved together as a business over the last 100 years.



Catch-up with what's happening across the business.

Contract wins 07

We've secured a number of notable contracts during the last six months.



The future of healthcare construction

We join our pre-contract manager for healthcare, Patrick Morrison, to find out more.



New appointment

We welcome our new Group Commercial Director, John Kelly.



apprenticeship... Providing opportunities for people to train,

learn, develop and gain key skills is now more important than ever.

> **Freedom delivers** power transformation

We deliver an upgrade to a customer's energy infrastructure at Cannon Bridge House, London.



Introducing our new responsibility strategy.





The last 18 months or so have been tough for many, but with restrictions being lifted across the country, things are getting back to a level of normality.

Despite the ongoing challenges of the COVID-19 pandemic, this is a year of significance for NG Bailey and sees us celebrating our 100th year in business. To mark the occasion in this issue, we've gone back through the archives to pull together a snapshot on pages four and five, which details our journey from 1921 to the present day, and shows just how much we've progressed as a business from our humble beginnings as a small domestic electrical contractor to the award-winning industry leader we are today.

We're proud to employ people who are experts in their field and it's great to see them sharing their views and opinions on some of the key issues that we face as an industry, as well as their suggestions for change. In this edition we hear from Patrick Morrison, our pre-contract manager for healthcare, who explores why modern methods of construction are key to the future success of construction in the healthcare sector on page eight and Richard Roberts, our group insurance manager, who highlights why having adequate professional indemnity insurance cover in place is essential (page 19).

Our projects are also key to our success and we've secured some exciting new contracts so far this year. This includes notable works being undertaken for clients such as Southampton Football Club, Fujitsu (on behalf of the Ministry of Defence), and renowned universities Manchester Metropolitan and Salford you can find out more about these on page seven. We also take a look at some of the outstanding projects currently being undertaken by our Engineering and Services teams across the country on pages 20 to 22, including the completion of our work on the prestigious Manchester Engineering Campus Development (MECD).

IT donations for schools power ahead

Thanks to our three-year relationship with SE Recycling, one of the UK's leading ICT recycling companies, we donated 55 laptops and PCs worth more than £10,000 to schools in the Leeds area earlier this year. This will support students affected by the pandemic and provide them with much-needed equipment required for online studying. We've now donated a further 97 laptops to schools in Birmingham, Cheshire, Salford, London, Reading, Leeds and Scotland.



Want to get in touch?

Contact our Marketing team **marketing@ngbailey.co.uk**

Take a look at our new office in the heart of Salford Quays.

11

Awards 16 SUCCESS

We've had some fantastic achievements and acknowledgments so far this year.

POC-MASTTM

New location in

Manchester

Our first installation for SSEN.

Is professional indemnity insurance the weak link in your supply chain?

Richard Roberts, our group insurance manager, shines a spotlight on this important topic.

Recent projects infocus



We take a look at some standout projects being delivered by our Engineering and Services divisions across the country.



As well as creating exceptional environments for present and future generations, we believe in nurturing and developing the next generation too. Providing opportunities for people of all ages to learn and thrive is really important to us and you can find out more about our long-standing and award-winning apprenticeship programme on pages 14 and 15. This also includes interviews with two of our talented electrical apprentices, who both joined us after a change of career path.

It's fantastic to see the work of our people being recognised in the RoSPA and Zero Waste Awards, as well as reaching the final stages in a number of other notable industry awards (page 16) - let's hope we can build on this success when the results are announced later in the year! We're also immensely proud to be honoured with the Employer Recognition Scheme Gold Award for our work with the armed forces community, and as a signatory of the Armed Forces Covenant, this is really important to us as a business (page 17).

It's fascinating to see the first POC-MAST being installed for SSEN on site in Wiltshire. Developed by our in-house experts at Freedom, this innovative tool it makes it safer, faster, easier, and more cost-effective for energy projects to get connected to the network. You can take a further look on page 11.

I hope you enjoy reading this issue and finding out more about some of the great things we're doing.

The future looks bright for us as a business, and we look forward to our next 100 years.

David Hurcomb Chief Executive



It's our centenary year!

This year we are celebrating our 100th year in business.

Founded back in 1921 carrying out only small domestic electrical installations, we have grown to become the award-winning, industry-leading independent engineering and services business we are today. We are still family-owned and extremely proud of our people, our achievements and the projects we've delivered over the last 100 years.

We delve into the history archives to find out more about some of our achievements and look forward to what the future has in store.



12 employees Turnover £5,000

Formed in a basement in Leeds, installing electrical wiring in a 12th century Norfolk manor house was one of our first projects. 1922 saw Noel Grimshaw Bailey buying out his partner and forming a non-limited company.







Growth and expansion 40 employees | Turnover £30,000

We became a limited company and opened our first electrical goods shop in Leeds. Noel Grimshaw Bailey launched our now wellestablished apprenticeship scheme by engaging five apprentices to help with the growing workload.



Supporting scientific advancement 1,100 employees | Turnover £1.38m

The 1950s saw continued expansion with a major focus on the county's growing nuclear industry; this field took us overseas to projects



1960

In full swing

The swinging sixties saw NG Bailey move into pipework installations with the company now offering all types of electrical work, we completed our first multi-storey office block.



1980

in the Middle East.

A decade of progress

2,700 employees | Turnover £100m

We expanded further and our Denton Hall office was equipped with new facilities to accommodate the numerous training courses on offer within the business.



1990

Maintenance services begin

We entered the heating, ventilation and cooling market and introduced Bailey Maintenance Services – a forerunner of our Facilities & Infrastructure Services offering.



| 2010 |

Shaping the future

Our acquisition of Freedom Group gave us a presence in the electricity distribution network market. We secured our largest contract to date, worth more than £600m, at Hinkley Point C, the UK's first new nuclear power station in two decades.





