



NG Bailey

PASSION | INTEGRITY | EXCELLENCE

Issue One | Autumn 2020

infocus

An **NG Bailey** magazine



NG Bailey **infocus** // NHS Nightingale Hospitals //
All the latest news from NG Bailey // Employee spotlight



04

Mega riser

An outstanding example of collaboration and modern methods of construction sits at the heart of an ambitious project to create a new Interdisciplinary Biomedical Research Building at the University of Warwick.

06

NHS Nightingale Hospitals

As COVID-19 swept into the United Kingdom in March, the NHS launched the Nightingale Hospital initiative.



08

Latest news from NG Bailey

A look at the NG Bailey Group in numbers, including how we're improving our carbon footprint and how many future engineers we've inspired.

09

Freedom's POC-MAST

A market-leading innovation by our Freedom business is set to transform the way new connections to the high voltage electricity distribution network are delivered.

10

Taking a look at the recent success of our Services division

From doubling contract values with MAPP, to a hat-trick of wins for Freedom, Services has been making the most of its experience and technical expertise.

12

North Tees NHS Trust

NG Bailey's work on a new energy centre for North Tees and Hartlepool NHS Foundation Trust has given the busy community hospital a more sustainable future.



14

Employee spotlight

We sit down with Adam Whitworth and Jennie Shackleton to gain an insight into their careers at NG Bailey. We also hear from Adrian Searl and David Coad.

16

Recent projects in focus

We take a look at some standout projects delivered by our Engineering division across the country.



“ Hello...

and welcome to the first edition of **infocus**,
NG Bailey's new company magazine.

The aim of this magazine, brought to you in an interactive digital format, is to share news, views and success stories from right across our business.

Sharing this information is really important to us as a responsible business, so we can continue to make sure you are kept up-to-date on what we're doing and how we're performing.

There has perhaps never been a greater emphasis on operating responsibly for NG Bailey than during the last few challenging months since the onset of the COVID-19 pandemic.

Our number one priority has been, and will always remain, to safeguard the health and wellbeing of our colleagues, customers and supply chain partners.

I have been full of admiration for all our teams working to provide critical services and support functions to our public and private sector customers across the country. I thank them wholeheartedly for their continued support and work during these unprecedented times.

I am proud of the way we have all adapted to the rapidly changing circumstances we and our customers have found ourselves in and how we have all collaborated to work for the greater good.

Of particular note is our work, alongside many others, to support efforts to combat COVID-19 by helping to deliver a number of Nightingale Hospitals. You can read about this on pages six and seven.

The long-term consequences of COVID-19 for all of us are still largely

unclear. But what is clear – as Nightingale has shown – is that when people work together great things happen. I believe that by continuing to share our knowledge and innovations as an industry, we'll all be stronger for it.

More widely across our business, fantastic work continues to be carried out across our Engineering and Services divisions, much of which is celebrated and highlighted in this edition.

Our work to install our biggest ever mega riser at the University of Warwick is featured on page four, and a key project highlighted on pages 12 and 13 is the £25m energy centre at the North Tees and Hartlepool NHS Foundation Trust.

Full details of our exciting new POC-MAST innovation are also revealed (page nine), whilst on pages 16 and 17 we take a look at a variety of project highlights from across the business.

As already mentioned, NG Bailey is a people business and it would be remiss of us not to shine a light on this, with two pages (14 and 15) dedicated to interviews and profiles with team members, including an award-winning former apprentice.

I hope you enjoy reading it and please keep safe. ”

David Hurcomb
Chief Executive

Want to get in touch?

Contact our marketing team

✉ marketing@ngbailey.co.uk



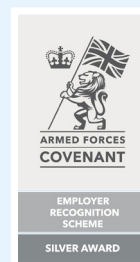
Follow us **@ngbailey**



Offsite Awards double win

We were recently awarded the top prize in both the Best Use of MEP and POD Technology and Offsite Pioneer of the Year categories at the Offsite Awards for our work on the Interdisciplinary Biomedical Research Building (IBRB) at the University of Warwick.

.....



Defence Employer Recognition Scheme Silver Award

We're proud to be honoured with a Silver Award in the Ministry of Defence's Employer Recognition Scheme for our work supporting the armed forces community. Across the business we currently employ more than 90 colleagues who are veterans, reservists, cadet forces volunteers or partners and spouses of serving men and women.

Offsite construction is key to fast-paced university project

An outstanding example of collaboration and modern methods of construction is at the heart of an ambitious project to create a new Interdisciplinary Biomedical Research Building at the University of Warwick.

Working in close partnership with principal contractor, Wilmott Dixon, and the University of Warwick, NG Bailey is working on the creation of a new Interdisciplinary Biomedical Research Building (IBRB). The new building will bring research students from the Life Sciences and Medical Schools together to fight human diseases in one state-of-the-art research hub.

Due for completion at the end of 2020, the new 7,000 square metre building will provide a 400-seat lecture theatre and a five-storey laboratory, as well as various social and collaboration spaces.

