

ISSUE 10 | 2023

INSIGHT

Catch up with the team and more:

- **Charity Updates**
- **Project Case Studies**
- **Award Announcements**
- **Team Interviews**
- **Industry Insights**



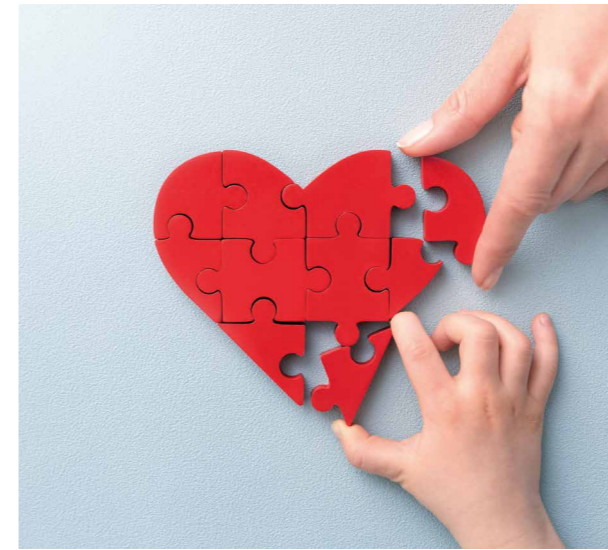
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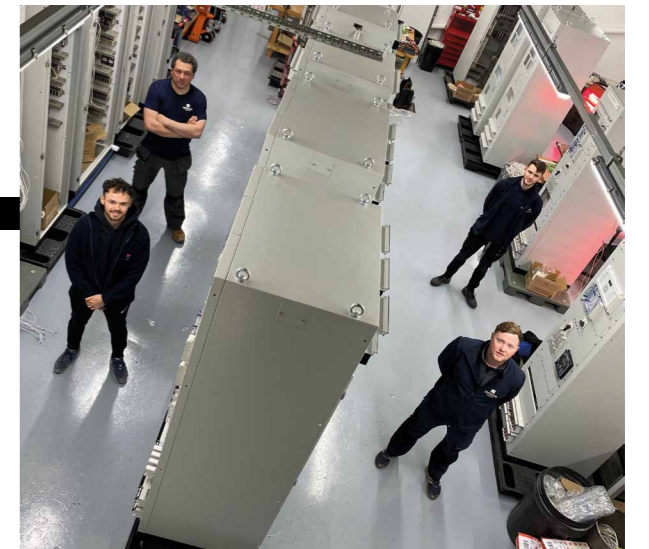


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ANNOUNCE TWO NEW
ASSOCIATE DIRECTORS**

CHARITY PARTNERS ANNOUNCED FOR 2023

Following a record year of nominations and votes across the entire Morson Group, we're pleased to announce that we have elected to support the British Heart Foundation and Brain Tumour Research as our 2023 charity partners.



In late 2022, following the conclusion of our fundraising for Teenage Cancer Trust and Refuge, employees were invited to nominate both national and regional charities to support throughout 2023. It was a record year of nominations, with almost 100 worthy organisations put forward for support. These were shortlisted to 10 of the most popular, with a final vote going out across the Group.

The winners of the final vote were British Heart Foundation and Brain Tumour Research.

British Heart Foundation

British Heart Foundation funds around £100 million of research each year into heart and circulatory diseases and causes. This includes heart disease, stroke, vascular dementia and diabetes. Their vision is a world free from the fear of such diseases with an estimated 7 million people in the UK living with them, accounting for a quarter of all deaths.

Their research has helped improve and save the lives of many people who suffer from circulatory related diseases, from developing 3D printed hearts and internal defibrillators to regenerative medicines.

Brain Tumour Research

Brain tumours kill more children and adults under the age of 40 than any other cancer, yet historically just 1% of the national spend on cancer research has been allocated to this disease. Brain Tumour Research is a charity that is determined to change that. They are the only charity in the UK focused on finding a cure

"On a personal note, it's touching to see Brain Tumour Research featured as one of our chosen charities, in memory of my dear friend in life and in business, Dr. Kevin Gorton..."

for all types of brain tumours through campaigning to increase the national investment in brain tumour research to £35 million per year, while fundraising to create a network of seven sustainable research Centres of Excellence across the UK.

In June 2022, Dr Kevin Gorton, Morson Group Managing Director, lost his long battle with a brain tumour. Kevin spent over 35 with the business and was a friend and colleague to many. The nomination of Brain Tumour Research was in his name, in the hope that Morson can help eliminate brain cancer for future generations, as echoed by Morson Group CEO Ged Mason: "After another successful year of fundraising, it's great to welcome two new charity partners on board. It was overwhelming to see the number of organisations that were nominated, over 100 in total across all our businesses, reflecting just how our core value of care is embedded across the Group.

"On a personal note, it's touching to see Brain Tumour Research featured as one of our chosen charities, in memory of my dear friend in life and in business, Dr. Kevin Gorton, former managing director of the Morson Group, who we sadly lost last year. Our fundraising for them will be in memory of him, in the hope that we can contribute to building a world free from the disease."

Throughout 2022, our fundraising activities included bike rides, golf days, a charity concert featuring Russell Watson, and more. The total raised throughout the year will be announced in due course.

"At Morson Projects, ED&I continues to be high on our agenda across all aspects of the business such as recruitment, training and career progression..."

THE INCLUSIVE CULTURE PLEDGE 2023:

COMMITTED TO BUILDING INCLUSIVE CULTURES

Our parent Company, Morson Group has joined leading companies from a range of sectors and industries in signing the Inclusive Culture Pledge in 2023, for a fourth consecutive year.

Our parent Company, Morson Group has joined leading organisations from a range of sectors and industries in signing the Inclusive Culture Pledge in 2023, for a fourth consecutive year.

At Morson Projects and our sister brands, Waldeck and Ematics, we are committed to building inclusive cultures every day. Not only is this good for business, but it's also the right thing to do. We aim to be a truly 21st-century workforce, where everyone's talents are welcomed, valued and nurtured.

Executive Director, Chris Burke explains: "Morson Group signing the Inclusive Culture Pledge for another year empowers our mission at Morson Projects to be part of the industry-wide cultural change to diversify the engineering sector, by placing inclusion first.

"We're committed to transforming the engineering landscape by encouraging our clients and ourselves to look at every step of our employees' experience and project delivery through the lens of equality, diversity and inclusivity."

Becky Hicks, Morson Projects HR Advisor adds: "Equality, inclusion and celebration across all diversities is essential for economies and communities to thrive, as well as businesses. Across the engineering industry

it is clear that stereotypes are being challenged and a diverse representation is more evident, which is something we work hard to champion as a business.

"At Morson Projects, ED&I continues to be high on our agenda across all aspects of the business such as recruitment, training and career progression, in order to eliminate unconscious bias and create an inclusive, empowering environment for all."

Why make this pledge?

Joining the pledge is a public commitment that we take diversity and inclusion seriously and that we understand the need to provide employees with a safe, fair and supportive place to work.

We're looking forward to the events provided as part of the Pledge, which will further enhance our internal capacity and ensure we work at the cutting edge of diversity and inclusion. This is an initiative that we believe will benefit our employees, clients and stakeholders.

By signing up for the Pledge, we will also have exclusive access to DEI experts and thought leaders to bolster our in-house understanding and knowledge.

WORLD STEM DAY:

BUILDING A SKILLED FUTURE WORKFORCE

It's safe to say that education and engineering come hand in hand when we talk about the future of a skilled workforce within the industry.



As such, this #WorldSTEMDay, we caught up with married couple, Jon Callahan and Natalie Callahan, to talk more about how exposing young children to STEM is crucial in developing the next generation of engineers.

Coming from differing sides of the industry, with Jon being a Principal Stress Engineer at Morson Projects and his wife, Natalie, being a Deputy Head Teacher at Mill School Bury, we caught up with the pair to get their opinions on why engaging in STEM from a young age is so important, and what we can all be doing to expose children more to science, technology, engineering and maths as we prepare to grow the future generation of young STEM talent in the UK.

Hi both! Why do you think it is so important to engage children in STEM from a young age?

JON: Participating in STEM activities at a young age is a fantastic way to engage children in critical thinking, to boost curiosity and introduces them to a world of opportunities; specifically nurturing the skills needed to succeed in the future.

NATALIE: I support children with Autism in our school and we use STEM activities to allow pupils to demonstrate to us the way that they see and understand the world around them. STEM is an essential skill for the children as it teaches them to think critically

and question the world around them whilst also thinking, "how can I make this better?". Without STEM there would be no innovation or out of the box thinking; which is what our children do best!

What can parents / carers be doing to encourage their children to get more involved in STEM?

JON: Getting children involved in STEM subjects from an early age is crucial in supporting the growth of the young talent required in the future – the next generation of doctors, engineers, teachers and scientists are being nurtured as we speak.

STEM activities are one of the easiest things to take out of the classroom. Cooking, for example, becomes a science activity and weighing ingredients becomes a maths lesson. Problem solving, trial and error along with critical thinking skills do not have to be dull – young children get excited about learning and enjoy it even more if it is disguised a fun and engaging activity.

NATALIE: Let them play, explore and investigate! STEM is about children exploring the world around them, asking questions and doing things differently.

Children do not need to know what they're doing is STEM but they need to be given opportunities to investigate; it is so easy for us as adults to show them because it's easier and quicker, but what if we

allowed children and young people to explore and find alternative ways to do things?

By building that interest in STEM from a young age, it will open up so many more opportunities for the children as they continue through education and then, later, can have a real influence on the opportunities and career choices available to them.

There is a great website which offers hundreds of ideas about how to engage pupils in STEM activities outside of school: www.stem.org.uk

What can organisations be doing to showcase the fantastic STEM careers available?

JON: 2022 has been a fantastic year for Morson Projects promoting STEM Careers. In the last 12 months, we have been actively showcasing our commitment to STEM through the creation of our Early Careers Development Programme, Careers Fairs at local secondary schools, inspirational talks at Summer Schools for Salford University and through engaging with work placements and summer interns.

NATALIE: I think companies like Morson are already showing a drive to do more to engage all pupils in careers which involve STEM knowledge and skills, I think the next step is to make it clearer through careers fairs and job adverts what specific skills companies are looking for – do

Continued >

you need a Stress Engineer or do you actually need a problem solver who can think critically? Do you need a Software Engineer or do you need a mathematician who can decode the most complex of programmes? In schools we teach these skills but then our pupils never see those skills in a job advert, so it can make it hard for them to relate.

What does the future look like for STEM?

JON: The future looks STEMazing! I have recently undertaken STEM Ambassador Training with the IMechE in partnership with STEMazing, who are dedicated to inspiration and inclusion in all things STEM. It is my passion to help create a central STEM learning hub within Morson Projects and grow our STEM Ambassador network throughout the company.

Morson Group and Morson Projects are already leading in the STEM space, through initiatives such as 'Go Beyond' Mentoring Programme and the Morson STEM Foundation. I look forward to being part of its continued expansion into the wider community.

NATALIE: I think now more than ever we need to look at the world we live in and look at how we can ensure its longevity for the generations after us; to do this we need more innovation, more critical thinkers and more young people who are enabled to change the world.

Schools are doing more to support this but this means moving away from things like 'Science Week' or 'STEM day' because while these are great for raising awareness of the importance of STEM, children should be provided with opportunities to practise these skills daily, both in school and at home so that it becomes a way of life to question the world around them and to be innovative!

JON: For anybody looking to engage more, the IMechE are running a free webinar on 'Effective Stem outreach for a Secondary School Audience' on the 10th November 6pm for all members.

These webinars are great to learn useful hints and tips for how to enhance your delivery of effective STEM outreach.

Find out more about some of our recent STEM initiatives below:

Go Beyond Mentoring

Following the huge success of last years' 'Go Beyond' Mentoring Programme, Morson Projects are delighted to be supporting the University of Salford again as they help prepare the future generation of female engineers for a career in the industry.

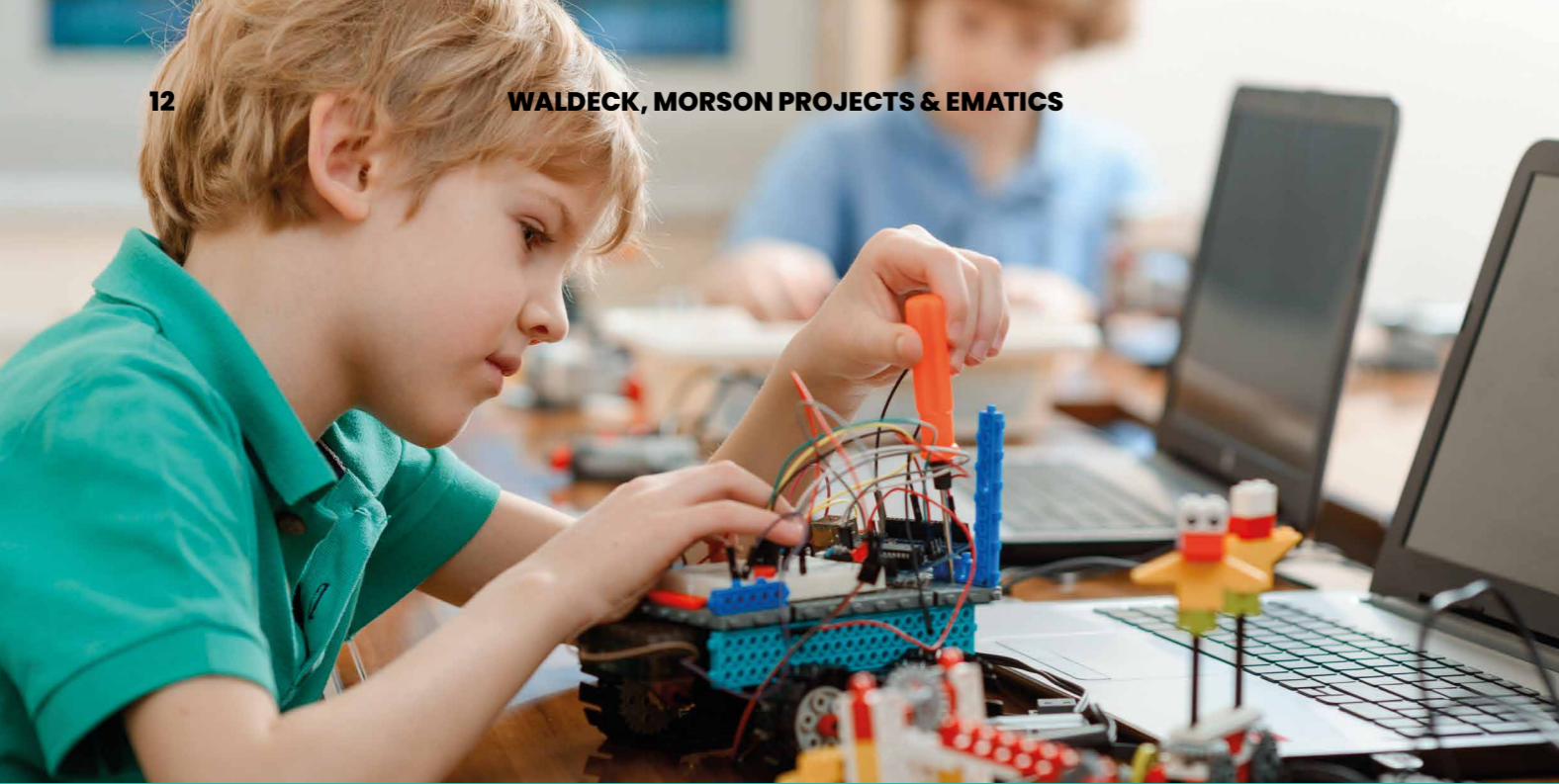
Early Careers Development Programme

As our industry booms and businesses continue to seek out the very best 'next generation' of engineers, Morson Projects continue to lead the way with growing the UK's top engineering talent of the future through our Early Careers Development Programme.