Working together

Despite the challenges of 2020 we continued to work together to achieve great things. We joined the fight against COVID-19, working collaboratively on the NHS 'Nightingale Hospitals' initiative, to quickly deliver working field hospitals in Harrogate, Manchester and Cardiff.



Follow the timeline to find out more about our 100-year highlights.

Keep an eye on our socials or visit the dedicated centenary page on our website to keep up to date with our centenary news.





Going nuclear 100 employees | Turnover £139,000

The 1940s saw the company continuing to support the country's war efforts and later focusing on major industrial projects and expansion into the atomic energy industry.

1970

Golden years

Our apprenticeship programme saw intake increasing by 35% and in 1978 we also had our largest intake to date, with 144 young people successfully securing a role.



Reaching milestones

We achieved our first Investors in People Award and turnover exceeded £600m. Bailey Prefabrication and Bailey Teswaine, which later became known as Offsite Manufacture and IT Services, were formed.





An exciting future

In our centenary year, we celebrate being 100 years young, 100 years responsible, 100 years together and 100 years strong. We are immensely proud of the people and projects that have made us the award-winning, industryleading business we are today.

The future is exciting for NG Bailey.

Catest news

IT Services secures FIRAS certification

Our IT Services business unit has achieved the esteemed FIRAS fire stopping certification for penetration sealing systems. The FIRAS certification is a third-party scheme for installers and is instrumental in improving the installation and maintenance standards of both passive and active fire protection products and systems.

FIRAS certification is awarded to the contracting company, which means all operatives are held to the same standards for the discipline being assessed. With few other companies holding FIRAS certification, it places our IT Services business in a unique position in the market. It also enables us to offer our clients total peace of mind.

Kelly Tedesco, Managing Director – IT Services, said "This is a fantastic achievement for IT Services, the team worked hard to ensure we were compliant in all elements of the assessment. I would like to say well done to the team

members who helped us to achieve this certification, which is a testament to our commitment to fire safety."



Services division MPACT sponsor 2021 IWFM 202' Impact Awards

This October sees the IWFM Impact Awards, which celebrate the outstanding best practice and ingenuity from across the services industry, take place in London. With a wide range of categories to enter, the awards will be an evening dedicated to showcasing the services industry.

Ahead of the awards, our Services division is proud to be sponsoring the Positive Climate Action category, which focuses on the practical implementation of environmentally friendly practices and specifically the role of workplace and facilities management in their success.

The IWFM Impact Awards are the industry's most prestigious award ceremony, celebrating organisations, people, processes and products that make a huge difference to millions of people across the UK.

The past year has been extraordinarily challenging for the services industry, with many obstacles to overcome due to the pandemic, but these challenges have also provided plenty to recognise and the Impact Awards celebrates this.

Along with our peers and customers we are very proud to be part of this year's awards.



Uptime Institute Professional Services M&O Stamp of Approval for One Angel Lane

One of our managed services premises, One Angel Lane in London, has been granted the Uptime Institute Professional Services Management & Operations Stamp of Approval.

The premises are the European headquarters for a leading investment bank and is currently one of only 11 buildings in the UK to hold this Global standard. For the premises to maintain its leading world-class service, it is vital that its facilities remain safe and threat resistant, which makes uptime, constant IT service availability supporting operational delivery, critical.

Mechanical and electrical infrastructure is an essential part of its operations and like all investment banks, it must comply with policies and protocols to deliver against rigorous regulatory requirements. Ensuring the resilience and security of its M&E infrastructure is vital, and as their facilities management provider, it is essential that we comply with these policies and protocols.

Tim Simmons, Managing Director, Facilities & Infrastructure Services, said: "This is a great achievement for all the stakeholders who were involved in successfully securing this prestigious stamp of approval for One Angel Lane. I'm particularly proud of our Facilities & Infrastructure Services team who continue to deliver a high level of service to our valued customer. We see this as a benchmark for our future performance and we are committed to continuous improvement and maintaining operational excellence."

Contract wins

FIS scores 'saintly' maintenance services contract

Our Facilities & Infrastructure Services business has secured a three-year contract to provide maintenance services for Southampton Football Club. It sees them providing a full range of mechanical, electrical and building fabric maintenance services at St Mary's Stadium and the club's Staplewood training facility.

The contract award is part of the club's wider sustainability strategy, which aims to reduce the carbon footprint of its sites and follows a year-long evaluation and competitive tendering process.

As well as St Mary's Stadium, a key part of the contract involves maintaining the club's extensive state-of-the-art Staplewood training facility which is situated on the edge of the New Forest. As well as training areas for the first team and youth team, the facility also features a gym, restaurant, function room, and seminar areas alongside temperature-controlled rehabilitation and treatment facilities, medical areas, and a hydrotherapy pool.

IT Services MOD double

Our IT Services business has secured two contracts, both with a multi-million-pound value, to support Fujitsu in delivering a range of services for the Ministry of Defence (MoD).

The majority of the work is being delivered as part of the Defence Connectivity Network Services project and will see 75 of our IT specialists providing break-fix capability for passive infrastructure on MoD estates throughout the United Kingdom, Cyprus and North West Europe.

Since May, the team has been supporting a significant number of locations for Data LAN services, with voice maintenance services also being provided at a sizeable number of locations. The break-fix capability is being delivered via a team of suitably qualified and experienced engineers, with associated management, to ensure a best in class service is accomplished. The passive infrastructure includes Cat5, Cat5e, Cat6 and Cat6a data cabling, all types of fibre optics mediums and telephony. The contract also includes a range of service level agreements to ensure key infrastructure remains available round the clock.