The £54.3m development is being completed to world-class standards and offsite manufacturing, which makes more than half of the construction work, is a key component. Our primary role is delivering all the mechanical, electrical and plumbing installations for the building, the majority of

which have been manufactured and assembled at our specialist Offsite Manufacture facility in Bradford.

The largest offsite element in the project is the mega riser, a bespoke five-storey spine containing all of the building's primary wet and dry services. The 27.5m high riser is the largest ever constructed by NG Bailey; it was created in sections at our Offsite Manufacture facility and lifted into position on site in just two days. Using traditional methods, this process would have taken 15 weeks to complete.

Modern methods of construction have played a key role on the project. The building itself is constructed using a pre-cast concrete frame and prefabricated modules and package plant rooms produced offsite are located on the roof.

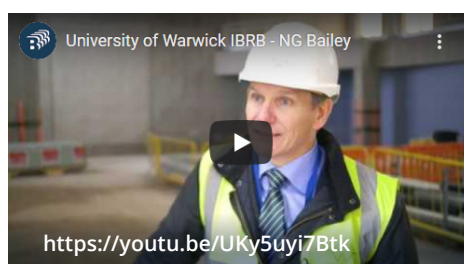
By utilising factory manufacturing techniques in a controlled



environment, the process has been far more efficient and provided a more sustainable package of works.

Using offsite techniques also has significant benefits for health and safety as it minimises the need for working at height. What is more, offsite solutions improve the overall carbon footprint of the project as it reduces the number of people travelling to site each day. This in turn simplifies site logistics and also benefits the local community as there is less disruption for site neighbours.

Follow the journey of the mega riser from Offsite Manufacture to installation by clicking on the videos here ➡





Key facts about the **mega riser**



Largest riser worked on to date by NG Bailey and Wilmott Dixon

Installed in just **two days**

It would have taken **15 weeks** to install using traditional methods

Took **six months** to develop the design for the riser

It's **27.5 metres** high



Collaborating in the fight against COVID-19

As COVID-19 swept into the United Kingdom in March, the NHS launched the Nightingale Hospital initiative. We look back at how our teams stepped up to assist in the swift delivery of these crucial medical centres and the importance of cross-industry collaboration.

As the country went into lockdown and COVID-19 cases began to spike, the NHS launched a nationwide project to create additional critical patient care capacity. NG Bailey played a key role in the conversion of major buildings up and down the country – from exhibition centres to sports stadia – into working field hospitals. All parts of the business pulled together to complete the works, with both our Services and Engineering teams working hard to assist the national effort.

Time was of the essence to create the hospitals, with our offsite manufacturing capability playing a key role in their quick delivery. In fact, the first bespoke product was manufactured and delivered from our Bradford offsite centre to the first project within 24-hours of the order being placed. At the height

of production, a completed item was coming off the production line every three and a half minutes.

Our pioneering offsite approach meant that fewer workers had to be onsite to deliver these solutions, removing a total of 12,000 working hours from site. This supported social distancing on site, keeping key workers safe and secure. Find out more about the extraordinary role offsite played in these ventures in the video below.



NHS Nightingale Harrogate

Our first Nightingale project involved converting the Harrogate Convention Centre into a 500-bed field hospital. We worked closely with the NHS, the Ministry of Defence and principal contractor, BAM Construction, our teams were crucial in the delivery of this facility. The combination of our offsite expertise and skilled Engineering team allowed for the rapid delivery and installation of key components.

The 150-strong Engineering team worked around the clock to deliver mechanical and electrical (M&E) services across the site, including medical gas, pipework and power equipment, along with managing the installation of more than 19km of pipework; 500 bed-head power modules; 3,500 socket outlets and 70 water heating/sink modules.

A word from our CEO, **David Hurcomb**, on the projects:

During the coronavirus pandemic it is more important than ever to stand united as an industry in the face of a common adversary; working collectively with key partners across the industry was

necessary to the success of the initiative. I'd like to thank our employees and supply chain partners for going above and beyond to deliver these projects at very short notice.

We have a long history of delivering vital healthcare projects and we were proud to have played such an integral part in helping to deliver these crucial NHS projects within such a short space of time.

NHS Nightingale North West

One of the largest projects for us was the conversion of Manchester's grade two-listed conference centre, formerly known as G-MEX, into a fully functioning medical facility to care for non-critical COVID-19 patients.

Led by Integrated Health Projects (IHP), we worked as part of the VINCI Construction and Sir Robert McAlpine joint venture, alongside the Army, NHS staff and key partners Mott MacDonald and BDP, to deliver Manchester's Nightingale Hospital in less than two weeks.

Members of our Engineering and IT Services divisions formed part of the 1,000-strong team tasked with the delivery of the 750-bed hospital. Within 12 hours of receiving the go-ahead, the IHP was up and running and ready to start delivery on the project.

Our Offsite Manufacture facility supported the efforts of the teams on the ground, providing the necessary cabling and products to make the site live. The Engineering team was responsible for the installation of a range of vital assets, including nurse call switches, power cabling, lighting and sinks, whilst the IT Services team installed enough

data cable throughout the hospital to stretch from Manchester to Liverpool, and back (65 miles).