The Morson STEM Foundation

Funding for the Morson Group STEM Foundation at The University of Salford is the latest in a number of initiatives from Morson and the Mason family aimed at financially supporting young people from underprivileged backgrounds.





NEW REPORT LED BY THE IET CALLS FOR THE GOVERNMENT TO EMBED ENGINEERING INTO THE CURRENT CURRICULUM

Endorsed by over 150 engineering leaders and celebrities, the new 'Engineering Kids' Futures' report is urging the government to help tackle the UK's engineering skills shortage by embedding engineering in primary and secondary education.

The report, which has the backing from the likes of Major Tim Peake, Carol Vorderman MBE, will.i.am and representatives from Rolls Royce, Vodafone and the Ministry of Defence, includes recommendations to the UK government to embed engineering in the current curriculum.

The recommendations within the report include:

1 The National Curriculum

The English schools National Curriculum be reviewed to embed the teaching of engineering, at both primary and secondary education levels.

2 The Design & Technology (D&T) Curriculum

The current D&T curriculum at secondary level be reviewed, to refocus it as an 'engineering and design' subject, with a possible rebranding of the subject accordingly.

3 Engineering training for teachers

UK Government endorse, actively promote, signpost and support an engineering package of training aligned with the Initial Teacher Training (ITT) Core Content Framework.

4 Bursaries and scholarships

UK Government funded ITT bursaries and scholarships in engineering be reviewed to increase their value and availability.

The report is supported by new IET research which found that 70% of parents believe primary and secondary education doesn't teach children about the real-life application of the subjects they learn about.

The research also found that:

- More than half of parents (55%) agree that without formal teaching in engineering and technology (which is the application of subjects such as science and maths), they are worried their child won't be able to make informed career choices.
- 69% of parents say its essential primary school children are exposed to engineering and technology at a young age to spark interest in these fields.
- Almost half of parents (47%) agree that engineering and technology should be a compulsory core subject at GCSE.

Primary school student learning engineering
Primary school students looking through VR technology
David Lakin, IET Head of Education, Safeguarding & Education Policy, said: "As we know, subjects like science and maths are eagerly taught in schools, but connecting them to engineering – the link between these subjects, their purpose and application to the world in which we live – is not currently being made clear.

"We need to ensure there are clearer learning outcomes for these subjects. Put simply, we need to embed engineering into the mainstream curriculum. One way we can do this is by reviewing the current D&T curriculum, which is a key engineering and technology gateway subject, and give it more importance in the EBacc suite of subjects.

"There are many options, and the engineering community is ready to help develop and implement these to support government in implementing these recommendations. Our aim to significantly increase the number of quality engineers and technicians entering the workforce can only be achieved by letting young people see the opportunities that a career in the engineering sector presents."

Jordan Knapp, Lead Design Engineer and Chair of Morson Projects' Early Careers Development Programme commented: "To have engineering form a clear and visible part of the National Curriculum would be a huge step forward into educating, enticing and engaging the next generation of engineers.

"As a country, the UK has struggled with the volume of people following engineering careers for decades now and I feel these recommendations could make significant real-world impact on the industry long-term.

"We as a company are fully embracing this with our engagement into STEM initiatives, as well as leading the way with tertiary (post-secondary) education through Early Careers Development Programme."

Jon Callahan, one of our Principal Engineer and an internal Morson Projects STEM Ambassador added:

"In addition to Jordan's observations, there were some key statistics I picked up during my recent IMechE STEM Ambassador training:

- 79% of 11-14-year old's don't know what an Engineer does
- 69% of parents don't know what an Engineering does
- and amazingly 42% of teachers don't know what an Engineer does

"As such, I believe we need to start linking engineering throughout the entire curriculum; Why can't a geometry lesson be taught whilst designing furniture? Why can we not build a physical model in physics whilst learning about natural frequencies? Why can't chemistry be taught through cooking?

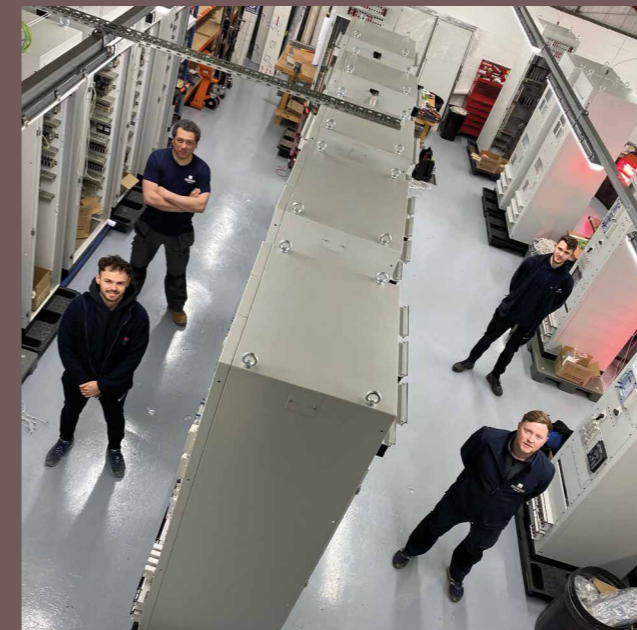
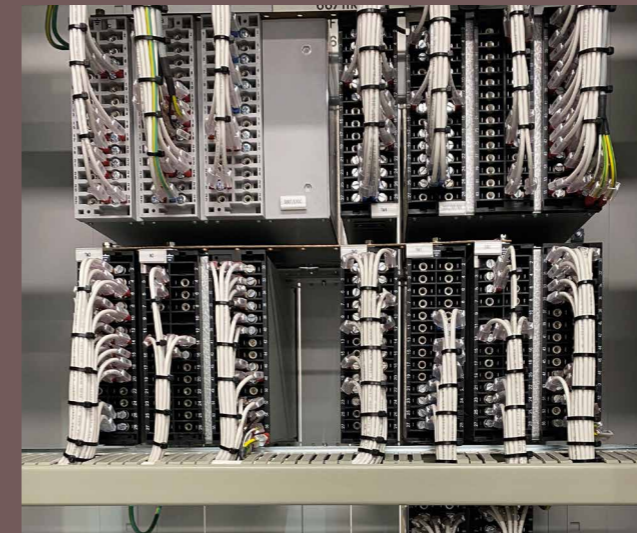
"Embracing engineering throughout the curriculum is essential in attracting and developing future engineers, and I look forward to continue advocating this message as part of Morson Projects wider STEM activities and ambitions."



MORSON PROJECTS' PANEL MANUFACTURING TEAM DOUBLES IN SIZE



Morson Projects' Panel Manufacturing team specialises in providing power system protection panels and control panels for a wide range of clients in the UK.



Following their continued success and sustained growth over the past 18 months, Morson Projects' Panel Manufacturing team has doubled in size and is currently still recruiting.

The recent acquisition of an additional workshop premise will also double the size of the panel building facility from early 2023 to accommodate further expansion.

Jack Roberts, Senior E&I Engineer on the team, shared: "Originally, the team started out delivering protection panels for power industry clients, offering a full scope of works from primary and secondary engineering and design through to site installation, including connections to the National Grid at up to 400kV."

"Having diversified and evolved our offering to include control panels for clients across the power generation, automotive and intralogistics sectors, we are delighted to have expanded our team and welcomed four new Panel Builders to the workshop, including two apprentices, with additional vacancies still open."

"The diversification of our portfolio provides more variety for the team, diversifying their skillsets and improving the scope of our collective capabilities, providing further opportunities for growth individually and for our team."

What will be happening in the workshop in 2023?

Utilising a 5,200ft² fully equipped workshop around the corner from our Morosn Projects' Head Office in Irlam, the team assemble, wire and test a range of control panels and host clients for factory acceptance testing.

The teams works closely with the Design Engineers in Morson Projects' Power and Ematics divisions to deliver the requirements of their clients and frequently contribute to the design process by offering valuable feedback that can only be provided by those working 'on the tools'.

With 3 apprentices now on the team, training has been a big focus over recent months. Workshop Manager, Jonathan McCreavey and Electrical Technician, Josh Loughran have done an excellent job of inducting the new recruits into the team and teaching them valuable and specialised skills, with all of them producing quality and consistent work.

To find out more about our Panel Manufacturing capability please get in touch with Simon Plimbley by calling 0161 707 1516.



AEROSPACE INDUSTRY INSIGHTS: 2023 TRENDS TO KEEP AN EYE ON

As we launched ourselves into 2023, we caught up with some of our aerospace experts to take a look behind the flashy headlines and catchy buzzwords to see what will really be taking off in the Aerospace industry throughout the year ahead. (All puns intended!).

2023 will be a year of innovation and consideration for the aerospace industry.

Based on the developments that our engineers are observing across the aviation landscape, five of the top aerospace trends to keep an eye on for 2023 are:

Written by:
Chris Summers
Principal Engineer
at Morson Projects

Sustainability

There is no escaping that the biggest existential challenge that aviation has faced in decades is the impact burning jet fuel has on the planet.

The pressure is growing for the aerospace industry to reduce its carbon footprint, from both climate-conscious passengers and nations determined to be less dependent on oil.

So, the race is truly on and this year we expect to see significant advancement in a number of technologies. Starting with more mainstream adoption of alternative fuels such as methanol and bio-ethanol which will work with the current fleets but reduce dependence on fossil fuels to cut down carbon emissions.

But the much bigger engineering challenges surround the move to zero emission aircraft, be that solar, hydrogen or electric. All of these technologies offer enormous potential environmental benefits, but all have significant engineering challenges to overcome.

With great challenge comes great opportunity and this is where we expect to see some of the most exciting innovations this year.



Additive Manufacturing (3D Printing)

Weight is one of the most important factors that affects everything in aerospace. Reducing weight improves efficiency by reducing fuel burn, which makes aircraft cheaper to run and more sustainable. So, it would not be a 'top five' list without a top weight-saving technology.

Additive Layer Manufacturing, or '3D printing' as it is commonly known, has been around for a while but as yet has not made the jump from technology demonstration to mainstream use. With significant improvements in additive layer manufacturing processes, and the material and structural properties of printed parts now being on par with casting, we see 2023 as a breakout year for 3D printing of structural components.

This year we expect to see widespread adoption of 3D printed parts designed in using traditional methods, simply switching production from forged and machined parts. This will be particularly useful in maintenance and repair organisations, providing near instant access to spares without a deep supply chain.

The real excitement, power and wave of innovation 3D printing will slowly unlock is when companies and regulators start to understand and embrace the new process to create more efficient, previously impossible designs.



Robotics & Automation

Aerospace factories across the world have produce some of the most advanced machines ever designed, but historically and to this day, not always in the most advanced way.

Compared to the automotive industry, with giant automated factories full of robotic production lines, a team of aerospace fitters installing parts with hand tools can seem prehistoric.

While appearances can be misleading, aerospace manufacturing does lag behind other industries in terms of production efficiency and automation. This has historically been due to the complexity and size of the product, however sectors such as eVTOL urban air mobility and low-cost combat UAVs, will see a significantly more companies in the market and a faster pace of development.

To be competitive, significant manufacturing cost savings must be made and that means learning a few lessons from the automotive sector. Look for manufacturers large and small to start trialling their "Factory of the Future" ideas this year.



Digitisation

Since the 90's when the Boeing 777 became the first large aircraft to be designed entirely on computers, the aerospace industry has heavily embraced digital technologies to ensure efficient production and quicker design. Now almost all projects, large and small are designed across multiple offices in different cities, countries, and continents.

We do not see this process slowing. In fact, with more data than ever before, and with smarter tools, further digitisation of design, analysis, manufacturing, and maintenance will enable companies to predict and respond to changes faster than ever before.

With more new projects underway than in decades, this year we see huge opportunities for companies who make the best use in smart structural design and analysis tools to increase the speed, and reduce cost of development.



Structural Health Monitoring (SHM)

One such opportunity around digitisation in service is Structural Health Monitoring of aircraft. Throughout aviation history, catastrophic fatigue failure or aircraft components have led to significant loss of life, as a result a huge amount of time and effort is put into aircraft teardown and inspection. Structural Health Monitoring uses sensors embedded or attached to structural elements to collect material and geometric data, and to utilise the data to assess the state of the structure.

SHM is a particular opportunity when used with 3D printing and composite structures where the sensors can be embedded directly into the parts.

The growing use of composites in aerospace poses a large maintenance challenge in the future as damage is much harder to detect visually and risks increasing maintenance and inspection costs significantly without a change of approach.



MORSON PROJECTS' MARINE, AEROSPACE & DEFENCE DIVISION ANNOUNCE TWO NEW ASSOCIATE DIRECTORS

Our Morson Projects Marine, Aerospace & Defence Engineering (MADE) division has seen a step-change in growth over the last few years, taking advantage in the uptake in sectors such as Underwater Systems, Surface Ships, Rotor Craft and Aerospace Defence contracts.

In addition, the quality of our engineering has set us on the path to becoming the Engineering Consultancy of choice for our clients such as BAE Systems, Leonardo Helicopters, Rolls-Royce and the UK Ministry of Defence.

Whilst the horizon of these sectors/clients is ever changing, our passion for effectively and efficiently solving our clients engineering and technical challenges, has placed us in the enviable position of having the opportunity for further significant growth during 2023 and beyond.

In order to underpin our success to date and promote future growth we are very pleased to announce that Becky Veal and James Tetley have both been appointed with the new title of 'Associate Director Engineering Delivery' within the MADE division.

Reporting to the Marine, Aerospace & Defence Divisional Engineering (MADE) Director, Gareth Beck, these roles assume accountability for a portfolio of projects, working side-by-side with our Chief Engineers to deliver the strategic objectives of our clients and our business.

Becky Veal

Becky joined Morson Projects in 2015 as Head of Business Unit, having previously owned an Engineering Recruitment Consultancy business.