The second contract, which began in March, is part of the Future Maritime Support Programme based at HM Naval Base in Portsmouth. The team is delivering a fast-paced installation of new internal and external communications infrastructure, including civils, electrical and containment work.

Engineering continues to excel in higher education projects

Our Engineering division has been contracted by Bowmer + Kirkland to undertake MEP projects at two of Manchester's well renowned universities.



Our bespoke flexible approach to building maintenance means problems can be identified sooner and fixed faster; information from building management will also be captured and used to improve the carbon footprint of its sites by reducing energy and water usage.

We are undertaking £4.1m of MEP service installations to the Energy House 2.0 research and testing



European Union European Regional Development Fund

facility at the University of Salford, which includes two environmental chambers and a central core of plant, office and control rooms. The project also includes the creation of facilities for testing the energy performance of whole buildings which can simulate all weather conditions ranging from -20 degrees Celsius to +40 degrees, plus rain, wind, solar radiation and snow. Work began in May this year and is programmed to run until December. The next phase of works is due to commence soon, and we have taken delivery of large plant and equipment to allow for the seamless transition into this stage. The Energy House 2.0 facility is being part funded by the European Regional Development Fund and more details about this project can be found at <u>www.energyhouse2.com</u>.

We are also completing the MEP service installations to the new state of the art building at Manchester Metropolitan University's Science and Engineering campus, as well as refurbishment of the existing John Dalton building, which includes laboratories, teaching facilities and engineering workshops. The £19m project started in January this year and is programmed to run until January 2024. We completed phase one of the project in May 2021 and have moved onto the 'summer phases', which involves undertaking isolations and the initial identification of services ahead of the next stage of ongoing works.

Why a one-size-fits-all approach may be the future of healthcare construction



Patrick Morrison, our pre-contract manager for healthcare, explores why modern methods of construction are key to the future success of construction in healthcare.

The UK Government has committed to finance the largest hospital building programme in a generation, giving the green light to more than 40 new hospital projects across the country. Six projects have already been given the go-ahead and a further 30 could be built during the next decade.

This is an ambitious programme and in order to achieve it within the next decade, NG Bailey and our colleagues across the sector need to re-think our approach to how we design and build new hospitals. This is where modern methods of construction (MMC) come in.

Why now?

MMC have been used by the construction sector for many years. At NG Bailey we have been pioneering the use of MMC across many of our projects, including in the healthcare sector since 2000, so why are we now talking about it being the future of the sector?

Well, the Nightingale Hospitals which were developed as part of the

Government's response to the COVID-19 pandemic are just one example of where MMC come into their own. In an unprecedented set of circumstances, where time was of the essence, NG Bailey and partners across the sector were able to construct five field hospitals across the country in just a matter of weeks.

A big part of this delivery was offsite manufacturing. This enabled us to design, manufacture and install complex services infrastructure serving over 2,000 new hospital beds in less than four weeks from a standing start, all while maintaining safe social distancing measures.

Creating standardised solutions

While the Nightingale Hospitals may be an extreme example, it goes to show what is achievable when there is a real, immediate demand in the healthcare sector.

The project also highlighted that when it comes to delivering multiple large-scale healthcare facilities, there are a lot of benefits to creating a 'kit of parts'. This means standardising offsite solutions, for example corridor services frames, so that they can be manufactured offsite and slotted together.

Currently, designs are progressed from concept through to the spatial coordination stage based upon traditional installation techniques. This means that key architectural design decisions are sometimes made against outdated engineering principles, which ultimately increases time needed on site and costs for the client.

However, if we work collaboratively with healthcare organisations to agree a standardised 'kit of parts' for hospitals, we can ensure that everything produced will not only be compliant, but will also deliver best value for the project because things don't need to be re-designed every time.

This is a change to the current method of construction, where a building is designed first and then assessed for prefabrication later. By designing the building around a catalogue of pre-designed components, efficiencies are created at every stage. These can be passed on to the customer who benefits from consistent quality across the build, cost savings and ensures the programme stays on track.

The idea of a 'one-size-fits-all' approach is something we've been developing for a while at NG Bailey and it has had positive results. One example is the work we delivered at the Aberdeen Royal Infirmary's new £115m emergency care centre.

For this project we manufactured all the corridor service modules offsite, complete with plasterboard head-partitions. This allowed all the service penetrations from the corridor into the clinical rooms to be made in a factory environment to a much higher standard of quality than could have been achieved on site.

The offsite solutions on this project included manufacturing more than 400 of these multi-service corridor modules, 10 mechanical and electrical risers, as well as rooftop and basement plant modules and a complete modular wiring solution.

Adopting this standardised approach meant that we significantly reduced the labour hours required on site which created a safer working environment, as fewer people were required. It also led to faster installations, with a 40% reduction in hours for the primary corridor services and dry-lining installation alone, which in turn saved time on the overall project programme.



Minimising disruption

The benefits of MMC are well documented, but the time, cost, quality and safety benefits which offsite manufacture bring should not be taken for granted, especially on healthcare projects where one of the biggest challenges we face is ensuring minimal disruption to patients and staff on site.

MMC help minimise the impact on clinical activity as we can refurbish areas like operating theatres in a



phased approach, ensuring vital surgeries can still take place. We also utilise Building Information Modelling (BIM) for design and offsite manufacturing on these projects, so no hot works need to be carried out on site, reducing the fire risk and improving site safety for all. Items are also delivered as a set, bolted together, so the amount of noise generated in construction and installation is greatly reduced for patients recuperating in hospital.