The speed of delivery on this project was made possible by an extraordinary cross-industry effort. All parties worked in partnership to manage the project, mobilising supply chains and services to deliver for the benefit of the nation. As a result, the collective team was able to transform the convention centre into a fully functioning field hospital in record-breaking time.

Dragon's Heart Hospital, Cardiff

Cardiff's 2,000-bed hospital was constructed within the Principality Stadium and is the second largest care facility of its kind in the UK after London. Our Engineering and Offsite teams worked tirelessly with principal contractor ES Global Solutions to complete the rapid delivery of the hospital.

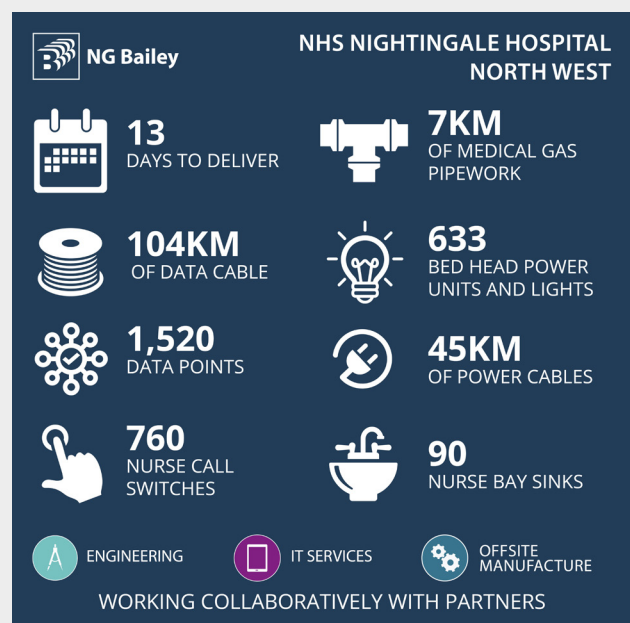
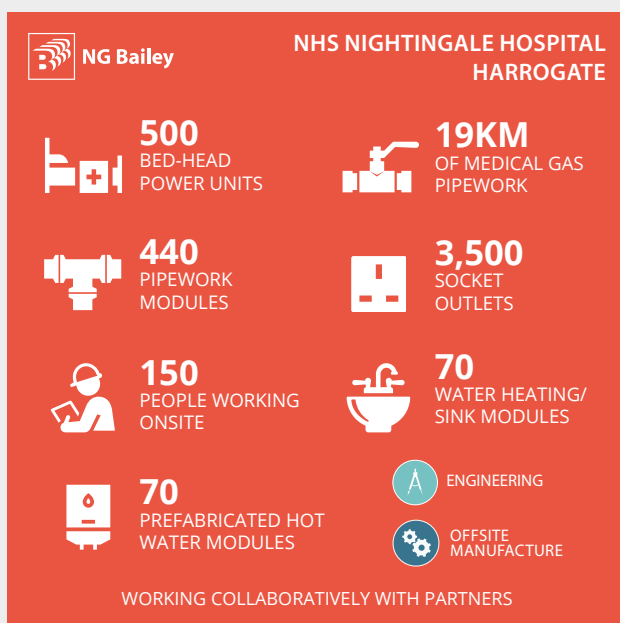
In order to transform the large stadium into a working care facility, the pitch was covered by one of Europe's largest tented structures, with large raised platforms installed over the lower stands to maximise available room for patients. We assisted in the creation of the first 335 operational beds, installed into the corporate

boxes and hospitality spaces within the existing structure of the stadium. In addition, the team working offsite created more than 1,200 bedhead trunking systems which included socket outlets, lighting and nurse call buttons. Dado trunking for 55 nurse stations was also manufactured and pre-assembled for ease of installation.

The Engineering team also assisted the project with vital M&E services, providing ventilation throughout the level four concourse areas, tented areas on the pitch and lower tiers, including labs and X-ray rooms. Vital oxygen pipework infrastructure was also installed into the majority of bed bays throughout the site.

Working around the clock to ensure swift delivery of this meant that it could begin accepting patients from 28 April, a true testament to the tremendous effort by all stakeholders.

During the COVID-19 pandemic, dedicated NG Bailey teams also played valuable roles at the Bangor and Deeside Nightingale projects and also supported COVID-19 preparedness works at Leeds General Infirmary, Whitby and Bournemouth hospitals.





Latest news

A look at the NG Bailey Group in numbers, including how we're improving our carbon footprint and how many future engineers we've inspired.

Safe & sustainable business

12

The number of **RoSPA Achievement Awards** received this year in recognition of our ongoing positive safety performance, including the coveted **Order of Distinction**.



This recognition is testament to the hard work that all our teams put in across the business.

Chief Executive, **David Hurcomb**

The amount of plastic buckets our Services division has **recycled** and transformed into plastic pipes, waste bins, flower pots and dashboards, **reducing our consumption of single-use plastics**.