Having spent 20+ years of her career in the Aerospace industry, Becky has been working alongside key clients such as Leonardo Helicopters where Morson Projects are a Prime Supplier, delivering a vast range of resourcing and engineering solutions.

Becky shared: "I am extremely fortunate to be supported by equally qualified subject matter experts at Morson Projects, who are pinnacle in ensuring we meet and exceed our clients expectations. I am thrilled to be involved in some exciting programmes of work this coming year, and am really excited to see the teams evolve through the development of our Early Careers Engineers, and our Technical Training Academies to help bridge the industry skills gap across the UK."

James Tetley

James has worked at Morson Projects since 2009 starting in the Jig & Tool Department, progressing to Head of Department in 2015.

Working with a wide range of customers from SMEs to leading global OEMs across the Marine, Aerospace & Defence sectors and delivering projects at all levels has provided James with a breadth of experience which can now be tapped into further to enhance our programme delivery across the division.

James shared: "Echoing Becky's words, I am extremely fortunate to be supported by an experienced and knowledgeable team with a first line of specialists in their field and highly skilled project teams. I look forward to seeing continued growth across the division as we head into 2023."

Director, Gareth Beck, shared of the appointments: "Becky and James have for a considerable number of years, been heading up key accounts and programmes within Morson Projects and as a result have made notable contributions to the growth of the division and wider business.

"These awards reflect and demonstrate our commitment towards career progression and development within Morson Projects and the wider Morson Group, of which we are very proud and pleased to reward. Please join me in wishing Becky and James the best of luck in their new roles."

MORSON PROJECTS BRIDGE THE SOUTH WEST SKILLS GAP AS THEY WELCOME FIRST LEONARDO HELICOPTERS TRAINEES ONTO THEIR PROGRAMME

Working in partnership with long-term client, Leonardo Helicopters, Morson Projects have welcomed our first cohort of trainee Integrated Support Engineers to the iAero Centre this month, to carry out bespoke upskilling training.

We are delighted to be supported by Austin Chick, Head of iAero, a purpose built research, design and innovation facility in Yeovil, which is committed to developing the high level skills required for high value jobs, helping to alleviate prevalent industrial challenges, such as the skills gap.

The trainee engineers taking part in the course have undergone an intense upskilling and Leonardo familiarisation programme, which has been devised by Morson Projects' in-house trainers and Technical Publications experts, who have previous business knowledge of setting up offload solutions for Leonardo Helicopters.



Head of Business Unit, Becky Veal explains more:

"Morson Projects and our parent company, Morson Group have been strategic partners to Leonardo Helicopters for over 20 years, supporting programmes of activity such as Product Support Engineering.

"As industry experts we pride ourselves in our collaborative approach and reactive working which had led to this long-term relationship. Through our Group offering, we are in a unique position to support clients such as Leonardo Helicopters, by delivering a wide range of solutions from recruitment to offload.

"This particular project, of bespoke upskilling training, was identified when our team recognised an opportunity to upskill ex-forces personnel to help address the resource shortage for Integrated Support Engineers in the Southwest.

"This course will enable us to bridge the industry gap and deliver training that is bespoke and specifically tailored to our client's needs. iAero has proven to be the perfect location to launch our first course, as it has given us the collaborative space to create an exceptional learning environment."



Kyle Chivers In-house Trainer

We caught up with Trainers, Mike and Kyle to find out more about their career history and why upskilling ex-forces personnel to help address the resource shortage for Integrated Support Engineers in the Southwest of England has been a critical milestone in providing skills to industry.

Hi both! Tell us a little bit about your careers history?

MIKE: I joined the Royal Navy in 1996, aged 16 and became the youngest Aircraft Engineer on Merlin when it was introduced in 1998. I stayed on Merlin, working on front-line and second-line squadrons until I left the Navy in 2005.

I then worked on various Merlin platforms such as Depth Maintenance, mid-life upgrades, and new build. I hung up my tools and moved into technical publications in 2015 and have worked my way up to an ISE (Integrated Support Engineer), currently working as a platform lead.

KYLE: I had a lot of military family and I was the typical 16 year old not knowing what I wanted to do with my life, I joined the Navy at 17 as an Aircraft Engineer, knowing that the skills will help me in later life. After 14 years of service I left and trained as an ISE (Integrated Support Engineer). I have been in Product Support Engineering for 5 years as an ISE with experience in rotary and unmanned aircraft.



Mike Shalders In-house Trainer

In total I have 19 years of experience with military aircraft.

How did your role evolve into training?

MIKE: Morson Projects needed to provide suitable personnel to our client. So we developed a training program to take Mechanical Engineers, who have valuable first-hand experience on the aircraft, and train them to be technical authors with a robust succession plan in place for them to become ISE's.

Having walked a very similar path to our first group of cohorts, it was a natural step to deliver the training in a way that meant they would easily get to grips with the very technical and challenging role. The first cohort proved a great success with the customer and have already integrated as key members of our team.

KYLE: As I gained experience in the role and ended up as one of the platform leads it was only natural to pass that knowledge on to junior members of the team.

What do you enjoy most about being a trainer?

MIKE: On this occasion, I enjoyed watching people transition over the two weeks from only having the hands-on mechanical experience to understanding the technical publication side and how that previous experience really plays a key part.

There's a lot of information to take in, and it's interesting to see

the different personalities evolve with their own lines of questioning to help them understand what is being taught. Hearing positive feedback from the different areas of the customers' business is rewarding, but the biggest reward is the cohorts themselves. Because of the training and approach Morson Projects have developed, we have a team of experienced and skilled personnel who are all eager to progress through the succession plan, and I'm sure they will all have a long and positive career with Morson Projects.

KYLE: Seeing the trainees gain in confidence and knowledge.

From the first day like rabbits in headlights thinking they'll never know what they are doing to things making sense and clicking.

How has your practical 'shop floor' experience enhanced the training programme delivery?

MIKE: Having used the product our clients deliver to service the aircraft for most of my career, I had a lot of questions when I first started as a technical author as I struggled with certain aspects of the job. I set up the training plan as if I was being trained again, ensuring I explained all the why's before I showed them the how's. This approach has allowed us to condense the training and produce highly skilled technical authors.

What real benefit does training like this provide clients (such as Leonardo Helicopters) with?

MIKE: Our cohorts were working on Leonardo products to varying degrees and looking for other challenges. Between them, they boast 70 years of experience on the EH101. Rather than lose them from the EH101 community completely, and lose that valuable experience and knowledge, Morson Projects have provided them with an opportunity to utilise their knowledge and continue to provide value to Leonardo Helicopters.



KYLE: We/Morson Projects can take the burden of training from the clients and train/men for a wellrounded ISE that has the level of skills industry expects, along with specific business rules for a client.

What's next?

MIKE: We are looking to train more cohorts for Leonardo Helicopters early 2023, as well as developing our training plan to deliver it to multiple customers across the industry.

KYLE: Helping the junior team members grow with the business. Some development courses for ourselves and then on to the next group of trainees. It's an exciting time for the team, with the growth of Product Support Engineering.

We heard from some of the trainees about how their upskilling has gone:

MICHELLE: "When I decided to take the leap into a new career path as a Technical Author I was initially apprehensive, however the excellent training provided which utilised my previous knowledge as an Aircraft Engineer to its' advantage quickly gave me the confidence and reassurance that this was the right move.

The Morson Projects team as a whole have made me feel incredibly welcome and that we are part of bigger things to come and I am excited about what the future holds for this role and the company."

STEVE: "With my 20 years background knowledge working on Leonardos EH101 on a front line platform in the Royal Navy and in a depth facility, I was excited to see Morson Projects advertising for Technical Authors. I took the jump and have just finished my training with Mike Shalders. Daunting at first, but Mike soon put me at ease and gave me all the confidence required. I can't thank

Mike enough for sharing his experience and giving me his support throughout. I look forward to working with Mike and his team within Morson Projects."

PETE: "Since the first phone call with Mike explaining everything to do with the role and the company, I fed off his enthusiasm to learn about Technical Authoring. After what seemed at the time a daunting experience of what was in store, both trainers, Mike and Kyle, showed a logical way to break down sections of each task, which in turn made learning more manageable. The confidence and reassurances they have given me about moving forward as a tech author has reaffirmed my decision to join the team.

"My previous experience of 16 years working on Merlin has aided me so far to make minor adjustments after consultation with Mike and Kyle."

JUEN: "Transitioning from Aircraft Engineer to Technical Author was quite daunting, but the level of training received was fantastic. My thirteen years of experience working on Merlin, both front line and in depth has been invaluable in helping me get to grips with what is required of me in my new role.

"Having Mike as our Lead, with his vast experience in both aircraft engineering and technical authoring, has been paramount to the success of our training."

Morson Projects continues to support the growth and development of our industry experts and are looking forward to welcoming our next cohort of trainees on-board in the coming weeks.

To find out more about how we can support your training and development needs, please don't hesitate to get in touch with Becky Veal by calling 01935 403200.

MORSON PROJECTS HIRE RECORD-BREAKING NUMBER ONTO EARLY CAREERS DEVELOPMENT PROGRAMME

We are proud to announce that we have been supporting a record-breaking number of early careers employees in the past 12 months and are starting 2023 with an incredible 62 across the company – almost doubling last year's figures.

Chris Burke, Executive Director, explains more: "Morson Projects pride ourselves on our commitment to supporting the professional and personal development of all our employees.

"It has been at the core of our 40+ year heritage and the formalisation of this culture through our 'Early Careers Development Programme' enables Morson Projects to continue leading the way with growing the UK's top engineering talent of the future, supported by our in-house operational 'enabling' teams such as IT, HR, finance, commercial, compliance and business development.

"We are starting 2023 with 62 early careers employees within the business, with plans to increase this by another 40% over the next 12 months; these numbers are defined by people who are enrolled onto funded College and University courses and supported by our in-house trained mentors."

Jordan Knapp, who is Chair of the Early Careers Development Programme, added: "The Early Careers Development Programme has evolved considerably over the past year in line with the increased demand of our clients and business. The proven success of the programme so far means it will continue to grow with more funding and mentor support to capture all areas of the business in 2023 and beyond."

"With our various learning pathways we are developing tailored plans for each individual, providing them with plenty of opportunity to develop and grow in their chosen field.

"Our programme focusses around the development of technical competence and core skills relevant to the individuals role and aspirations."

We caught up with some of our early careers team, past and present, to find out more about how they are enjoying their careers at Morson Projects so far. Here's what they had to say:

Justin Bosworth Graduate Design Engineer

Justin graduated in 2019 with a First Class Honours Degree in Mechanical & Energy Engineering from the University of Hull.

"Engineering has always been my dream career as it's something I have naturally taken an interest in. Morson Projects' Early Careers Development Programme has defined direction and progression and it's been so refreshing that the company are inclusive of older graduates looking for a career change.

"My favourite part of this job has to be the variety of the work and the satisfaction of producing something substantial. Morson Projects in general is a great company to work for. Everyone seems really happy to be working here which is a massive boost to morale. But let's be honest, designing top tier aircraft, is a pretty cool job to have!"



Hannah Worden Senior Commercial Officer

Hannah graduated in 2022 with a First Class Honours Degree in Quantity Surveying from the University of Salford.

"I love the varied nature of my role and the clear route for progression following my recent graduation.

"I'm grateful to work with an amazing group of people who have supported me throughout my degree and encouraged me to do my best in every assignment and exam.

"I hope that my newfound knowledge will provide me with opportunities to grow more within my current role as well as creating a stepping stone into other areas of the business."



Joe Baker Engineering Technician

Joe is currently studying a HND in Construction and the Built Environment (Civil Engineering) at Lincoln College having previously completed his HNC in the same subject.

"I have surprised myself with how quickly I am learning and progressing. I feel very settled in my role and am positive about my future prospects. It is great to feel like I have achieved something at the end of each working day, especially as each project we work on is so different.

"I would say if you were considering taking a route into construction or any other STEM subject, it is important to think about what interests you the most. I have seen first-hand how the roles can be so varied, creative and rewarding."

Hannah Lee Apprentice Design Engineer

Hannah is currently studying for her Level 3 Engineering Design and Draughtsperson at Hull College.

"Everybody has been really welcoming and approachable.

"Whenever I have a question or am unsure there is always someone that spares their time to help me solve and understand it, so it's proving to be the perfect environment for an Apprentice like me!

"I recently attended the Early Careers Day as part of the Early Careers Development Programme, this was an amazing experience to have so early into my career, it allowed me to meet and learn from other graduates on the programme and gave me an insight into the size and scope of the company and the future that I could have with Morson Projects."

Joe McGuire Systems Engineer

Joe graduated in 2022 with a First Class Honours for his BEng (Hons) in Electrical & Electronic Engineering at the University of Central Lancashire.

"Completing my degree and achieving a First whilst working full-time on demanding projects, is something I'll always be proud of. I'm thrilled with the end result and overall achievement – the hard work paid off!

"Morson Projects have fully supported and encouraged me throughout this journey. The continued support from the management and my colleagues has definitely contributed to the success that I have achieved, and for that, I'm truly grateful."

HULL OFFICE WELCOMES FIRST FEMALE APPRENTICE DESIGN ENGINEER

Morson Projects' Hull office marks an important milestone, having welcomed their first female engineering apprentice to the team.



Hannah Lee, 19, was recently accepted onto our Early Careers Development Programme as an Apprentice Design Engineer and is the first female member of the team to be based in our Hull office.

We caught up with Hannah to find out more.

Hi Hannah, how are you settling in?

I feel I am settling in really well, thank you. Everybody has been really welcoming and approachable.

Whenever I have a question or am unsure there is always someone that spares their time to help me solve and understand it, so it's proving to be the perfect environment for an apprentice like me!

What made you chose a career in engineering?

My journey to this role with Morson Projects is comparable to a rollercoaster, a whole load of twists and turns.

Throughout school my favourite (and my best!) subject was Design and Technology, I have always been very interested in designing and was sure that there was a career for me in the engineering sector.

I completed work experience in a civil and structural engineering firm and loved it, this pushed my decision at A-Levels to take mathematics, chemistry and 3D design. I was accepted by all of my chosen universities for various design courses, one of which with an unconditional offer, however on results day I had a setback in confidence due to my mathematics result.

I questioned my ability and did a U-turn and started university in September 2021 taking Law due to a previous interest.

I soon realised I was not using my creative flair in design and began searching for a way into my dream career in engineering, which was when I came across the Apprenticeship opportunity at Morson Projects.

Following a successful interview I was asked if I would like to take the position as an Apprentice Design Engineer for Morson Projects. It wasn't a difficult answer, with my, not so secret, love for aviation and strong passion for design, it was a definite yes!

What are you looking forward to the most?