Our work at the Chesterfield Royal Hospital saw us face the challenges of working on a live hospital site. We provided new state of the art operating theatres for the hospital and were able to use a phased approach to refurbish their existing surgical department, ensuring adjacent theatres could still function while the upgrades were being made.

The hospital was updating its 40-year-old operating theatres to create cutting edge facilities which are at the forefront of UK hospitals. Our work on the project took several years to complete and involved some complex logistical challenges. Through the use of BIM, we demonstrated and coordinated new services through the existing services structures, ensuring that new services could be both efficiently installed and easily maintained.

At points we were working across the corridor from where live operations were taking place, so patient and staff safety was of paramount importance. Our use of MMC meant there were no unplanned disruptions to the daily operational functions of the hospital and patient care was maintained throughout.

Our teams have also recently delivered similar complex theatre refurbishment programmes at other hospitals throughout the UK, using MMC to help minimise disruption.

Creating a sustainable future

While cost and time efficiencies are naturally important considerations for clients, designing more sustainable hospitals is also high on the agenda. The UK Government has committed to reaching net zero carbon by 2050. This means significantly reducing emissions and the NHS has therefore committed to reaching Net Zero as soon as possible. Increasingly clients want buildings and construction methods which are more sustainable and can help them reduce their carbon footprint.

MMC and offsite manufacturing will undoubtedly play a big role in the aim to reach Net Zero carbon as the techniques mean there are fewer people working on site, this also means reduced numbers of people driving there daily. Offsite also reduces the number of deliveries required to site and there is less waste during production as services are designed to be more efficient, and more complex modelling together with factory quality control means errors are reduced.

At the University Hospital of North Tees new energy centre, we were able to remove more than 6,000 labour hours and 180 site deliveries through our use of offsite, saving 10 tonnes of carbon. The new £14m energy centre we designed, manufactured and installed is also more reliable and utilises modern and more efficient plant and equipment, reducing the Trust's future energy consumption and carbon footprint.

This one example goes to show what a significant impact using MMC can have. If these savings were scaled up and multiplied by the 40 new hospital projects the Government has planned over the next decade, we would see significant benefits.

Delivering healthcare over the next decade

It's also worth thinking about the amount of resources and technical expertise required to deliver these projects. It's an ambitious figure and the number of contractors who can build and deliver projects on this scale is limited. That means that if we are going to stand a chance of achieving these figures, on time and to budget, we need to be thinking seriously about an organised, standardised 'kit of parts' approach.

COVID-19 is also something which will play a part in the delivery of future healthcare projects. Currently we don't know how long the virus will have an impact on our daily lives for, but what's certain is that this global pandemic will have a lasting legacy in how we approach new hospital builds.

We're already starting to see an impact on hospital designs for the future, with a demand for more flexible space which could accommodate a future pandemic. There is a greater onus being placed on critical care and any new major hospital will need to have a strategy and resources in place to become key care centres for a future outbreak.

Hospitals may need to have facilities nearby which could be turned into an extension to deliver further care. A more robust and increased services infrastructure is another key consideration as some patients with COVID-19 require specific care, which means there is a much greater demand placed on services such as medical gases and ventilation systems.

On a practical note, as MMC reduces the number of people required on site, those working will be able to socially distance more easily making it a much safer working environment, something which was a huge benefit on the Nightingale projects.

It's clear that MMC will continue to play a significant part in the future of the healthcare sector and with the Government committed to adopting it for the future hospitals programme, as an industry we need to think seriously about adopting a forward-looking 'kits of parts' approach. At NG Bailey we will continue to pioneer modern methods of construction, using our technical expertise to help meet the demand for high-quality healthcare facilities.

+10%

Least efficient Most

efficient



Our Freedom business has been working hard to deliver a POC-MAST™ installation for a 70MW solar farm on the Scottish and Southern Electricity Networks (SSEN), the first to be used on their network.

The 213-acre solar farm at the former RAF Lyneham base in Wiltshire, the first to be developed with the Ministry of Defence, saves 21,000 tonnes of carbon emissions annually and generates enough power to cover the average annual usage of around 20,000 homes.

The location next to an ancient woodland presented several challenges and it initially appeared that the permanent connection would require installation of a new pylon, diversion of an overhead line and removal of part of the woodland. The patented POC-MAST installation provided an alternative solution, enabling a connection directly onto an existing tower without the need to disturb any of the surrounding woodland.

Each of the two POC-MASTs required were lifted into place in just six minutes, with the total installation taking 10 working days. A new tower and diversion would have taken considerably longer, required multiple outages on both circuits and cost significantly more.

POC-MAST™ has been developed by Freedom's in-house experts to transform the way new connections to the high voltage electricity distribution network are delivered, making it safer, faster, easier, and more cost-effective for energy projects to get connected to the network

POC-MASTTM shortlisted for innovation award

The innovative POC-MAST[™] product is shortlisted in the physical technology of the year: electric energy category in the upcoming Energy Awards.

The awards celebrate innovation and imagination, best practice and business excellence, customer service, and collaboration in the energy industry.

This follows its success at the Engineering and Technology Innovation Awards last year where it won the Outstanding Innovation in Future Power award.

POC-MAST[™] was originally developed for a renewable energy project where a traditional connection into an electricity network wasn't possible. Since then, POC-MAST[™] has received substantial investment, undergone extensive testing, and experienced early successes.

Now the patented product is set to revolutionise the way new connections to the high voltage electricity distribution network are delivered

platform approach

Kit of parts/

Offsite construction

Traditional construction



Quick to complete, it takes less than 20 weeks from concept to construction, where traditional installations typically take 6-12 months. This quicker process can make the difference to whether a scheme is viable.





New appointment John Kelly

We welcome John Kelly, our new group commercial director, to the business.