A recognised employer of choice

2,000

How many future engineers, construction workers and apprentices we engaged with in 2019/20 through our **Inspire schools programme**.



5

The number of social channels we now have a presence on. **We've recently joined Instagram** – follow us to keep up to date with the latest company news!



Follow us
@ngbailey

Partner of choice in our industry



The **annual carbon savings** of CO₂ generated through the installation of solar panels on the roof at the University Hospital of North Tees to generate renewable energy.

5-15%

The energy savings **Freedom's Power Solutions Team** has helped a number of industrial customers to achieve, making a huge difference to their environmental and carbon impacts, and financial costs.



Giving something back



British Heart Foundation

£76,000

The amount we raised to support our latest charity partner, the British Heart Foundation.



The number of **local charities** we've supported across the UK in 2019/20 through charitable giving donations on behalf of our people.

Freedom's POC-MAST set to transform UK connections market

A market-leading innovation by our Freedom business is transforming the way new connections to the high voltage electricity distribution network are delivered.

The Point of Connection Mast (POC-MAST), offers a safer, faster and more affordable means of connecting to the local power distribution network.

Developed by Freedom's in-house experts, it is shaking up the connections market, in particular, making it easier for renewable energy projects to get connected.

POC-MAST enables any developer that requires a connection into the electricity distribution network – for generation or load – to achieve an affordable and timely point of connection for their scheme. It can make the difference to whether or not a scheme is viable.

With three commercial installations having taken place within the UK Power Networks region, the benefits of POC-MAST are already starting to be realised.

Now, following extensive full-scale testing at the Eucomsa test centre in Spain, witnessed by representatives from UK Power Networks and Northern Power Grid, installations have already taken place at a number of sites across the UK, with more in the pipeline.

Martin Buckland, Managing Director of Freedom Professional Services, explained: "We've been providing connection services for many years and recognised the increasingly diverse nature of power generation was creating a greater demand for quicker and more cost-effective connections into the distribution networks.

"Traditional methods for connecting to an existing line usually require a new junction tower or extensive modifications to an existing tower. This can involve a lengthy outage and, in some cases, a temporary circuit diversion. Such modifications cause disruption to the network for many weeks and can only be carried out at certain times of the year.

"It also means they are expensive and can take a long time to complete. POC-MAST was born out of a desire to make the connection process more affordable and quicker."

Matt Pryor, Technical Manager of Overhead Lines at Freedom, has been instrumental in the development of POC-MAST.

He adds: "The first POC-MAST was developed for a renewable energy project where a traditional connection wasn't possible, so it was created as a bespoke solution. We quickly realised that it overcame the issues associated with traditional connections to the distribution network."

Since then we have invested more than £500,000 developing and testing POC-MAST.

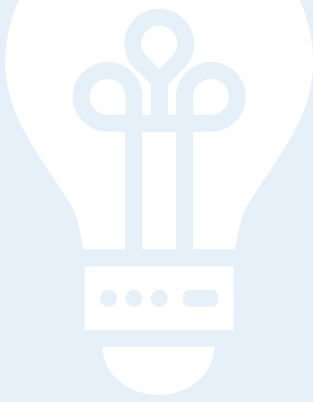
It is available for connections up to 132kV to the most widely used tension and suspension towers on the UK's distribution network.



Key benefits of the POC-MAST include:

- Improved safety levels during construction – greatly reduced time spent working at height; no heavy lifting operations required
- Considerable cost savings against traditional methods – no requirement to replace or modify existing towers
- Minimal environmental impact – screw anchor foundations negate the need for deep excavations and typically saves more than 30 tonnes of concrete
- Speed of completion, taking less than 20 weeks from concept to completion
- Reduced circuit outage times for installation
- Low maintenance as it's fully galvanised.





| Successes across o

Expanding our Services offering with Freedom

A key part of our Services division is Freedom, which we acquired in 2018. It sits under one umbrella alongside our Facilities & Infrastructure Services and IT Services businesses, to make up our Services division.

The addition of Freedom expanded our services offering and we've enjoyed a host of recent successes, from winning a place on Yorkshire Water's high voltage electrical design and maintenance framework, to securing high value extensions on UK Power Networks and Northern Powergrid frameworks.

These contract wins and extensions are testament to Freedom's technical expertise and long-standing client

relationships. Freedom has been associated with Yorkshire Water for more than 30 years, delivering its grounds maintenance programme, and for the past four years providing countryside management services.

The new framework, worth £55m in total, will see us working alongside Yorkshire Water on a programme to provide a range of design and maintenance services for the company's high voltage (HV) systems and infrastructure for the next three years.

Similarly, our previous work delivering reliable and safe power to people across the South East and East of England, has led to us being awarded an extension on UK Power Networks framework, to support its essential maintenance and commissioning

works. The £49m Overhead Line and Distribution Capital Delivery Services framework was awarded on a two-year plus four-year basis, with a full four-year extension now granted.