I have only been with the company for 8 weeks, but can already see the future prospects the company holds. I attended the Early Careers Day as part of the Early Careers Programme, this was an amazing experience to have so early into my career, it allowed me to meet and learn from other graduates in the early careers programme and gave me an insight into the size and scope of the company and the future that I could have with Morson Projects.

Where do you see yourself heading over the next five years?

In five years I will have completed my Level 3 Engineering Design and Draughtsperson and I hope to be well into my degree in engineering.

I aim to be a more confident and capable engineer and to have had the chance to work on a variety of projects that Morson Projects have lined up in the future.

Morson's Early Careers Development Programme has been created for engineers, by engineers. Designed to attract and retain the best future talent it allows Morson Projects to continue to deliver market leading engineering consultancy solutions to its clients.

Jordan Knapp, Chair of the Early Careers Development Programme, shared: "Our Early Careers Development Programme has been created for engineers, by engineers. It has been designed to attract, develop and retain the best future talent in our industries to allow Morson Projects to continue to deliver market leading engineering consultancy solutions to our clients.

"We do this by empowering our early careers employees to take ownership of their own continual professional development with a structured career path framework.

"We're absolutely delighted to have Hannah onboard, she is already proving to be a valuable member of the team, and I look forward to seeing her journey progress, aided by a wealth of knowledge and support around her, here in Hull and across the wider business."

The programme also gives the company's senior engineers and previous 'Early Careers Development Programme' cohorts an opportunity to share their knowledge and experiences with the next generation of budding young engineers in a measured way through a bespoke mentoring scheme.

WILL THE OVERTURE AIRCRAFT BE A BOOM OR BUST?

Following Boom Supersonic releasing the latest design of their 'Overture' supersonic passenger aircraft at the Farnborough Airshow back in July, we discuss whether the aircraft will be boom or bust and the challenges it may face as it aims to enter service in 2026.



Figure 1: Boom Supersonic Overture

Figure 2: British Airways Concorde G-BOAG



Boom Supersonic released the latest design of their 'Overture' supersonic passenger aircraft at the Farnborough Airshow back in July.

Designed to carry 65-80 passengers at Mach 1.7 and enter service in 2026 will the Overture aircraft be a boom or bust?

There have been no supersonic passenger aircraft in service since the arguably early retirement of Concorde in 2003. The Anglo-French aircraft was first flown in 1969 and entered service in 1976, technically Concorde was an engineering marvel, commercially it was considered a failure, and in the end only 14 production aircraft were made all entering service with British Airways and Air France.

Concorde was restricted to subsonic flight over land due to the sonic boom generated at supersonic speeds, which severely limited the routes available to fly. A relatively low passenger capacity together with high fuel consumption (at a time of inflating fuel prices) meant that airlines cancelled their orders in favour of high capacity subsonic aircraft such as the Boeing 747.

Concorde only ever flew profitably for part of its service life offering a very expensive niche service primarily between London or Paris and New York.

So... What are the challenges?

Many of the challenges encountered by Concorde still exist today, for example sonic booms, high fuel consumption relative to subsonic aircraft and aerodynamic heating of the structure due to friction.

Since the design of Concorde in the 1960s there have been significant advances in materials, the Overture design will make extensive use of carbon composites for the wing, fuselage and vertical tail which are lighter, stronger and more thermally stable than traditional metallic materials such as the Aluminium alloys used on Concorde.

A significant problem to be overcome is the high fuel consumption associated with supersonic flight. When in level flight at a constant speed the thrust provided by the engines is balanced by the drag of the aircraft. Drag increases with the square of speed, i.e. if you double the speed, the drag increases by a factor of 4. This means 4 times the thrust is required from the engine and that thrust is generated by burning fuel.

Due to the unique operating conditions (sustained supersonic cruise) the engines required for the Overture aircraft are very different to those used on any other in-service aircraft. Boom Supersonic and Rolls-Royce worked together for 2 years to identify a propulsion system to suit the Overture aircraft, but Rolls-Royce have

"The sonic boom is a continuous 'bang' produced when an object travels through the air faster than the speed of sound, typically a sonic boom sounds like an explosion and is similar in volume to the human ear as a thunderclap."



Figure 3: NASA X-59 QueSST

recently decided not to continue the partnership and will instead concentrate on other projects. This leaves Boom Supersonic with no engine supplier and no suitable engines available on the market.

The Sonic Boom

As with Concorde, the Overture aircraft will be unable to travel at supersonic speeds over land due to the environmental impact of noise created by the sonic boom, instead it will travel at high subsonic speeds over land (Mach 0.95) and increase to its supersonic cruising speed of Mach 1.7 over water.

The sonic boom is a continuous 'bang' produced when an object travels through the air faster than the speed of sound, typically a sonic boom sounds like an explosion and is similar in volume to the human ear as a thunderclap.

NASA and Lockheed-Martin are currently working on the X-59 Quiet Supersonic Technology (QueSST) program. The aim of the project being to design and test a supersonic aircraft that reduces the level of a sonic boom to a quiet thump and assess acceptability for supersonic flight over land. The X-59 is due to make its first flight later in 2022.

What's next?

Boom have gathered a significant number of pre-orders for their Overture aircraft (as did Concorde), they also have an interest from the US government and Northrop Grumman for a special missions variant of the aircraft.

There are significant technical challenges to be overcome, an engine supplier to be found and with the current high fuel prices and push for sustainability whether the project will ultimately go on to become a commercial success remains to be seen...!

Written by: Tom Handford

Principal Stress Engineer
at Morson Projects

LIKE WHAT YOU'VE BEEN READING? JOIN OUR AEROSPACE & DEFENCE TEAM!

The Morson Projects team is currently 900+ personnel strong, with over 350 people deployed on Aerospace & Defence programmes. We are currently working towards a target of growing our team by almost 20% over the coming 12 months.

Morson Projects are a long-term supplier for top industry clients such as BAE Systems, Leonardo Helicopters, Vertical Aerospace, Rolls Royce, Airbus, Raytheon and Bombardier where we have been involved in many of their major programmes in recent history.

Our highly qualified team of professionals have developed solutions for the Aerospace & Defence industry throughout all project phases from structural design concept through to manufacturing detail, including the integration of systems, stress analysis, tooling design and manufacture, and production support. Due to the unprecedented growth we are seeing as we continue to work on the UK's most significant programmes, now more than ever we are focussed on attracting, developing and retaining the best talent. It is an exciting time at Morson Projects as we continue to invest in our team substantially.

To find out more about our current opportunities, please get in touch with Matthew Thompson, Resourcing Manager by calling 0161 707 1516.



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WALDECK CELEBRATE AT LINCOLNSHIRE CONSTRUCTION & PROPERTY AWARDS

WALDECK SCOOP 'BEST ASSET MANAGEMENT INNOVATION' AWARD FOR SECOND YEAR IN A ROW

We were delighted to be crowned 'Best Asset Management Innovation' Winner at the Building Innovation Awards 2022 for our Panoptic Bridge Management project with Network Rail, Nottingham Trent University and Birmingham City University.



Each year the Building Innovation Awards recognise and celebrate the pioneering individuals, organisations and partnerships that are embracing emerging technologies and digital across the construction sector.

For the second year running, Waldeck were the winners in the 'Best Asset Management Innovation' category for our work for client, Network Rail.

The award recognised our work to digitalise Network Rail's approach to masonry bridge condition inspections. The technology driven solution focuses on lifecycle benefits, and the many 'value adds' which digital data can also provide for Network Rail's wider stakeholders and teams. Veronica Ruby-Lewis, Associate Director at Waldeck shared: "Being able to support Network Rail with their future aspirations and to take their visions into demonstratable working solutions over the past few years has been a prestigious project for Waldeck. The project has been founded on a strong and collaborative working relationship, which has certainly enabled the teams to deliver the best results.

"As we continue to work through the scalability of the approach and solution overall, we are working with Network Rail to release all of the 'value adds' which the works offer for the wider periphery of Network Rail stakeholders.

"We are delighted to have picked up the award for 'Best Asset Management Innovation' for the second year in a row, which is a testament to the teams hard work, collaboration and application of the latest technologies."



"Since last year's win, Waldeck have been continuing to work collaboratively with Network Rails team and our university partners, Nottingham Trent University and Birmingham City University."

Find out more about the award-winning project below:

Project Overview

Network Rail's aspirations are to digitalise the condition monitoring of their assets, enabling non-subjective and data led decision making. Working with key stakeholders, Waldeck have developed and actively deployed techniques which offer improvements over the current means of asset condition monitoring and assessments.

The continuously evolving solution has been developed over recent years to support a digital, data driven approach to the asset management of their 29,000+ bridge portfolio, providing holistic and lifecycle benefits to Network Rail. The solution sees digital data supporting informed decision making for project engineers and asset care teams over the entirety of each bridge's lifecycle, as well as supporting Network Rail's ambition to create a 'Digital Railway'.

The project has focused on digital means of data collection and the application of this

data. The data is leveraged to support machine learning and artificial intelligence for condition assessments, automation of BIM models, and their aggregation into Network Rail's 'Digital Railway' and asset management solution.

Since last year's win, Waldeck have been continuing to work collaboratively with Network Rails team (R&D and Wales Route) and our university partners, Nottingham Trent University and Birmingham City University.

Network Rail's aspirations to further the digitalisation of condition monitoring of their assets has led to trials being undertaken on much larger bridge complex structures; viaducts of varying heights and challenges in terms of capture, i.e., spanning bodies of water and the inclusion of condition scoring within the asset viewing solution.

To find out more about Waldeck's Digital Capture and Asset Management capability, please call Veronica and the team on 08450 990285.

HOW WILL THE METaverse SHAPE THE CONSTRUCTION INDUSTRY IN 2023?

It's over a year since the 'Metaverse' became a hot topic of conversation after Facebook Inc.'s name change to 'Meta Platforms' was introduced at the Facebook Connect conference.



which has always peaked human interest. However, the construction industry has also been intrigued by how the Metaverse can shape its future, how it enables connection and collaboration, and how it can enhance efficiencies and communication across the workplace.

Will it reduce costs? Will it enhance work-output? Will we become fully immersed in a Metaverse way of working?

We caught up with Head of Digital Capture, Amy Cheeseman, to immerse ourselves into the relationship between the Metaverse and construction industry, looking at how AR and VR can be used to drive added value for projects in 2023 and beyond. Amy shares:

Currently, you can only really experience the Internet when you 'go' to it, looking at it through your phone or monitor. As Mark Zuckerberg famously quoted, when asked what's the difference between "the Internet" and "the Metaverse":

"It's the difference between peering through a window and actually being there right in the moment together." – Mark Zuckerberg

This is much the same with construction, where most of the design and technical process is done through a screen and drawings. You can pan around a 3D model of the project, but on a 2D monitor or TV, it's not an immersive 3D experience. The Metaverse is the solution to more immersive and interactive experiences within virtual environments. For example...

Augmented Reality
Oxford Languages defines Augmented Reality (AR) as "a technology that superimposes a computer-generated image on a user's view of the real world, thus providing a composite view."

Simply put, AR enhances the real world through digital means. For instance, the 'IKEA Place' app allows customers to visualise a piece of furniture within their home

However, the term was first coined in Neil Stevenson's 1982 novel 'Snow Crash' and it was only after Meta Platforms announcement that we saw a rapid rise of interest, with the whole of the internet wanting to know more.

Many were curious as to what the Metaverse was, and how it would affect their regular internet browsing. In Meta Platforms announcement, they call it the "next chapter for the internet", emphasising the power of connection.

But what is this new way of connecting... What is the Metaverse?

Oxford Dictionary defines the Metaverse as "a virtual-reality space in which users can interact with a computer-generated environment and other users."

In Stevenson's novel, the Metaverse was a virtual place where characters could go to escape their own reality.

The word "Metaverse" is a portmanteau of the prefix "meta" (meaning beyond) and "universe"; combining them together means "beyond the universe".

Escaping into a different or 'virtual' reality is something

using their phone's camera to overlay a 3D scaled model of an item in a room – trying the furniture out for size, style etc.

In a similar way, AR is becoming more commonplace within the construction industry, as apps for phones and AR products (such as Microsoft HoloLens 2) continue to be developed.

As such, uses range from overlaying buried services onto a floor slab to understand where alterations can be made without impacting pipework, to visualising Mechanical & Electrical models on a site to validate that they have been installed as per the design. This technology brings many benefits to construction as it enables the user to see models/ designs in context with the space and its surroundings.

For example, on projects the designers can see if there are any initial issues to work around, the builders can get a better insight into what they are working towards, the investors can see if they believe it is an investable project and the general public can get an insight into how their local spaces might look in the future.

This being said, AR also has limitations and it is common that a build site can't always be accessed. As such, it is always a better option to be proactive and prevent an issue on-site than relying on technology such as AR to detect issues and develop reactive solutions. This is where Virtual Reality (VR) technology can be extremely valuable and take users deeper into the Metaverse.

2. Virtual Reality

Virtual Reality (VR) can be defined as "the use of computer modelling and simulation that enables a person to interact with an artificial three-dimensional (3D) visual or other sensory environment."

VR is typically experienced through wearable interactive devices such as headsets or goggles which contain stereoscopic screens. Additional accessories such as gloves,

controllers or even full body suits allows the user to interact with the VR environment.

VR is already extremely accessible in mainstream internet spaces, used for chatting, games, art and education. Some examples include VR Chat, Half-Life: Alex, Sketchfab and Meta Platforms own technology.

The AEC sector can see the benefits of VR, with solutions for market leading software such as Autodesk BIM 360, Solid Edge and Trimble SketchUp to name a few being developed to integrate VR.