John has enjoyed a long and successful career in the engineering sector and joins us from Imtech UK & Ireland, where he also held the role of group commercial director.

He has also previously held senior commercial leadership roles with Mercury Engineering, Laing O'Rourke Crown House and Wimpey/Tarmac/Carillion.

Speaking about his new role, John said:

"NG Bailey is a leader in *its sector with a fantastic* heritage and an exciting future ahead. I'm delighted to join the company as it celebrates its centenary year and support its continued growth and development."

David Hurcomb, Chief Executive, commented: "I am delighted to welcome John to the business. He brings a wealth of valuable experience and he will play a key role in cementing our position in the sector and maximising opportunities for further sustainable growth."



New location for our **Manchester office**

Our Manchester-based teams have relocated to a new office in the heart of Salford Quays and we have chosen Building 5 at Exchange Quay as our new regional base in the North West.

We have a long and proud history of working in Manchester, opening our first office in the city in the 1930s. Over the years, our Engineering and Services teams have worked collaboratively on a number of iconic projects in and around the city including; Media City, Bridgewater Hall, Imperial War Museum, Old Trafford, the Grade 2 listed Central Library and more recently the development of Manchester Engineering Campus Development (MECD), the refurbishment and partial restoration of Manchester Town Hall and the transformation of Manchester Central Convention Complex into a NHS Nightingale Hospital.

The new 6,787 sg. ft office has created a flexible agile workspace for colleagues and was chosen for its great transport links and local amenities, along with bringing the business closer to our industry partners and customers. The Exchange Quay campus incorporates 435,000 sq ft of Grade A office space along with extensive occupier amenity in a landscaped waterside setting close to Manchester City Centre and currently accommodates more than 4,000 workers.

Mike Darlington, Managing Director of Engineering : "This marks a new chapter for our business in the North West, moving to a new office space which offers a fresh, modern working environment and enables a more flexible way

of working for our Manchester-based colleagues. Our new office enables us to build on our history and wealth of experience in the region and continue to create exceptional environments for present and future generations."

EXCHANGE QUAY



It all starts with an apprenticeship...

At NG Bailey we believe apprenticeships are a great way to start your career, whether you're just starting out or embarking on a change of path. Providing opportunities for people to train, learn and develop, as well as gain key skills is now more important than ever and essential when it comes to future-proofing our industry.

Award-winning

training and

apprentices

We've been training apprentices since 1934 and since then, we've trained more than 5,700, with many going on to enjoy long careers and progress into senior positions with us.

We work in partnership with a national network of colleges to offer some of the best training in the industry and have recently been recognised by the Government as a Top 100 Apprenticeship Employer. These rankings celebrate the country's most outstanding apprenticeship employers in the public and private sector.

As proud members of The 5% Club, we consistently have more than 5% of our employees undertaking their studies via the apprenticeship route.

Our award-winning programme has been recognised many times as industry-leading and many of our apprentices win awards themselves. We are proud to say that at the end of their programme most of our graduating apprentices move into a permanent role with us.

With more than 20 different apprenticeship training programmes on offer, we currently have 226 apprentices going through their training with us. Even COVID-19 didn't stop us recruiting and this year is no different, our 2021 apprenticeship intake will soon be joining us.

Our apprenticeship training is very important to us and we continue to invest in our programme, and expand the range of roles we have to offer. Providing these skills and development opportunities is really beneficial to both NG Bailey and our apprentices and it's great to see them grow with us.

"I'm particularly proud that our commitment to apprentice training has continued throughout the COVID-19 pandemic and it is fitting that we can continue this in our centenary year.

Group Head of Learning, Frank Clayton





Apprenticeship Employer



20+ apprenticeship programmes



Over 5700 apprentices trained

From football to **fuses for Chenav**

Meet Chenay Hussey, who has swapped football for fuses to join us as an electrical apprentice.

Before becoming an apprentice Chenay played for Tottenham Hotspur, took up a football scholarship in Miami, and completed a diploma in sports when she decided to change direction, joining our 2020 apprentice intake.

Chenay said: "I started playing football seriously when I was 12 and had trials with top clubs including Tottenham, Arsenal, West Ham and Chelsea. As well as 11-a-side, I also played indoor 5-a-side in the National Futsal Championships – we were invincible

not losing a game all season. I was spotted by a scout and offered a scholarship at Broward College in Miami and although I enjoyed it for two-years I became very homesick, so I returned home and completed a level 3 diploma in sports.

"During my final year I realised I wanted a change of direction, but as I'm very driven it was important for me to finish."

Realising she wanted to do something practical, Chenay turned to family to help her choose her new path. She explained: "At school I was always more engaged when it came to practical, hands-on work – so I realised a trade would suit me. I've got uncles working in different trades so I asked them if I



Apprenticeship unlocks career change for Matt

Before joining our apprenticeship programme, coffee was the area of expertise for Matt.

Second-year electrical apprentice Matt Pickering, 29, had previously worked as a technical support manager for a commercial espresso machine importer before changing direction to take up an apprenticeship with us.

He said: "It was a big change and it meant going back into learning, which I hadn't done for a while.

"Supervisors and colleagues on site are very supportive. Most electricians enter the trade through an apprenticeship, so everyone has been in the same position as you at some point. If you

have any questions or need advice on a task, someone is always there to help without judgement or criticism.

"I feel really positive about how the apprenticeship is progressing. I've been given more and more responsibility, from installing complex runs of containment to second fixing accessories and distribution boards.

There's a perception that apprenticeships are for younger candidates but that's not the case and I now know of a lot of older trainees. I'm getting a wealth of experience that I didn't expect to get so soon and I'm really looking forward to seeing what the future brings.

could do work experience. After doing a couple of days of electrical installation I knew this was right for me.