Freedom has also secured a two-year extension on an essential Northern Powergrid framework to deliver cable engineering services across the North East, Yorkshire and northern Lincolnshire. The project is worth £16m and follows Freedom's successful delivery on the contract over the last four years and includes scope for a further two-year extension.

Around 50 Freedom colleagues are involved in the delivery of the contract, including graduates and apprentices, providing vital training opportunities and helping to ensure there is a strong pipeline of future talent in the sector.



IT Services secures contract renewal with Tesco

Our IT Services team has secured a three-year contract renewal with leading supermarket chain, Tesco, to provide a managed service at two of their data centres.

The contract renewal is worth £2.2m and sees us providing support across two data centres and Croydon and Watford. Both centres offer services to both Tesco Retail and Tesco Bank.

The banking and retail services managed through the centres are accessed 24-hours-a-day, 365-days-a-

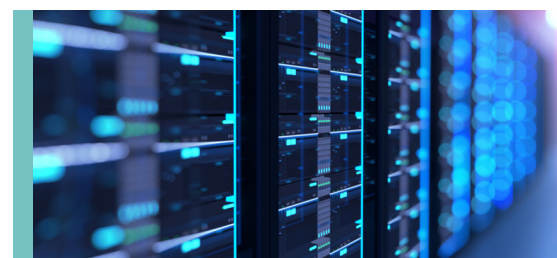
year by Tesco's customers. NG Bailey's IT Services team, part of our Services division, works closely with Tesco's IT function to ensure they operate smoothly and without interruption.

Kelly Tedesco, Managing Director of IT Services, said: "This contract win reflects the strength of our Services offering, the continued performance of our IT team to-date and our relationship with Tesco.

"In these unprecedented times, it is more important than ever that we're able to provide clear technical expertise for our clients, so they are confident we can deliver on these complex projects and ensure vital

banking and internet services are readily available to customers.

"Our clear technical expertise, which combined with our strong knowledge of the sector, means our clients are confident that we can deliver on complex projects, such as ensuring vital banking and internet services are available to customers 24-hours-a-day."



ur Services division



It's gold again

The expertise of our IT Services team has once again been recognised as they retain Mitel Gold partner status for another year.

NG Bailey has more than 30 years' experience working in telecommunications services and the IT Services team is Mitel's longest serving partner, having worked with them throughout the last three decades.

The highly respected gold status enables the team to continue to sell, design and deliver Mitel's full suite of unified communications solutions. As more businesses transition to cloud-based communications, or implement remote working technologies, they look for valued suppliers and partners that provide the right solution for their unique requirements – this includes ensuring any existing Mitel solution they have is utilised to maximise their investment.

Our IT Services engineers are experts in installing, upgrading and migrating Mitel solutions – from legacy equipment to virtual or cloud-based technologies and have delivered multiple public cloud, private cloud and hybrid solutions.



Extending our relationship with BT

Our Services division has extended its relationship with BT after securing a new three-year overseas managed service contract to support BT in delivering a range of telecommunications services for the Ministry of Defence (MoD).

The contract, valued at £4.5m to NG Bailey sees the team delivering services including voice, data and video-conferencing services as well as fixed and mobile voice services for the MoD in Germany and Cyprus. The contract is one of several NG Bailey holds with BT.

The work is being delivered as part of the MoD's Defence Fixed Telecommunications (DFTS) and Integrated User Services (IUS) contracts. The contract is headed up by Tim Briggs-Mould, NG Bailey's IT Services Defence Sector Director who said: "Securing this contract is excellent news for us.

"For a long time we have recognised the importance of the defence sector, and our strategy has been to grow in this area by utilising and showcasing our proven delivery capability, our significant experience and utilising the expertise of many of our employees, who themselves are ex-military.

"I am extremely excited to be taking on the delivery of the DFTS and IUS services overseas on behalf of BT and welcome those employees who will be joining us as we continue to demonstrate our commitment to supporting both British Forces Cyprus and British Forces Germany."

Kelly Tedesco, Managing Director of NG Bailey's IT Services Division, said: "This contract win reflects the strength of our Services offering, as well as our relationships with BT.

"For this project we demonstrated our clear technical expertise, which combined with our strong knowledge of the sector, means our clients are confident that we can deliver on important and complex projects."

New energy centre boosts hospital's sustainability credentials

50 years after installing the original services, NG Bailey returned to the University Hospital of North Tees to install a new energy centre, giving the busy community hospital a more sustainable future.

Creating a new £14m energy centre to replace ageing boilers and heating and electrical plant was a key part of the North Tees and Hartlepool NHS Foundation Trust's ongoing Sustainability and Transformation Plan.

As Principal Contractor, NG Bailey led on the superstructure and forming of the energy centre building, as well as two new reinforced-concrete below-ground walkways to link the new energy centre into the existing hospital infrastructure.

Sitting within the busy existing hospital estate, the new centre houses a new primary intake substation; N+1 emergency generators; a combined heat and power unit; three steam boilers producing 5,600kg of steam per hour; new water storage tanks; oil storage tanks; as well as associated mechanical, and electrical infrastructure.