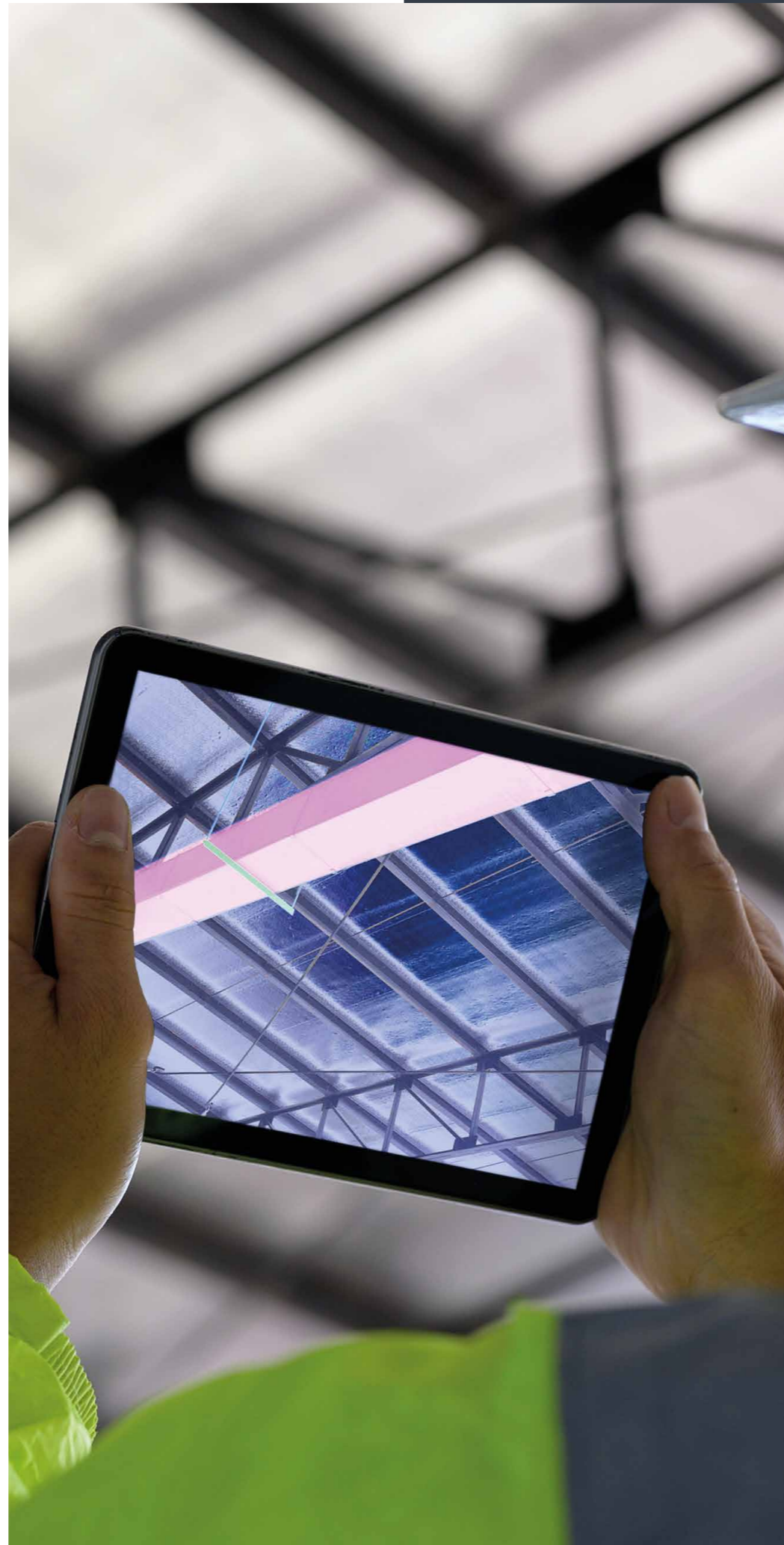
Whilst the predominant function of VR is experiencing a 3D environment, there are many more functions and benefits for the construction industry such as:

- **Reviewing a design live and collaboratively for faster approvals**
- **Holding meetings in a shared digital space, regardless of where everyone is across the globe**
- **Optioning various designs to see how they impact an environment**
- **Holding virtual conferences where a global audience can attend without the need to travel.**

The move away from full time office-based working since the global pandemic has highlighted the potential for VR to facilitate alternative ways of working whilst maintaining a collaborative approach to projects.

However, VR is not just for designing in construction. VR can be used across all stages of an environment's lifecycle such as:

- **Completing training in a VR environment to ensure operatives understand the complexities of a specific task or project before setting foot on site**
- **Running a selection of repair scenarios to understand which would be most effective so a repair can quickly be implemented**



"The move away from full time office –based working since the global pandemic has highlighted the potential for VR to facilitate alternative ways of working whilst maintaining a collaborative approach to projects."

- **Understanding how people with different impairments may experience a space to ensure it is accessible for all**
- **Facilitating asset management with virtual clipboards to full technical schematics being hosted within the VR asset**

As with all technologies, there are disadvantages to consider as well. Firstly, as will all new technology, there is a cost to invest in the hardware and any necessary software or upgrades need to run it perfectly, as well as a learning curve during adoption. With some construction projects having a large number of stakeholders of different sizes, not all companies are able to make the investment, resulting in a disjointed and ineffective workflow.

Considerations by business discussing significant investment in AR and VR should include that:

- **3D modelling projects in a virtual environment opens up the industry to other sectors such as software and gaming design. Whilst this may benefit the industry, deepening the talent pool, there is also the potential to blur the lines between developers and the roles of architects. Make sure you engage with trusted experts to support you through your Metaverse journey.**
- **Construction projects should adhere to specific standards such as ISO19650 and ensuring those are met by all project standards can be an uphill**

battle as companies interpret requirements in different ways. Developing standards for cohesive working in VR adds another layer of compliance to implement and police. Again, engaging with the right consultants is crucial to ensure a compliant and efficient use of AR and VR.

- **Whilst the global pandemic highlighted the potential for new ways of working remotely, it also highlighted the human need for social interactions and how endless Zoom and Teams meetings were not a full-time replacement for physical meetings. Don't get carried away, balance is key!**

In conclusion

As we enter into web 3.0, the Metaverse provides a new platform for companies, employees and clients to interact with and experience their projects in a new way. Already, we are reaping the benefits with more collaborative projects, creating better work environments, faster approvals, and more efficient collaboration. Like with all new technologies though, there will be roadblocks along the way to fully integrate VR into the construction industry.

To find out more about how your next project could benefit from utilising some of the latest digital technologies and methodologies, please get in touch with Amy and the team by calling 08450 990285.

MAKING THE MOST OF DIGITAL CAPTURE SOLUTIONS IN 2023

Over recent years we have seen example after example of how Digital Capture solutions can provide valuable data to inform decisions for buildings and facilities. But how else can businesses make the most of digital capture tools in 2023?

As technology continues to advance and equipment gets more compact, our team are able to help clients get to those hard-to-reach places, including the exterior and interiors of:

- Ships
- Planes & Helicopters
- Trains
- Cars, Vans & Lorries

During design and fabrication, or when undergoing maintenance and refits, with all modes of transport, it's important to minimise time spent out of service. Deploying digital technologies allows for rich data sets of be quickly captured and shared, reducing the need for multiple visits by different project participants.

No matter the stage of a project, a digital approach can provide vital insights, visualising constraints and planned modifications from the beginning, with problem solving and driving design development, to training environments and vital health & safety information at project handover.

How we can help

Amy Cheeseman, Head of Digital Capture, shares: Waldeck offer a wide range of surveying methods which allows us to ensure we are always using the right technology for the job. Our experience across multiple industries and design disciplines gives us the knowledge to make sure we meet our client's requirements, delivering the data they need in the best format to suit their project requirements.

Our digital capture team works with project teams and businesses to understand their specific requirements, enabling them to derive full benefit of the data over its lifecycle use. Our digital capture solutions support multiple use cases, from informed concept and design stage activities to supporting intelligent decision making for owner-operators.

Our team, work with our clients to understand their needs and utilise available technology to the best of its potential. By doing so, our clients see benefits such as:

- Cost savings due to faster methods of capture and minimum disruption to an asset
- Fully co-ordinated outputs for easy project integration
- Improved health and safety, minimising the need for specialist access equipment and working at height
- Much more information captured than if traditional methods were used, providing wider context
- The ability to use the data in a 3D environment
- Variety of outputs ranging from 2D drawings to 3D models and virtual tours
- One example of this is a recent project case study where Waldeck were appointed by Dales Marine Services Ltd to produce accurate 3D layouts of two pilot boats to support their upcoming engine refits.

Client Testimonial

"Dales Marine were contracted to re-engine Two Pilot Boats with four MAN Units. Our approach to the client was to offer a turn key package for the upgrade. We reached out to the team to have the vessels 3D scanned to ensure we eliminated and addressed any design and installation issues of the new engines, cooling and exhaust tier 3 systems.

"I have to say that we were very impressed with the timely and professional service we received from the team and of course the quality of information and images received from the 3D scan process."

— **Andrew Malcolm**
Dales Marine Services Ltd

Our team were appointed by Dales Marine to undertake a laser measurement survey and produce accurate layouts of two pilot boats in dry dock.

For more information please call 08450 990285 and ask for Amy Cheeseman.





BIM

WHAT YOU NEED TO KNOW ABOUT BIM COMPLIANCE IN 2023

A Brief History

Most of the construction industry are now familiar with the UK BIM Mandate that was set out by the UK Government Construction Strategy in May 2011, detailing that for all centrally-procured public projects the 'Government will require fully collaborative 3D BIM (with all project and asset information, documentation and data being electronic) as a minimum by April 2016'. With BIM Level 2 being developed to meet this mandate. In 2018, the term 'BIM Level 2' was superseded by the UK Building Information Management (BIM) Framework, which was based on the emerging ISO 19650 series of standards and remaining BS/PAS 1192.

In 2021, the Government published 'Transforming Infrastructure Performance (TIP): Roadmap to 2030', the BIM Mandate was redefined as the 'Information Management Mandate' delivered through the application of the UK BIM Framework, being applicable immediately and for the duration of the TIP 10-year plan. There are three key documents that interrelate and by following them, you are meeting the new mandate:

1. **Transforming infrastructure performance: Roadmap to 2030 – sets out a vision for innovation and reform in infrastructure delivery, with an objective to “end what is seen as artificial separation between infrastructure and construction”, and collectively prioritising societal outcomes.**
2. **Construction Playbook – sets out key policies and guidance for how public works projects and programmes are assessed, procured, and delivered.**
3. **National Infrastructure Strategy – sets out plans to transform the UK infrastructure in order to level up the country, strengthen the Union and achieve net zero emissions by 2050.**

So... What is BIM Compliance and what legislation is currently in place?

There are two facets to BIM Compliance:

1. **For a company, they need to be able to deliver projects in accordance with the UK BIM Framework which aligns to the international suite of industry standards, ISO 19650 series and remaining BS/PAS 1192. Attaining Business Systems Certification is a good measure of such compliancy, as achieved by Waldeck in 2021.**
2. **In terms of a project, this requires the application of the UK BIM Framework on the project and the Information Management process, detailed within BS EN ISO 19650-2:2018 being applied throughout the delivery phase of the assets, thus collaboration being key.**

To support BIM Compliance, the BIM Protocol which was drafted back in 2013 for use with all common construction contracts and supporting BIM working at Level 2, has been updated to support the ISO 19650 series. The Information Management Mandate requires this protocol to be appended to contracts to ensure all procurement and contractual processes are compliant with the standards set out in the UK BIM Framework at the time of delivery.

What does it really mean to be BIM compliant?

In 2020, John Ford, BIM & Digital Delivery Lead, Galliford Try Construction, discussed 'why it's time for a BIM reboot' after highlighting that his results depicted that the industry could be heading backwards with BIM, and calling for the public sector to re-energise the original 2011 objective.

Without placing blame, but with BIM starting and ending with the client, it is crucial that they understand what information they need, in whatever form, to be able to operate and maintain their asset upon handover. These specific requirements need to be clearly communicated within an Exchange Information Requirements (EIR), formerly known as Employer's Information Requirements. Without an EIR being provided, then the project is not complying with the UK BIM Framework.

When should BIM be used for a project?

For public-funded projects, conformance to the UK BIM Framework is required on projects by the Information Management Mandate detailed within the TIP Roadmap to 2030 and by the Government's expectations within the

"Waldeck's BIM Consultancy team offers a holistic approach to BIM, providing our clients with the expertise to leverage competitive advantages and increased operational efficiencies..."

Construction Playbook, regardless of type (roads, rails, or buildings etc.) and size with societal impacts being at the centre of every decision.

Outside of public-funded projects, the implementation of BIM can relieve many challenges faced within a project, of any scale; the simple introduction of standards and processes for suppliers to align to, together with 3D coordination and data exchange mechanism (the Common Data Environment) provides a level of assurance to the client in the information being delivered during each phase of the project.; design, construction and through to operation.

What are the benefits of using BIM on a project?

The adoption of BIM brings benefits at each stage of the project life cycle. Such benefits include:

During Design

- 3D coordination and design reviews will reduce design clashes, improve cost, and time certainty, facilitate informed decision making and generate a smooth transition to construction.
- Ability to access up to date information at any time throughout the project improving collaboration and communication.
- Dynamic simulation modelling forecasting the energy performance of the asset prior to construction and operation.

During Construction

- Ability to access up to date information at any time throughout the project improving collaboration and communication.
- Closer collaboration can lessen the number of variations and reduce waste on unused materials, reducing cost.

- Facilitates visualisation of construction progress
- Facilitates construction logistics planning
- Facilitates construction risk analysis and management

During Operation

- Handover and operation are transformed. Development of BIM data throughout the project stages can be integrated into the client's asset management system creating a digital record that can be accessed and updated throughout the asset's lifecycle.

How can Waldeck help with your BIM Compliance?

Our BIM Consultancy team

Waldeck have been utilising software supporting good information management for 10+ years and have been delivering BIM compliant schemes since the Government mandate in April 2016, gaining BRE BIM Level 2 Business Systems Certification in 2017 and more recently awarded with BRE ISO 19650-2:2018 Certification Scheme for Businesses in 2021, now being one of the first UKAS accredited schemes.

Waldeck's BIM Consultancy team offers a holistic approach to BIM, providing our clients with the expertise to leverage competitive advantages and increased operational efficiencies, and knowledge to ensure the most effective digital design approach is deployed and compliant with the UK BIM Framework.

Our BIM Consultancy services support clients across four key areas:

1. BIM Implementation
2. BIM Support Services
3. Project Information Management
4. Strategic Information Management

Adding value through tailored solutions

Our BIM Implementation offering aligns digital transformation with organisational purpose, which is embraced throughout our clients' organisation, and deeply integrated into the daily activities of their employees.

We work with our clients and their key stakeholders to implement the application of virtual tools, aligning to BS EN ISO 19650 standards to promote and ensure better collaborative working and performance monitoring.

Values adds of BIM Implementation on a project include:

- Whole lifecycle management
- Enhanced design
- Improved collaboration
- Improved efficiency
- Risk reduction

Twinned with our BIM Implementation offering, our BIM Support Services and Training empowers our client's internal teams with the knowhow to leverage the following benefits of BIM within their organisation and projects.

- Knowledge and understanding of industry leading modelling and project delivery standards
- A more efficient and higher standard design output than before
- Ability to provide improved deliverables for clients
- The skills to tender for Government funded projects (requiring UK BIM Framework)

Our Project Information Management offering is compliant with the UK BIM Framework and sits at the heart of our project solutions. Our experts provide BS EN ISO 19650-2 information management activities associated with the role of Lead Appointed Party and Appointed Party ensuring the delivery of models and

data at the defined project milestones, enabling our clients to benefit from data certainty throughout the lifecycle. Value adds of Project Information Management include:

- Improved coordination and communication across supply chains
- Better quality information production
- Streamlined project activities
- Asset data supporting delivery and maintenance
- Smart operations
- Reduced risk of error

Our Strategic Information Management offering sees our BIM Consultants working with our clients to understand their particular organisational and project information requirements and undertaking the BS EN ISO 19650-2 information management function of behalf of the client.