"I set about researching where I could do an electrical apprenticeship, I found NG Bailey and it seemed like the perfect fit. This was confirmed for me as I went through the recruitment process and again when I did the online induction.

"My ambition is to complete my apprenticeship, learn about other parts of the business and work my way up the line. I would also love to become a role model to apprentices to support them and help them to be the best they can be and achieve their aspirations – it's an exciting road ahead."

> I'm thrilled to have started my apprenticeship and already feel that I'm getting great practical experience and learning on the job.



Awards success

We've had some fantastic achievements so far this year, which recognise the professionalism, hard work and dedication of everyone in our business over the last 12 months. Here's an update on some of our recent accolades.



RoSPA Awards recognition

We're delighted to have our commitment to health and safety recognised once again by the Royal Society for the Prevention of Accidents (RoSPA), which has honoured us with an amazing 11 awards across the business.



For the third year running we have received the highly coveted Order of Distinction, RoSPA's highest accolade in recognition of achieving 17 consecutive Gold Awards, in addition to six President's Awards, three Gold Medal Awards and one Gold Award.



Despite the challenges we've faced during the COVID-19 pandemic, these results represent all the hard work that has continued across the business over the last 12 months and our success demonstrates our ongoing commitment to improving health and safety standards across every part of the Group, where safety continues to be first and foremost.

Freedom receives four-stars at the **Zero Waste Awards**

Our approach to sustainability is an integral part of the way we do business, so we're really pleased that our Freedom business has been awarded a four-star rating at the latest Zero Waste Awards in recognition of its current zero waste to landfill position and other waste reduction initiatives. This supports our new Group-wide Net Positive strategy, which sets out our ambition to achieve zero avoidable waste in the longer term.

During the period of March 2020 to February 2021, 1705 tonnes of waste was generated through the services and projects Freedom delivers with a total of 99.4% of this waste being diverted away from landfill. In 2020, it reduced the amount of plastic waste generated by diverting 2260kg to a local reprocessing plant, which equated to approximately 2000 pieces of plastic packaging.

Freedom has also reduced its waste through smarter design and procurement, established two external partnerships that reprocess waste materials into new products and modified their ways of working by adopting innovative re-useable products that result in less packaging and hazardous waste.

Peter Jones, Managing Director, Services division says: Reducing the waste generated by our operations continues to form an important part of our wider sustainability programme, and to be awarded a four-star rating is a great achievement.

"Whilst 2020 was a very difficult year for many businesses, we are very proud of the high level of commitment we have maintained across the Freedom business and the dedication of our people who have continued to support and uphold our environmental initiatives, whilst exploring new ways of reducing waste.

We also believe that our environmental endeavours are helping us to foster better relationships with our business partners too.

Shortlist sensation

Offsite Awards

CN Specialists Awards

We are a finalist in a fantastic four categories; MEP Specialist of the Year, Offsite Specialist of the Year,

Construction News Awards

Constructing Excellence West Midlands Awards

ZERO

FOUR

STARS

WASTE AWARDS



We are proud to have been recently honoured with a Gold Award from the Ministry of Defence Employer Recognition Scheme for our work supporting the armed forces community.

We signed the Armed Forces Covenant in 2019 with a pledge to support the employment of veterans young and old, their spouses and partners and our employees who choose to be members of the Reserve or Cadet Forces. From initially receiving a Bronze Award from the Ministry of Defence Employer Recognition Scheme in early 2020 to receiving a Silver Award last September, we are really proud to be honoured with the prestigious Gold Award in 2021, our centenary year.

We currently employ more than 90 colleagues who are veterans, reservists, cadet forces volunteers or partners and spouses of serving men and women and we see the huge benefits recruiting ex-military, reservist or cadet forces personnel can offer us, as they have a breadth of aptitude, skills and training which are easily transferable and increasingly add real value to our business.

We have established strong

partnerships with military groups and charities through which we offer work placements and the opportunity to join employability workshops to help those transitioning from military service into civilian work. We continue to advertise our career opportunities through the Career Transition Partnership, which is

designed specifically for employers seeking to recruit ex-military personnel, and Forces Families, who offer training and employment opportunities for family members of currently serving UK military personnel. We have also pledged our support for Reserve and Cadet Force members both in supporting colleagues who wish to enlist as well as employing people who are already serving Reservists and Cadet Force Adult Volunteers.

We are always looking to see 'what can we do better' and despite the challenges of the last year, we have continued to provide internal Armed Forces networking opportunities and conduct guarterly workshops with our Armed Forces community to see how we can further develop and enhance our recruitment, careers, training and development opportunities, as well the experience we offer to our new starters.

Signing the Armed Forces Covenant has brought many benefits to our business and we believe it can also be beneficial to many other businesses too. For anybody wanting to find out more about becoming a signatory of the covenant and becoming a forces friendly employer, please click here.

Defence Employer Recognition Scheme **Gold Award** honour



Freedom delivers power transformation

Our Freedom Power Solutions and Facilities & Infrastructure Services (FIS) teams recently joined forces to deliver an upgrade to a customer's energy infrastructure, installing a new electricity transformer at Cannon Bridge House, London.

Our FIS team began looking after Cannon Bridge House in the City of London in 2020, where it was quickly established that the existing transformer was due for an upgrade. Project Manager Rob Mazzone was able to harness the in-house expertise of Freedom's High Voltage (HV) team who helped design and deliver the transformer exchange – replacing the old equipment with modern, energy efficient infrastructure.

With Cannon Bridge House located in a prominent position above Cannon Street Station, the project required collaboration between numerous stakeholders including Transport for London (TFL) and Sunbelt, who completed the traffic management changes. To minimise disruption, the project was carried out over a weekend with the team working long hours to ensure everything was back to normal by the Sunday evening.