As well as being more reliable, the modern and more efficient plant and equipment reduces the Trust's energy consumption and carbon footprint.

A new approach to major hospital infrastructure procurement

Julie Gillon, Chief Executive at North Tees and Hartlepool NHS Foundation Trust, said: "NG Bailey's appointment for the energy centre marked the next phase of an exciting project for the Trust, which ensures we secure the long-term future of the hospital and continue to give the very best care to our patients."

The project

Works included a major upgrade to the electrical infrastructure through the creation of three new substations within existing courtyards around the hospital estate. This was followed by replacement of the high voltage (HV) network cabling and then new low voltage (LV) electrical distribution to re-feed the various switchboards and distribution panels around the site.

These works were necessary in order to address the risk arising from the existing ageing infrastructure and to provide capacity for future development at the site.

Solar panels which generate 5 – 10% of the hospital's electricity have also been installed.

The benefits of Building Information Modelling (BIM)

As mandated by the UK Government in April 2016, to ensure all plant and equipment was fully detailed and coordinated with the building structures, our BIM team amalgamated the architectural, engineering, and services into one.

This ensured designs were right first time, avoided wasteful reworking and eradicated defects. The model was also used to enable major elements of the services infrastructure to be manufactured offsite.

Offsite solutions

Major elements of the internal services were manufactured at our specialist Offsite Manufacture facility in Bradford. These included prefabricated plant skids and heavy-duty services modules incorporating plant, pipe, fittings, and control equipment.

This approach removed more than 5,000 labour hours from site, reduced health and safety risks, and improved quality. It also reduced the number of deliveries and vehicle movements, helping minimise the carbon footprint of the project.

An integrated team

Projects of this nature demand close collaboration with all parties to ensure the safety of employees, patients, staff, visitors and the general public is always first and foremost. It was also imperative that there were no unplanned power outages which could affect hospital clinical activity.

The team integrated closely with the hospital estates department





with regular liaison and daily briefings to plan all activity.

A detailed methodology was developed to show how complex critical services would be maintained throughout construction and commissioning and a switchover protocol used to transfer from the ageing infrastructure to the new sub-stations.

Marking a milestone

Reflecting on the completion of the project, Chris Catterick, Operations Director in NG Bailey's Engineering division, commented: "The new services infrastructure and energy centre utilise modern, efficient plant and equipment; these are more reliable and reduce energy consumption.

"More importantly, we worked closely with the Trust to ensure the works were completed on time and without any disruption to the on-going operation of the hospital."

A 'Down to Earth' donation

More than 20 tonnes of surplus topsoil were donated to the local community and 'Down to Earth', a food growing group.

The group was set up to grow good quality fruit and vegetables without pesticides. With more than 260 members ranging in age from seven to 77, they work on a half-acre site close to the hospital. Some of the produce they grow is donated to local food banks.

Key Statistics

- More than **68,000** accident free labour hours
- **200 tonnes** of equipment installed
- **180 tonnes** of steel structure
- **12,000 meters** of L.V sub-mains
- **68** planned shutdowns to transfer from to the new supplies
- Two 2500kVA **generators** to provide N+1 emergency power, serving six new sub-stations
- One 1750kVA **Combined Heat & Power Unit** (CHP)
- Three steam boilers, producing **5,600kg of steam per hour**
- Installed water tanks storing **220,000 litres** of water
- Installed oil tanks storing **80,000 litres** of oil.

Employee spotlight



60 seconds with Adam Whitworth

What is your role in the company?

I'm a Mechanical Project Engineer.

How long have you been with NG Bailey?

I started out as a fresh-faced apprentice in 2011, straight after leaving school. After finishing my apprenticeship, I was given the opportunity to train as an estimator, which gave me the skills necessary to transition into my current role.

What is your favourite project that you have worked on?

It has to be the first phase of renovations to Manchester Town Hall. It was my first project as an

apprentice and I was based on site from start to finish. There is something really rewarding about being on board for the duration of a project.

What has been the most challenging aspect of your role?

Probably moving from being site-based to working in an office-based environment. It took me a while to adapt to the change of environment, but now I love it.

Where do you see yourself in five years' time?

During my eight years at NG Bailey, I've been able to develop a wide range of skills. I hope to continue to develop my technical and managerial skills, allowing me to lead my own projects in the future.



What advice would you give to aspiring apprentices?

Make a good brew! But in all seriousness, take up any opportunity to learn from those around you and don't be afraid to throw yourself into new and challenging situations.

Jennie Shackleton profile



We caught up with award-winning apprentice, Jennie Shackleton, who has recently completed her electrical apprenticeship and shared her thoughts on what it takes for an apprentice to succeed.

Tell us a bit about yourself.

I actually started my apprenticeship a little later than usual. Rather than coming into it straight from school, I went to university and studied multi-media and illustration. Once I'd completed my degree, I decided I wanted to see the world and went to live in Australia for a few years. When I came back, I wasn't sure what I wanted to do. Construction has always

appealed to me because I enjoy solving problems, so I thought it would be a good place to start. I knew about NG Bailey because it's a local company to me, so when I saw the opportunity here as an electrical apprentice, I went for it and haven't looked back since.