What's next?

Waldeck have a wealth of knowledge applying BIM across a broad spectrum of infrastructure projects, therefore, contractor's wanting to know more about BIM, and how through the appropriate level of BIM implementation within a project and aligning to BS EN ISO 19650 standards will benefit their delivery; then please feel free to contact us to speak with one of our specialists.

To find out more how Waldeck can support your next BIM projects, please contact Veronica Ruby-Lewis on 08450 990285.



WALDECK BIRMINGHAM TEAM CELEBRATES 5 YEARS WITH OFFICE EXPANSION

As our Commercial & Risk Management team celebrates the 5th anniversary since the opening of their first Birmingham office, we are delighted to share that they have also now expanded into a new office space in central Birmingham.

When they're not busy out on-site or meeting with clients, the team can be found on the 4th Floor of Charles House, located at 148 Great Charles Street (B3 3HT).

We caught up with Commercial & Risk Management Director, Graham Wright and Project Operations Director, Kirsty Tune, to find out more about how the Birmingham team has grown and what services they are now able to offer clients.

Hi Graham, happy anniversary to your team! Tell us a bit more about how your team has grown over the past five years?

Thank you! The team started off in the heart of Birmingham with just me and a business plan to help provide solutions to our clients, with the ambition to provide a high-quality Commercial & Risk Management service, with senior team members running the projects on a day-to-day basis.

As our offering has grown, we have been able to recruit more experts into the team, all who have brought in additional experience across a range of sectors including residential and care, retail, hotels, education and commercial. We were originally offering Interim Management and Health and Safety services and have since expanded this offering to deliver Quantity Surveying, Employer's Agent, Project Management, Contract Administration, Building Surveying and Clerk of Works across a range of multi-million-pound projects.

Has there been a highlight for you over the past 5 years?

The main highlight for me is that we've built some fantastic relationships with clients and are able to work with them on an on-going basis, we've seen several of our projects win national awards and have got some great schemes in the pipeline. We have built up a strong portfolio of projects with clients in the West Midlands such as Orbit Homes, Stonewater Housing and Wrekin Housing, where we have over £40million in build contracts at any one time.

We've also seen significant expansion in the East Midlands with

clients such as EMH Group, Futures Housing, Longhurst Group and Stonewater, as such we currently have over 350 units under delivery with more in the pipeline.

Kirsty, what's next for the Commercial team?

As Graham mentioned, we have some strong roots in Birmingham and a fantastic team, which has led to us having solid relationships across the housing, care and extra care sectors.

We are in the process of now replicating our West Midlands team and building a similar offering across the North West (covering Manchester, Liverpool, Chester etc) and the East Midlands (covering Lincolnshire, Nottinghamshire, Leicestershire, Yorkshire etc). We are already delivering a selection of schemes and have secured positions on the ICNW, Fusion21, Re-allies and Pagabo Frameworks for these areas.

With the growing workload and client base we are pleased to be offering our expanded service to clients for compliance monitoring, bank monitoring and fund monitoring. We are also launching new service lines in 2023 so watch this space!

"We have built up a strong portfolio of projects with clients in the West Midlands such as Orbit Homes, Stonewater Housing and Wrekin Housing, where we have over £40million in build contracts at any one time."

WALDECK'S ARCHITECTURE TEAM WELCOME TWO FRESH NEW FACES



Charlie Hirst Junior Technician

Charlie is following in the footsteps of 'Young Achiever of the Year' finalist, Connor Penlington, taking on a hybrid role between the Architecture and Digital teams, having recently completed his Part 1 in Architecture at the University of Lincoln.

Following our Architecture team becoming a RIBA Chartered Practice last year, they have seen continued success and as a result, have entered 2023 welcoming two new faces to their Lincoln Head Office.

Director of Architecture, Stuart Denniss, shared: "We are delighted to welcome Charlie and Sophie to the team from the University of Lincoln. They join us during a period of continued growth and as they integrate into the business I have no doubt they will become valued members of the team.

"Recruiting and investing in local people to develop the next generation of construction industry talent is high on Waldeck's agenda. In 2023 we are committed to continuing our engagement with our local community, attending Careers Fairs at local Colleges and Universities to support young people in the next chapter of their careers. These two new appointments are testament to this."

"We have a proven track record of delivering high quality design for our clients and collaborating successfully with the wider design team to meet our client's objectives. The skills and fresh ideas Sophie and Charlie bring, will feed into our current experienced team as they develop over the coming months and support the production of practical, buildable and cost-effective solutions for our clients."

We caught up with Junior Technician, Charlie Hirst and Placement Student, Sophie Vanstone to find out more:

Hi all! Welcome to Waldeck! What are you looking forward to most about the role?

CHARLIE: After achieving a 2:1 in my Part 1 Bachelor's degree in Architecture at the University of Lincoln, as well as completing various art-based subjects at A-Level and GCSE I dreamt of furthering my architecture career via an interest in the technical side of design. In this aspect I'm looking forward to increasing my knowledge of Revit and other BIM software, I am also looking forward to the data capture side of my role.

Sophie Vanstone Placement Student

Sophie is currently in her final year of studying Interior Architecture & Design at the University of Lincoln, and is currently carrying out a work placement alongside her studies, with a view of joining the team full-time following graduation.

SOPHIE: So far I'm really enjoying the collaborative working environment that the Architecture & Digital Capture teams at Waldeck have, so I look forward to continuing to work in that environment and further progressing within my role.

Why did you choose Waldeck?

CHARLIE: I chose Waldeck due to the exciting hybrid nature of the role, which will see me supporting both the Architecture and Digital teams through a mixture of office based design and on-site data capture.

This mixture of learning is what I am most excited for. I am also excited to be part of the team, working with them to deliver projects for our clients.

SOPHIE: I attended a career fair in Autumn 2022 at the University of Lincoln which Waldeck were exhibiting at. After getting talking to Stuart Denniss, the Director of Architecture / Digital & Technologies about my studies and career ambitions, I realised that Waldeck were a great fit in helping me to get some real-world experience. Waldeck offer a variety of services that I see enabling my further learning and progression within the company.

What do you hope 2023 will bring for your career?

CHARLIE: In the long-run I hope to build my experience which will contribute towards my PEDR logbook, so that I can then further my studies in architecture; by the possibility of completing a Masters to eventually become qualified as an Architect.

SOPHIE: I hope to finish my studies and officially start my career within the architectural industry, a key area of interest for me is advancing my industry knowledge, but especially my digital skills.

Image: Our two new team members pictured with the rest of the Architecture team. Charlie Hirst [Back Left] and Sophie Vanstone [Front Right]

WALDECK PARTNER WITH THE UNIVERSITY OF LINCOLN TO KEEP TOP TALENT IN LINCOLN

Earlier this month, Waldeck welcomed Harpaul Singh Dhindsa, Head of Careers & Employability and Louise Huxley, Employer Engagement Advisor from the University of Lincoln, UK to our Head Office at Wellingore Hall in Lincoln.



The pair joined Director, Stuart Denniss, and University of Lincoln Placement Student, Sophie Vanstone, so that Sophie could showcase her recent placement projects after joining Waldeck following our attendance at a recent Careers Fair organised by the University.

Stuart shared: "Sophie's placement with us is a prime example of the success that can come from Waldeck's collaboration with the University of Lincoln and is a testament to our long-standing commitment to recruiting and investing in local people.

"Finding and nurturing the next generation of talent is high on our agenda. With several University of Lincoln alumni already within our business and a busy calendar of activity planned for 2023, this partnership is a natural fit.

"We look forward to continuing to expand our integration with the University over the coming months with a view to add real value to their ambitious plans, whilst

growing our own business and delivering the best solutions for our clients."

Harpaul shared: "Our goals and ambitions for the University of Lincoln, and for Lincoln as a City, focuses heavily on retaining our top Graduate talent within the local area following students completing their studies with us.

"By engaging with local employers such as Waldeck, who are continually seeking highly-skilled employees to join their business, we hope to bridge the gap between academic studies and post-graduate careers through helping students build a deeper understanding of the opportunities available on their doorstep.

"There are so many opportunities for local employers to engage with the University to help shape the future of our local area, and we are delighted to have Waldeck on-board to support us with this."

"Our students leave the University with a global mindset

so retaining them in the region will support our local employers grow as a business. We want to work with employers to support their recruitment needs and understand skills gaps to better inform our curriculum.

"If anyone wants to find out more about how you can work with the University of Lincoln please visit our website <https://uolcareers.co.uk/employers/>"

This partnership aims to strengthen the existing flow of talent from the University of Lincoln into employment in Lincoln, with companies such as Waldeck.

As part of our on-going collaboration with the University, Stuart Denniss also recently visited the University to deliver a session to their Architecture students on starting a career in industry.

Earlier this year we also welcomed Junior Technician, Charlie Hirst to the Waldeck team, having recently completed his Part 1 in Architecture at the University of Lincoln.



WALDECK CELEBRATE AT THE LINCOLNSHIRE CONSTRUCTION & PROPERTY AWARDS

A huge thank you to the Lincolnshire Chamber of Commerce for another fantastic Lincolnshire Construction & Property Awards!

The awards proved to be a busy night for Waldeck, with Junior Technician, Connor Penlington, shortlisted for Young Achiever of the Year, Head of Marketing & Communications, Hannah Cook, on the judging panel and Waldeck sponsoring Consultancy of the Year!

Firstly, we caught up with 'Young Achiever of the Year' finalist, Connor to find out more about his career journey so far and why he was shortlisted for the awards:

Hi Connor, tell us a bit more about your time at Waldeck so far?

My career at Waldeck started following the realisation that I was in a role in the manufacturing industry which I felt had no clear opportunity for progression and didn't suit my long-term career ambitions.

Following a successful interview process with Waldeck, I joined the team in February 2022, and have since been in a new hybrid role of "Trainee Technician" which sees me working cross-disciplined between both our Lincoln-based Architecture & Digital Captures teams. The role has also seen me working on both single and multi-discipline projects, collaborating with other branches within Waldeck such as Civil, Structural, Mechanical and Electrical Engineering.

My role as Trainee Technician was a brand-new role for the business, which came about following the amalgamation of two of the teams (Architecture and Digital Capture) under one Director (Stuart Dennis).

This organisational change created an opportunity for this new hybrid role, seeing me supporting both of the established teams by operating as the linchpin between them, with the aim of improving the collaboration between the two departments to enhance Waldeck's offering to clients and overall project delivery, through better combining, aligning and utilising the skills from both teams.

My day-to-day role includes a mixture of office and on-site working, with support from senior members of the team to develop my skills and knowledge across the two different workstreams.

What has your professional development journey looked like so far?

When I joined Waldeck I was in the middle of undertaking an HNC in Mechanical Engineering at Lincoln College. Even though I changed roles during the course, I was committed to finishing it, and Waldeck offered me an opportunity to complete the course alongside my new role, with day-release to College.

On completion of the course through Lincoln College, I was

delighted to come out with the top mark of a distinction whilst also picking up the 'Student of the Year' Award. Although this was associated to a different field of work, I picked up lots of different transferrable skills which have helped my transition into the construction industry.

Since completing my HNC, I have chosen to continue my learning journey through starting a degree in Architectural Technology at Sheffield Hallam University. This is with the aim of becoming an Architectural Technologist on completion of the course.

Between work and university, I often find myself doing research into new technologies and trends within the construction industry. This is with the aim of not only my own development, but also wanting to help the company adapt to these trends and be at the forefront of championing these new technologies.

What would does being a Finalist mean to you?

My journey started with Waldeck in February 2022, and I have gained a whole wealth of experience in a short period of time. This has been demonstrated in the projects I have worked on and the quality of work that has been produced. I have gone from having no experience to being able to work as a member

"We spotted Connor's potential straight away – he has the right attitude and an eagerness to learn. He is proactive, always a positive and warm character in the office and has the necessary people skills to really exceed in his role."



of the project delivery team. I have fully immersed myself into the environment I am in and embraced the opportunity I have been given.

The role I find myself in, I feel, has been quite a rare opportunity, given the quality of colleagues I am working with and the technology I am also working with, is not something which is lost on me, and I feel as if I have really "taken the bull by the horns" so to speak. I have a strong desire to succeed in my career and this award would just be the beginning, and prove that the hard work does pay off! It's also important for me to share with others that they don't need to get stuck on a career pathway if they aren't happy with it, I know I'm relatively young but it's never too late to do what you feel is right for yourself. Only 9 months ago, I was working in a completely different industry, and since then I have begun to learn the ropes of two new disciplines in a job I can truly say I love.

Director of Architecture & Digital Technologies, Stuart Denniss commented on Connor's performance so far: "Having read

Connor's award submission, it's clear to see the hard work and passion he has for his career and own personal development, but more than that, Connor is a team player and has already proved himself as a valued asset to the Waldeck team."

"When I first met Connor, he excelled in his interview for his attitude, and although employing someone with no industry experience for such an important role was a risk to the business, I truly believe it has been one that has paid off.

"We spotted Connor's potential straight away – he has the right attitude and an eagerness to learn. He is proactive, always a positive and warm character in the office and has the necessary people skills to really exceed in his role.

"Connor has proved himself so far and has set himself up well to build a successful career at Waldeck and within the construction industry. So far he has exceeded all expectations in filling both roles and made a success of the opportunity given to him. Well done Connor and good luck for the award!"



"It was fantastic to see such a breadth of diverse projects and unique stories from this year's submissions. As a former winner, I hope I brought a different insight to the judging process."



Secondly, we caught up with Head of Marketing and Communications, Hannah Cook, who scooped the 'Young Achiever of the Year' Award last year, and joined the judging panel for 2023.

Hannah also took to the stage to present the 'Consultancy of the Year' Award to Delta-Simons Ltd, a local independent environmental consultancy who specialise in sustainability services.

Hannah shared of the awards: "I was absolutely delighted to have been invited back to the awards as a judge by Head Judge, Simon Morris of Gleeds and the rest of the panel.

"Every year Waldeck joins other local organisations at the DoubleTree by Hilton as they gather to praise and congratulate the best of the Lincolnshire Construction and Property industry.

"It was fantastic to see such a breadth of diverse projects and unique stories from this year's submissions. As a former winner, I hope I brought a different insight to the judging process.

"I'm proud to have been given this opportunity to represent women in the industry and I'm sure everyone who attended will agree, the awards were a great success in recognising and celebrating the wonderful talent we have in abundance across the county." Hannah will return on the panel again in 2024, joined by fellow judges Simon Morris of Gleeds, Martine Hamilton-Wright, a renowned architectural photographer, Lee Marshall of environmental building specialists Viridis and Alex Smith, Managing Director of full service law firm, Shakespeare Martineau.