Head of HV Operations for Freedom Richard Pinnion explained: "The team is highly experienced in delivering transformer exchanges. There were several challenges to overcome, not least the location of the building and the need for a cycle lane closure to crane in and out the old and new transformer. Further adaptations such as a scaffold lift and specially designed LV end box were also needed to carry out the exchange.



"Thanks to the team working throughout the night and over the weekend, we were able to minimise disruption, and complete the exchange unhindered and the customer was full of praise for everyone's efforts. The new transformer will provide a reliable service for years to come and reduce running costs for the customer."







As head of insurance at NG Bailey, I have seen various insurance market related issues recently move to the top of my agenda. One of the most prominent is the placement of professional indemnity insurance (PII) premiums, and the increasing costs of premiums.

Across our industry, PII premiums have soared while exclusions have also increased, this is driven by a number of factors including an increase in historic claims in the sector, and undoubtably the cyclical hardening of the insurance market.

According to one major recent survey of the architecture sector, practices are being quoted new premium prices that are, on average, three times higher than the cost of their previous policy renewal.

Additionally, not all practices said they had comprehensive insurance, with more than half (57%) accepting exclusions, particularly relating to fire safety. This not only limits what they can work on but could also leave them liable for any historic claims.

Numerous insurers have already left the market altogether, with over 50% of available insurance capacity lost in the last 12 months. Those that are still operating are reducing cover for construction risks, particularly for contractors, often applying broad and onerous restrictions or full exclusions to insurance cover. This is leading to many contractors and businesses in the construction industry supply chain being unable to secure the appropriate insurance protection. We are already seeing the knock-on effect of this, with an increasing number of contractors simply deciding to not take out policies because of escalating costs and reduced availability.

The current economic climate combined with an ever-growing list of short-term business priorities will inevitably mean that despite their best efforts PII will simply move lower down the order of priority for many operators. Some may even make more of a business case to wilfully avoid paying it. Whatever the motives, this likely trend will inevitably increase risk levels for principal contractors and a building's owners.

So, what does this mean for NG Bailey? Well, as a responsible and financially stable business, we are committed to consistently reviewing and refining our methods of managing risk.

We pay particular attention to the insurances of our supply chain partners, offering support where we can, to ensure appropriate cover is always in place. Only by scrutinising all the terms and conditions of contracts and insurances can we be certain that we, the principal contractors we are working for and a building's owner are adequately protected.

Professional indemnity insurance **is it a weak link in your supply chain?**

Richard Roberts, Group Insurance Manager, explains why we are calling on the industry to ensure that all companies involved in a project have adequate professional indemnity insurance cover in place.

> Furthermore, we are challenging our supply chain to provide confirmation that they maintain sufficient PII, and that they are only undertaking duties that are within their capabilities and insurance business description.

Our call to the wider industry is to follow our lead. More businesses should understand and manage the exposures originating from the supply chains in which they are involved.

Lower cost doesn't always mean best value, especially when it comes to PII levels. Due to the wider economic environment, aggressive pricing and the very difficult commercial conditions, it's more important than ever to do your due diligence, ensuring you operate with contractors that have correct insurances in place, strong balance sheets and you have confidence they will be around for the long-term.

Construction PII is under the microscope. We all have a duty to ensure risks are managed effectively now and in the future.

Projects infocus

We take a look at some of the projects being delivered by our Engineering and Services teams across the country.



This image was taken before COVID restrictions

Manchester Engineering Campus Development (MECD)

We have played a crucial role in helping to inspire future generations of engineers through our pioneering work at the Manchester Engineering Campus Development (MECD). Following two years of successful collaborative involvement, our work on the prestigious project is now complete.

We were appointed by principal contractor Balfour Beatty to design, install, test and commission the specialised mechanical, electrical and plumbing works at this world class facility, on behalf of the University of Manchester.

Representing an investment of more than £400m, the building spans eight floors and boasts a floorspace of more than 818,000 sq ft, the equivalent of 11 football pitches.

It is one of the largest single construction projects ever undertaken by a higher education institute in the UK and when finished in 2022, will become the single-biggest home for engineering in any UK university. It will house the University of Manchester's engineering disciplines, teaching spaces and research institutes and is set to welcome almost 7,000 students and 1,250 staff. This was a vast project with the majority of works being delivered using offsite techniques. Our designers, Building Information Modelling (BIM) co-ordinators and engineers worked collaboratively with Balfour Beatty to develop a range of innovative solutions.

In particular, the utilisation of BIM played a vital role in detailing and co-ordinating design across this vast project. We developed the BIM model not only to aid the construction process but to also align with the principal contractor's facilities management strategy, in turn helping to form an important part of the developed BIM Execution Plan.

This meant that we were able to begin manufacturing equipment in advance at our specialist Offsite Manufacture facility in Bradford.

Every piece of equipment installed was quality tested before being delivered to site, as well as being tagged to ensure full traceability. Work has been completed in phases with our 137-strong on-site team working on a zonal basis and in line with the wider onsite installation programme. More than 850 tonnes of equipment including an incredible 64km of pipework – almost enough to reach from our Offsite facility in Bradford to the site in Manchester – has been



delivered throughout the scheme.

Equipment ranging from 40 fully assembled plant room skids through to 293 distribution boards, mechanical risers, more than 1,000 pipework modules, 4,000 welded spools, 18,000 valves and almost 10,000 pipe clips and elbows were delivered by our team fully assembled, ready to be installed and connected at site.

This approach has achieved significant and positive sustainability and health and safety outcomes. For example, more than 74,500 hours of work have been taken away from site helping to reduce onsite congestion and improving the interface between trades – both of which improve on-site safety performance.