What do you think an apprentice needs to succeed, and importantly, enjoy their experience?

I think the main quality you need is a desire to learn. It can feel like a steep learning curve at times, but every project offers you the opportunity to develop a new skill. As well as being engaged and listening to the advice of your colleagues, you also need to be willing to take the initiative and be proactive. It's only by getting hands on that you really learn. In a nutshell, you have to put everything into being the best you can be!

Aside from the technical skills you have learnt as an apprentice, how important would you say areas including teamwork, communication and planning are?

In short, really important. Communication is a really good example of this because I was quite shy when I started. I was the only female in my area at the time, which can feel daunting, but I had to pluck up confidence to speak to my team

and especially external tradespeople. I quite quickly recognised how important it was to take myself out of my comfort zone and saw it as a personal goal to develop. Now I feel a lot more confident and it's something even my friends and family have commented on, so I'm really proud of that.

What have you done as an individual to take yourself out of your comfort zone?

A big step for me personally was contributing to the 'Forward Ladies 2018 Bridging the Gender Gap in STEM' report. This is the first time NG Bailey had ever taken part in it, so it was an honour for me and another apprentice, Reanna Evans, to share our experiences with others.

From what you've learnt so far, what advice would you give to yourself if you were starting your apprenticeship again today?

Get your head down and take in everything you can, however small it may seem, because one day that piece of information will come in really handy. It's also important to always listen and take any advice you can, because there's so much experience in a business like NG Bailey which has been going for a long time. The last thing I'd say is just to seize the opportunity!

New appointment

Adrian Searl

Our Services division looks to strengthen its work-winning position with the appointment of Adrian Searl as Growth and Strategy Director.

Adrian's main focus is to lead the development and implementation of an effective and measurable strategy for high growth. He will work closely with the managing directors responsible for the Service division's business units, their business development teams and business unit senior leadership teams.

His role will also ensure that each of the five specialist business units within our Services division develop mature pipeline opportunities, spanning several years and embed strategic relationships in key targeted growth sectors.

In addition to his new role, Adrian will also continue his work supporting the growth and development of our defence strategy and the works we undertake across this sector, both in our Engineering and Services divisions.

Before joining the business in 2018 as Pre-Contract Director for Defence, Adrian's previous experience included roles at SSE PLC, working as regional sales director in their building services and large power

connections business, followed by group defence director within their SSE Enterprise business division.

When we caught up with him about his new appointment, Adrian commented: "My background has always been in work-winning teams. I enjoy engaging with customers and building relationships. However, for me, it's essential to be surrounded by great people and have a robust strategy in place, so I'm looking forward to working with our talented Services teams to really make an impact."

"The defence sector plays an important part in our company's success, across both our Services and Engineering divisions. My role will continue to support and drive this sector to continued growth."

Peter Jones, Managing Director of NG Bailey's Services division, added: "I would like to congratulate Adrian on his new role and wish him every success."



I'm looking forward to working with our talented Services teams to really make an impact.



Welcome

David Coad



We've extended our expertise in the high voltage power solutions market, welcoming a new operations manager.

David Coad has joined the Freedom team this year as Operations Manager in the South West. He brings a wealth of experience in managing major connections, high voltage (HV) projects and HV operations and maintenance.

With 30 years' experience in the power sector, David's career has seen him progressing from an apprentice electrician, through to technical author and co-ordinating

authorised person. He has end-to-end experience of complex HV projects, from initial design through to installation and commissioning and has delivered numerous HV schemes, many of these at MoD and other secure sites in the region.

David joins Freedom's Power Solutions team which specialises in electrical design, connections and private electrical projects providing solutions for connections (ICP), power generation, battery storage, standby power, and private network operators.

He will be working from Freedom's new base in Plymouth.



Projects in focus

We take a look at some standout projects delivered by our Engineering division across the country.

Installation complete at the UK's first Battery Industrialisation Centre

Our Engineering division has completed a fast-paced installation of mechanical and electrical services at the UK's prestigious and pioneering new battery development facility, the £130m UK Battery Industrialisation Centre (UKBIC).

UKBIC combines manufacturing, experimentation and innovation and covers the whole production process from electrodes to cell, module and pack assembly.