WALDECK CELEBRATE AT HPC EXCELLENCE AWARDS

Congratulations to all of our colleagues working on EDF Energy's Hinkley Point C (HPC) project, who celebrated at the HPC Excellence Awards last week.

Also, a huge well done to some of the Waldeck team who were nominated in the 'Best Collaborative Team' and 'Workforce Awards' categories for the prestigious awards:

'Workforce Award'

Rozana Zyka (JDO HCA Review and Acceptance Engineer) was nominated for the individual 'Workforce Award' for outstanding individual contribution.

'Best Collaborative Team'

Shaun Karolinski, (JDO C2 Review and Acceptance Engineer), Mohamed Addan (JDO Galleries Review and Acceptance Engineer), Osas Usiobaifo (JDO Sitewide Review and Acceptance Engineer), Juan Rodrigues (JDO HK Engineer), and Vitalijus Kovas, Muhammad Bacha, John Iroh and Leopoldo Iglesias (HL Review and Acceptance Engineers) were all part of teams nominated for the 'Best Collaborative Team' awards.

This year, Waldeck was also nominated in the 'Best Collaborative Team' Award for our contribution to the Joint Design Office (JDO).

The JDO team manages modifications to the design on site, taking into consideration the Nuclear Safety, Environmental, and Technical Impacts across all of the buildings at HPC. Waldeck have 35 engineers working in the JDO, providing support to NNB as the intelligent customer.

We caught up with some of the team to find out more about their involvement in the project.

Shaun Karolinski, C2 Review and Acceptance Lead, explains more: "The C2 area consists of the Electrical Building, as well as the Transformer Platform where the electricity generated at the power station is connected to the national grid to be distributed across the South West.

"2022 provided several challenges and milestones in the C2 area, the milestones included the installation of the transformer, as well as a key project milestone; the handing over the Unit 1 Electrical Building top floor to the Mechanical & Electrical Team, which represents the completion of the civil works.

"I am proud of the C2 team for being nominated, and feel the team deserves it for all of their hard work over the last year despite all the challenges or setbacks. The team has worked really well together, and I hope that we continue to show our strength throughout the year 2023."

Rozana Zyka, Review and Acceptance Team in Heat Sink Area, explains more:

"The Heat Sink draws cooling water from the sea through inlet tunnels to flow naturally on the station and returns to the sea through the outfall building (HCA) and the discharge tunnel.

"As part of Review and Acceptance Team, I have a key

role in the process, making sure that any design changes do not affect Nuclear Safety.

"Last year it was really challenging including (but not only) the handover between contractors in the Outfall Building (HCA) which I was involved in and nominated in the 'Workforce Awards' category for.

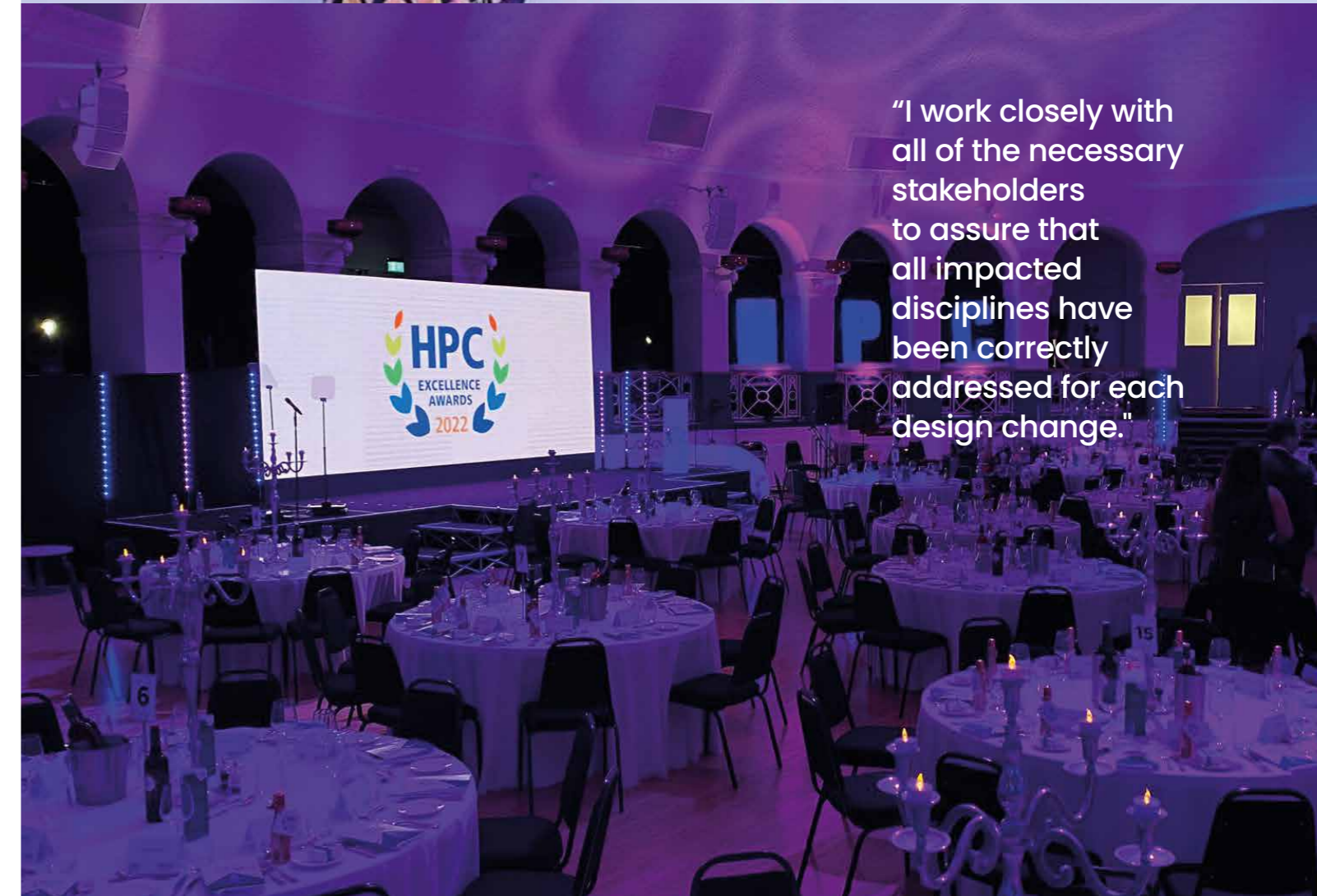
"Although I wasn't a finalist this year, it is with great appreciation that through my nomination my efforts and passion have been recognised as a contributing factor to the delivery of safety and success for the build of HPC and once finished, our diamond HPC will shine for decades."

"There is a high pressure to deliver quality, on time, without compromising safety – but all the good things happen under pressure! Grapes must be crushed to make wine and diamonds form under pressure.

The HPC Excellence Awards happen every year and have been running for 7 years.

Judging took place over the course of September and October 2022 where nominees were collated and the shortlist decided.

Three finalists were then taken forward to the Final which culminated in an awards ceremony last week (16th February) at Taunton County Cricket Club, Somerset. The judging panel was made up of EDF Energy Nuclear New Build (NNB) Directors and Leaders.



"I work closely with all of the necessary stakeholders to assure that all impacted disciplines have been correctly addressed for each design change."

MAYOR VISITS COMPLETED AFFORDABLE HOUSING DEVELOPMENT IN COVENTRY

Waldeck's clients, leading housing provider Stonewater, and family-owned construction company Deeley Group, recently marked the completion of their affordable housing development with a visit from Metro Mayor, Andy Street.

Andy Street was welcomed to Tiverton Road, a development of 39-homes in Wyken. Built on the former Dartmouth School site, the development provides vital affordable rented and shared ownership housing in the form of two-, three-, and four-bed homes.

The occasion marked the mayor's second visit to Tiverton Road, with him previously visiting the development during its construction in January 2021. At the time, he praised all involved for regenerating the former derelict site to create affordable housing – stating the project aligned with his brownfield first approach to providing housing across the region.

Graham Wright, Waldeck Director shared: "It has been a pleasure to support long-term client, Stonewater, as Employer's Agent and Clerk of Works, as well as carrying out Principal Designer duties for the scheme. This is now our fourth project with Deeley Group, and we look forward to continuing to work together in the near future.

"The need for affordable housing in Coventry and across the UK continues to be of the

upmost importance, being able to play a small part in helping to reduce homelessness and provide safe, affordable homes for the community is something as a business we are proud to be able to support."

Andy Street, Mayor of the West Midlands, said: "It's fantastic to see the completion of these affordable homes. I congratulate Stonewater and the Deeley Group on breathing new life into this once derelict site at the same time as meeting the housing needs of the local community.

"By building on a former school site, all the partners involved here are helping to maintain our region's strong commitment to brownfield-first development – protecting our precious greenbelt in the process.

"I look forward to this scheme changing lives for the better in the years ahead."

Matt Crucefix, Director of Development (West and South) at Stonewater added: "Providing good quality, affordable housing schemes, such as Tiverton Road, is a vital strategy in reducing homelessness. This is particularly important in Coventry, which saw some of Warwickshire's highest rates of families facing

homelessness during the pandemic. "Stonewater is not only committed to providing residents with a safe and secure place to live, but also instilling in them a sense of pride in their local community. That is why we introduce edible landscapes and install public art, such as Graham's excellent Wyken-inspired sculpture, in each of our new build developments."

The development is the fourth that Deeley Group has completed in the Wyken area of Coventry – having already built a school, church and church hall for the community.

Peter Deeley, Joint Managing Director of the Deeley Group said: "It is fantastic to see the development now completed and providing vital affordable housing to people in Wyken.

"The strength of the Deeley Group is that it can source development sites – particularly brownfield, where possible – and bring them back to use for the benefit of the communities we work within.

"The development has been delivered despite restrictions brought by the pandemic and that is testament to our strong working partnership with Stonewater."



WALDECK TO SUPPORT LANDMARK £15M EXTRA CARE SCHEME IN NEWPORT

Waldeck are delighted to be supporting our client, The Wrekin Housing Group, to deliver their new £15million Extra Care scheme in Newport, comprising of 70 properties and a host of communal facilities with construction being undertaken by Keon Homes.

Ideally situated just a ten-minute walk into the market town, 'Queenswood' will provide high quality living space and wraparound care and support for people over the age of 55, offering a mix of one and two-bed apartments, private gardens and a café.

Extra Care Home Newport Groundworks have already started, with a 20-strong team expected on-site from March 2023 and an aim to complete the development in Spring 2025.

Charlotte Prince, Development Manager at The Wrekin Housing Group, explained: "Our new Extra Care scheme will bring huge benefits to Newport and its surrounding communities. This is an exciting project that will help meet the growing demand for older people's housing and create much-needed job opportunities for local people.

"We have a strong track record when it comes to providing modern, secure and vibrant facilities that allow our tenants to enjoy a hassle-free retirement. We're delighted to be working with Keon on this exciting development."

Matt Beckley, Head of Development at Keon Homes, also said: "This is a massive milestone for the business and the first time we will be constructing an 'Extra Care' scheme."

"The location is perfect. Just a few minutes away from the centre of Newport, which gives residents the opportunity to be a real part of the local community and enjoy everything the sought-after market town has to offer in terms of shops, walks, pubs and restaurants."

Keon Homes was formed by Richard Williams, Warren Bolton and Noel Sweeney in 2019 after they spotted an opportunity in the market for a developer who could provide much-needed affordable housing and care schemes. They are one of West Midlands' fastest-growing providers of affordable homes and social housing.

Kirsty Tune, Commercial Operations Director, who is leading the project on behalf of Waldeck added: "The Waldeck team are acting as Employer's Agent, Clerk of Works and Principal Designer for the scheme and look forward to building on this new partnership with The Wrekin Housing Group and Keon Homes Limited as they provide this much needed facility to the community in Newport."

"Our team is recognised as a specialist consultant on Extra Care and Retirement Living schemes and have further expertise in dementia care. We pride ourselves in work closely with our care clients, such as The Wrekin Housing Group, to ensure their aspirations on care quality and innovation are considered and implemented within their schemes design, by utilising our experience and expertise from previous projects."

"Our team is recognised as a specialist consultant on Extra Care and Retirement Living schemes and have further expertise in dementia care."



MARTIN CHEUNG COMPLETES STRATHPUFFER 24HR RACE FOR THE EMILY HARRIS FOUNDATION

Principal BIM Manager, Martin Cheung, completed the legendary 'Strathpuffer 24' mountain bike endurance event held in the Highlands of Scotland on the 14-15th January 2023.



"We endured freezing temperatures, consisting of 17 hours of darkness up in the Highlands of Scotland in the middle of winter, with ice, wind, hail, rain and mud."

Martin was fundraising for the Emily Harris Foundation, a cause close to his heart.

Martin explains: "The Emily Harris Foundation, together with everyone at Kingsmill Neonatal Intensive Care Unit have provided so much help and support to those in their care during difficult times, including my partner and I when our two beautiful twins were born close to six weeks premature.

"Having spent a couple of weeks in the Neonatal Intensive Care Unit, the level of care and support we both experienced and observed was truly amazing.

"As a small thank you for the efforts of the Emily Harris Foundation and the rest of the team who made our daunting journey so much easier, ultimately enabling us to remain by our girls' sides throughout their early start in life, I have chosen to fundraise through the Strathpuffer 24 hour mountain bike endurance event, in the hope of raising some money for the Foundation.

"Five friends agreed to take part in the event alongside me, and this was actually our 2nd Strathpuffer race, having previously completed the race in 2020 for a different charity.

"A few years and a lockdown or two later, we trained hard to ensure we were in shape for the event, which was much harder than back in 2020! We endured freezing temperatures, consisting of 17 hours of darkness up in the Highlands of Scotland in the middle of winter, with ice, wind, hail, rain and mud.

"We are pleased to be able to make a contribution to a fantastic cause which will help future families and babies who find themselves on the Neonatal Intensive Care Unit."

A huge well done to Martin and his friends who raised a significant amount of £780, trebling their original target.



MEET THE TEAM:**BUSINESS DEVELOPMENT EXECUTIVE, LINZI ROSS**

We are delighted to have recently welcomed our new Business Development Executive, Linzi Ross to our team.



Linzi joins the business at an exciting time as we continue to expand our presence, team and capability across the UK.

With over 17 years in industry, working within various architecture departments, Linzi has joined us following a decision to transition from a technical delivery role to a Business Development role and we look forward to her being part of the next phase of our growth.

Linzi has already been busy attending events across the country, having recently visited UK Construction Week at the NEC in Birmingham, various Built Environment Networking Development Conferences in Manchester and London and several local networking events across Lincolnshire and Nottinghamshire, as well as welcoming the Peterborough Phantoms Ice Hockey Club to our new office.

Waldeck Director, Neale Stephens commented on Linzi's appointment: "Already Linzi is proving to be a terrific addition to the Waldeck team, with her enthusiasm for her new role, plus her experience of not just architecture but multi-d projects which aligns well with our current and future plans."