Our Services division also played a key role with data cabling being installed by our IT Services teams and engineers from our Freedom business installing four sub-stations on site.



Collaboration has been key to the success of this project, not just between NG Bailey and principal contractor Balfour Beatty, but also with the University and other construction partners

> Jason Millar, Project Director Manchester Engineering Campus Development



Rail projects on track

Luton Dart

We have now commenced with commissioning our works at the new Luton DART (Direct Air-Rail Transit) project at Luton Airport. The project includes HV, LV, general and architectural lighting, public health, tunnel extract, general ventilation, cooling systems, communications systems, SCADA, fire detection and suppression systems, and building management systems for this new state-of-the-art guided mass passenger transit system.

The systems, which border Luton Parkway Train Station and Luton Airport are made up of over 30km of electrical cabling and around 2.5km of fire hydrant pipework.

Scheduled to open in 2022, it will transport passengers from Luton Parkway train station to the terminal of Luton Airport in under four minutes.





Northern Line Extension

We have installed some of the mechanical, electrical and power services for the new Northern Line Extension (NLE) Tube tunnels, which run between the Kennington loop and a new station at Battersea, with another station being built midway at Nine Elms.

Our works included installing bracketry, power, lighting, and mechanical pipework in the 3km long tunnels, as well as testing and commissioning.

The NLE will help regenerate the Vauxhall, Nine Elms and Battersea areas by supporting new jobs and homes.

Offsite integration on HS2

Victoria Road Substation

Our Freedom business is currently undertaking substation works for the Victoria Road Crossover Box, which forms part of the HS2 programme.

The project has included close collaboration with our Offsite Manufacturing facility. The bespoke substation solution created for the project is the largest single section box ever delivered by our Offsite Manufacture team, measuring over 5m wide, 13.5m long and a whopping 28 tonnes.

Early engagement with the customer, precise planning, fantastic skills and great collaboration meant the substation was delivered to site and handed over all within the tight programme timescale.

Once the overall construction works are complete, the huge underground structure will allow trains passing through the London tunnels to switch tracks, speeding up train movement in and out of the capital.



IT Services managed support

Data Centre Services

Our IT Services team is delivering a three-year data centre managed service contract for leading multinational groceries and general merchandise retailer, providing a data centre managed service support team, that offers 24/7, 365 days a year managed service support across two of their UK data centres, based in Watford and Croydon.

This support includes break-fix support, design, moves, adds, deletions and changes to the data centre infrastructure, rack, stack, patch and Power UP, smart hands, DCIM Management, as well as general day-to-day operational tasks.

We also have introduced some innovative ways of working, including Ipatch software for cable management and our digital cloud-based platform for management reporting, MyInsight, which has been specifically created for use on our customer-facing accounts.

We have a wealth of experience in the retail sector, and our strong working relationship with our customer has





been successfully built over the last five years whilst delivering similar data centre support services.

Making a **responsible** impact

Net Positive our new responsibility strategy

June saw us launching our new responsibility strategy 'Net Positive' which aims to ensure we put more into society, the environment, and the economy than we take out.

Net Positive will transform our way of doing business and help us to make a responsible impact.

The strategy contains six long-term ambitions focused on achieving zero carbon, harm, and waste, being a great place to work, delivering social value, and sustainable growth.

Through many small actions, great change can occur and so by setting our long-term Net Positive ambitions we are setting a sustainable course for present and future generations.





ZERO carbon

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An increased focus on managing our direct carbon impacts across all our group activities and working with supply chain partners to deliver zero carbon benefits across our industry.

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ZERO waste

At present 98% of the waste we generate is either recycled or recovered to generate energy – our ambition now is to drive down the amount of waste we generate.

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ZERO harm

To people and the planet delivering industry-leading safety standards remains a priority, we will also continue to work with our supply chain to stamp out modern slavery. To minimise our environmental impact, we will focus on achieving zero reportable environmental incidents.

As well as driving negative impacts to zero, our strategy also focuses on making a positive impact.



A great **place to work**

We recognise it is important that our people are happy, healthy, and able to be themselves at work. Our continued focus on fairness, inclusion, and respect, and supporting wellbeing, underpins this ambition.



Delivering social value

We also want to deliver social value beyond the benefits delivered by our projects - we will be examining how we can give back better to our people and the communities in which we work.

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Sustainable growth

Operating responsibly supports our ambition for sustainable growth. It enables us to demonstrate how we are the partner of choice in our industry and can help our clients achieve their sustainability targets through the delivery of our services.

Supporting global climate action

We have joined a select group of visionary companies that have pledged to play their part in limiting global temperature rise to 1.5°C to help limit the worst impacts of climate change.

engineering and services business, we are working with the Science Based greenhouse gas emissions.

The SBTi is driving ambitious climate action in the private sector by enabling companies to set science-based and have already achieved a 31% reduction in our carbon footprint since Chief Executive David Hurcomb

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We recognise how important it is for us to manage our direct carbon impacts and we have a strong track record of adopting renewable technologies and delivering carbon reductions.

"Signing up to the Business Ambition for 1.5°C means we are committed to setting a science-based target to drive down our total impact across the Group.

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BUSINESS 1.5°C

"We are already working to define the target and expect to be able to share the details within the next year. As well as reducing our carbon impacts, we will also be focusing on a drive to zero waste, zero harm, being a great place to work, and delivering social value.

'We are wrapping this all up into our new Net Positive strategy which will put us in a position where we can put more into society, the environment, and the economy, than we take out.

"By focusing on all these, I believe our business will thrive, and make a responsible impact."





PASSION | INTEGRITY | EXCELLENCE