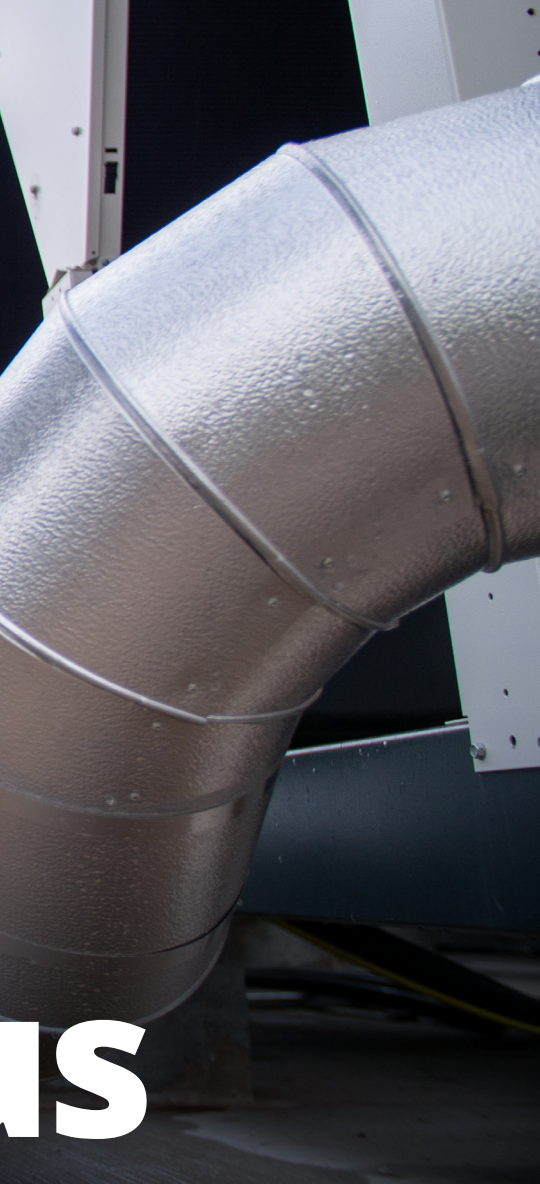
The £14.6m installation was completed in just eight months with the majority of equipment – including more than 6km of pipework and 140 heavy duty service modules – manufactured at our Offsite Manufacture facility in Bradford.

Other solutions delivered using offsite construction techniques include production of horizontal multi-service modules which enabled rapid installation and innovative space-saving solutions including a multi-service bridge structure which reduced the amount of space needed to house essential services and maximised useful production areas.

Using offsite techniques dramatically reduced the time needed to deliver the project by shifting more than 17,500 hours of work away from site.

Offsite Manufacture at UKBIC in numbers:

- More than 6km of pipework
- 140 horizontal heavy-duty multi-service modules (HDSM)
- Innovative space-saving 20m long, 5m high multi-service bridge structure to house essential services
- Six plant skids for both low temperature hot water and chilled water
- 10 HDSM trench modules for mechanical and electrical services
- Three 6m high bespoke floor standing multi-service heavy duty service modules
- 50 goal post frames for internal and external compound services
- 10 Air Handling Unit valve assembly modules
- Loose pipe spooling for site installation
- 12 distribution board assemblies.



Offsite: the key to delivering Grosvenor House

Offsite construction played a major role in the delivery of Grosvenor House, HSBC's flagship building in the heart of Sheffield city centre.

Being involved in the early design work meant we were able to influence decision during development of the 333,000 sq ft development and integrate our offsite supply manufacturing solutions from the outset.

Producing 18% of the MEP offsite brought huge logistical and safety benefits to the technically challenging project including removing 25,000 labour hours from site and reducing the amount of time needed for onsite installation. Congestion on and around the site was minimised and an estimated 29.6 tonnes of carbon was saved as a result of less travel.

Quite simply, Grosvenor House wouldn't have been deliverable in the same timescales using traditional techniques.



MEH milestone at Hinkley Point C

The first two of 156 tanks have been installed at the new Hinkley Point C power station project in Somerset, marking the start of physical works being delivered by the MEH Alliance.

The MEH Alliance is a partnership between Altrad, Balfour Beatty Bailey (a joint venture between Balfour Beatty and NG Bailey), Cavendish Nuclear and Doosan Babcock, working together across the project to integrate and coordinate the delivery of all Mechanical Electrical Heating (MEH), cabling and associated support services.

The two walled-in tanks have been successfully installed following the completion of civil works.

Approximately 24 more tanks of various sizes and shapes will be installed this year. These are designed to contain, store, distribute and prepare various fluids in support of reactor operations and are critical parts of the project's infrastructure.

Gavin Schletcher, Operations Manager for the MEH Alliance, said, "This work is being delivered safely and in line with social distancing and other protective measures. It highlights the positive

progress that continues to be delivered on this important project, despite the challenges currently being faced."



Hinkley Point C

Creating a new community at Wood Wharf

At just under nine hectares, Wood Wharf is the latest stage in the transformation of London's Canary Wharf.

Our Engineering division has been on site for three years delivering infrastructure works on the development which when complete in 2023, will feature 2million sq ft office

space, 490,000 sq ft retail and leisure space and up to 3,500 new homes.

The team is delivering the MEP works for the first phase with our offsite facility producing 48 plate heat exchanger skids, as well as a chilled pump room.

The size and scale of the site and its location in a busy part of London makes offsite manufacture ideal as

equipment arrives pre-assembled; this reduces deliveries and congestion which is not only good for the site's carbon footprint, but also on-site safety.



in**focus**

An **NG Bailey** magazine



NG Bailey

PASSION | INTEGRITY | EXCELLENCE