As such, we thought it was about time we caught up with Linzi to find out more about her career history and how her experience will help open up new opportunities for Waldeck, our clients and supply chain.

Hi Linzi! Welcome to the team. Tell us about your career journey so far?

Prior to my new role, I had been working as part of an Architecture team for the past 17 years. I started out as a CAD technician after leaving school, then completed my BA (Hons) Architecture at the University of Lincoln.

Following this, I secured a job which I remained in for 14 years, working in the public sector on a

framework with a Local Authority, mainly focussing on schemes across the education sector. I later moved to a new role within a private consultancy business, still remaining in Architecture, as an Associate Architectural Designer. This role was varied, including working on projects for agricultural buildings, class Q conversions, housing developments and solar power farms.

Through these roles I have obviously developed and utilised the necessary technical skills required to deliver successful projects, but I have also learned that I am very much a 'people person', which has been a huge part of my motivation to take on a new and exciting role in BD!

Something that is also really important to me, is that I am also a qualified Mental Health First Aider. Having previously undertaken an evening course in counselling too, I recently volunteered at an NHS funded project 'Night Life Café' in Lincoln for a year, providing a confidential listening service.

What skills and experience do you bring to Waldeck?

My approachable and friendly personality alongside my experience and knowledge of the industries I've worked within, I feel puts me in a unique position to really get under the skin of Waldeck and support the business with its ambitious growth plans!

Throughout my Architectural career I found I grew to really enjoy the client engagement side of a project and as a result, a key skill I believe I bring to Waldeck is my people skills; making new connections, understanding potential clients' needs and aligning these to how Waldeck and our partners are able to help them be achieved.

What inspired your change in career path?

The main reason for my career change was opportunity. I was at

"Throughout my Architectural career I found I grew to really enjoy the client engagement side of a project and as a result, a key skill I believe I bring to Waldeck is my people skills; making new connections, understanding potential clients' needs..."

a point in my life where I wanted to change my career path and put all my energy and focus into something I deem as a really exciting role.. where I could be outside in the world, meeting new faces and feel like I am adding real value to a business.

I look forward to being able to contribute to a continuously growing company and its success, making some new contacts along the way!

What do you enjoy doing outside of work?

Outside of work, nothing is better to me than being outdoors, by the water or in the fresh air. One hobby I wish to get back into is learning the harp where I had several lessons but due to covid had to stop. Once time allows, I hope to pick this back up again!

Linzi's calendar is booked up with a whole host of local and industry-led networking events over the coming weeks.

If you would like to get in touch with Linzi to find out more about Waldeck and how we can help deliver your next project, please call the office on 08450 990 285.



NATIONAL APPRENTICESHIP WEEK

National Apprenticeship Week is an opportunity to celebrate the achievements of apprentices around the UK, sharing the positive impact they make to communities, businesses and the wider economy.



FINLEY NOTTINGHAM

In September 2022 we saw 5 members of the team start an apprenticeship as part of their role at Waldeck, one of whom is Trainee Technician, Finley Nottingham, the latest apprentice to join our Civil & Structural Engineering team in the East Midlands.

As such, we thought it was time to catch up with him to find out how he is settling in, and why he would recommend an apprenticeship to others starting out in industry:

Hi Finley! Tell us a little bit about your career so far?

"My career at Waldeck started following the completion of my Level 3 course in Construction and the Built Environment at Peterborough Regional College.

"I wanted to progress my education into engineering but also wanted a job where I could get some real work experience.

So, I decided the best option would be to continue my studies with a Degree Apprenticeship.

"Following a successful interview process with Waldeck, I joined the team in June 2022, and have since been in the role of Trainee Technician which sees me working within our Civil and Structural Engineering team.

"After a 3-month probationary period I was happy with my start with Waldeck and applied for the Civil Engineering Degree Apprenticeship at Nottingham Trent University, which I then started in September 2022."

Why did you choose a Degree Apprenticeship to further your education?

"I have chosen to do a Degree Apprenticeship in Civil Engineering as it is a great way to gain experience whilst also working towards a qualification.

"I work at Waldeck four days a week being involved in a variety of projects learning more each day, then once a week I am at Nottingham Trent University.

"The subjects I am being taught currently are Engineering Maths & Mechanics, Engineering Materials, Geology, and Graphical Communication/IT. These lectures and seminars are helping me to gain a better understanding of what it takes to be a valuable civil engineer. As well as learning when at the university, I have lots of independent learning to do during the week which allows me to develop a deeper understanding of what is being taught."

What are you looking forward to most over the coming months?

"I am looking forward to progressing my skills and knowledge within civil and structural engineering which will allow me to take on larger projects more independently.

"I am also supported by an ICE Supervising Civil Engineer and mentors at Waldeck, combined with a Personal Development Plan and regular CPD training.

"Finley is intelligent and polite, receiving praise for his hard work from several project managers. It's evident that he's on track to a very successful career."

"CPD's have already proved beneficial to me as they've helped to broaden my knowledge about various disciplines within civil engineering. For example, about parametric design which demonstrated a different way in which the design of a building could be automated by setting up a series of algorithms."

And finally... What are your aspirations for 5 years' time?

"In 5 years' time I'd like to have successfully completed my Apprenticeship Scheme and be working on my end point assessment to become an Incorporated Engineer."

Finley has been involved in a variety of projects, playing a valued part on all, from small housing developments to large factories and railway intersections, increasing his contribution and responsibility each time. And consistently exceeding expectations from the team.

Tom Peden, one of the Civil Engineers Finley has been working with, shared: "Finley has seamlessly integrated with the team, consistently demonstrating

that he's a good listener and fast learner. "His technical understanding has developed very quickly, and he's already been heavily involved in the drafting/modelling design works on a variety of schemes.

"Finley is intelligent and polite, receiving praise for his hard work from several project managers. It's evident that he's on track to a very successful career."

Will Green, Associate Director within our Civil & Structural Engineering team shared: "It was clear when I first met Finley that he had the potential and drive to be successful at civil engineering, it's really encouraging to see him making a superb start to his career.

"One of the best ways to align individuals' skills to client projects is through on-the-job training. Finley collaborates and communicates extremely well within the team and has proven to be a very capable, dependable team member."

NATIONAL APPRENTICESHIP WEEK

QUANTITY SURVEYING APPRENTICES, LARA AND KELLY

In September 2022 we saw five members of the team start an apprenticeship as part of their role at Waldeck, two of whom are Lara Bird and Kelly Holpin, who work within our Commercial & Risk Management team in Birmingham.

As such, we thought it was time to catch up with them to find out how they are settling in, and why they would recommend an apprenticeship to others forging careers within the industry.

Hi both! Please can you tell us why you chose an Apprenticeship to further your education?

LARA: I began working for Waldeck in September 2021 and had been taking on more roles and responsibilities within my Project Co-ordinator role for the Birmingham office.

This in turn has led to the Senior Management Team asking Kelly Holpin and I if we would be interested in beginning our training in the field of Quantity Surveying to be able to offer a broader range of support to the Commercial & Risk Management team.

This apprenticeship means I can still work and gain experience as well as gaining a qualification in Quantity Surveying, which will give me options in the future for further advancing my career!

KELLY: An apprenticeship seemed like the most sensible way to further my education, having to support a family whilst training meant full time education was not an available option for me. With an

apprenticeship I have the balance of being able to work and train at the same time.

What are you looking forward to most?

LARA: I am looking forward to gaining a more in depth knowledge into the world of Quantity Surveying which will help me to understand more of the work that I assist with in my team. I am looking forward to expanding my knowledge and applying that in my everyday tasks for work. Overall, I am most looking forward to the challenge.

KELLY: Qualifying! It was a bit of a shock to the system having homework again after 20 years of being out of education.

From what you've seen so far – would you recommend someone starting an apprenticeship and why?

LARA: I have been studying now for 4 months, and have completed three assignments. My confidence is growing and I am enjoying the challenge of learning in a college environment again.

As this style of learning means I can work at the same time, I would definitely recommend this approach to gaining extra qualifications.

KELLY: I would yes, I think learning on the job helps with your knowledge when you are at college and visa versa so I will (hopefully) progress quicker than I would have if I was in full time education.

What career aspirations do you have for 5 years' time?

LARA: In 5 years' time, I would like to have the qualifications to progress my career as far as an Apprenticeship can take me, I'm looking forward to the challenge, and am grateful for the opportunity to do so!

KELLY: I am no Richard Branson!!! I would like to feel that in 5 years' time I will have some qualifications and will be confidently progressing. I am very thankful for the opportunity.

Project Operations Director, Kirsty Tune, shared: "Both Lara and Kelly have been working incredibly hard since they joined and especially since taking on their apprenticeship journey.

"I know at times it's been a juggle with work, homework, attending college and of course raising a family but they have been completely committed and professional along the way.

"Both Kelly and Lara are excellent examples of how you can change your career path at any time and still learn new skills. I'm sure that with their hard work and dedication they will continue to be a huge asset to our business growth as well as their individual growth in their future career paths!"



Lara Bird
Construction Quantity Surveying Technician Apprenticeship

Job title: **Lead Project Co-ordinator**
Joined Waldeck: **September 2021**
Office: **Birmingham**
Place of study: **Institute of Technology, Dudley**



Kelly Holpin
Construction Quantity Surveying Technician Apprenticeship

Job title: **Lead Project Co-ordinator**
Joined Waldeck: **May 2022**
Office: **Birmingham**
Place of study: **Institute of Technology, Dudley**

NATIONAL APPRENTICESHIP WEEK

ELECTRICAL ENGINEERING APPRENTICES, NICK AND JOSH



Nick Murdoch Electrical Engineering Degree Apprenticeship

Job title: **Trainee Technician**
 Joined Waldeck: **August 2022**
 Office: **Sheffield**
 Place of study: **Sheffield Hallam University**

In September 2022 we saw five members of the team start an apprenticeship as part of their career progression at Waldeck, two of whom are part of our Mechanical & Electrical Building Services team in Sheffield.

As such, we thought it was time to catch up with Trainee Technicians Nick (left) and Josh (right) to find out how they are getting on, and why they would recommend a Degree Apprenticeship to others starting out in industry.

Hi Nick! Please can you tell us more about why did you choose an apprenticeship to further your education?

I decided to do an apprenticeship because of the balance it offers between work and education. This apprenticeship allows me to gain hands on experience in the Electrical & Building Services field, while working on a range of projects at Waldeck. This real-world understanding can then feed through into my education and better support my learning and development to become a well-rounded engineer.

All the modules that I am studying at university can apply to the jobs here at Waldeck which means that I can apply the knowledge to help better understand specific parts of my course and help out more significantly and become a real asset to the team. A degree in Electrical & Electronic Engineering is a springboard into the electrical world, and with the

work experience it allows me to expand my knowledge in this sector.

What are you most looking forward to most over the coming months?

I am most looking forward to being part of a highly skilled team that uses its engineering expertise to help engineer some of the most exciting projects in the UK. I am so excited to be learning about all the different services that the Mechanical & Electrical team offer; there are so many things to learn about in this sector and this gives me something to look forward to everyday.

The challenging aspects of the job also excite me because I feel you learn so much more when pushed by challenges. Expanding my knowledge and understanding the levels of responsibility that are required at Waldeck is an area that I constantly look forward to because of the amount of care and pride that Waldeck employees take in every job. All in all, there are a few areas that I am looking forward to, it is hard to narrow it down to just one!

From what you've seen so far – would you recommend someone starting an apprenticeship and why?

Absolutely! You learn at an astonishing rate. With me being in the role for only a few months, I have learnt so much and already feel part of the team, which is something that can be quite daunting when starting out.

"I am hoping to also be working towards a Master's degree in my field, because this would add great benefit to Waldeck and allow me to contribute more to the engineering team."

Apprenticeships are definitely the way to get more relevant hands on experience as well as qualifications. On a personal level, I feel that I have been exposed to more engineering problems and scenarios than I would have never encountered being a full-time University student. This means that after 3 years, I will have a degree with 3 years of relevant work experience, compared to a University student who will just have a degree. I would highly recommend starting an apprenticeship so that you are obtaining great qualifications and building up experience to be a valuable member of your team.

What role would you like to have in 5 years' time?

In 5 years' time, I will have completed my 3 year degree course and had 5 years' experience working at Waldeck. Consequently, I am hoping to be a Senior Engineer or very close to achieving this role.

Because of the 5 years' work experience at Waldeck, I am hoping to be close to IEng (Incorporated Engineer) or EngTech status. I am hoping to also be working towards a Master's degree in my field, because this would add great benefit to Waldeck and allow me to contribute more to the engineering team. 5 years is a long time, and there is so much to learn here at Waldeck... I am embracing the challenge and look forward to seeing where this apprenticeship will take me.

In the face of a skills gap and lack of people choosing a career in STEM subjects, how would you inspire someone, to take a similar route into the workplace?

For someone who is debating whether to do an apprenticeship or not, I would inspire them by showcasing the different projects that are being worked on and try to have students have a hands on approach to the job in hand.

It is something that they will not have come across before and it is something that is totally different to the leaning that is undertaken at school. I would also say that there are endless possibilities with STEM and the fact that no project has ever been the same no matter on how similar it may look.

I also think the inspiration can spark early on at home or school by being exposed to STEM subjects at home. It would also be fantastic to see schools have a STEM day where they are tasked to create something and have the students think about how this could be achieved!



Joshua Price
Electrical Engineering Degree
Apprenticeship

Job title: **Trainee Technician**
 Joined Waldeck: **August 2022**
 Office: **Sheffield**
 Place of study: **Sheffield Hallam University**

"Working for Waldeck as an apprentice allows me to be involved on important projects, developing my experience in the building services industry..."

Hi Josh! What led you to choosing an apprenticeship to further your education?

I decided to take on this apprenticeship because it allows me to gain experience and learn on the job, all while working towards a recognised degree in the field.

This was perfect for me as I wanted to get into the world of work straight away after finishing A Levels and with this apprenticeship it allows me to do this, as well as furthering my education at university.

Working for Waldeck as an apprentice allows me to be involved on important projects, developing my experience in the building services industry to accommodate the knowledge I obtain from attending Sheffield Hallam University. Attending university will help me understand key parts of engineering and the industry surrounding it, which I can then transfer into my place of work to better accompany my colleagues at Waldeck.

What are you looking forward to most over the coming months?

What I look forward to most is getting involved in key projects around the country and the knowledge that comes with that. This accompanied by a very experienced team in both the Electrical and Mechanical sections of the team guiding me to produce quality output.

This is exciting as it helps me gain experience by being involved in important jobs and being pushed to get deadlines completed in time for clients. This comes with lots of responsibility that I look forward to having and sharing with my colleagues at Waldeck to complete jobs to the highest standard.

From what you've seen so far – would you recommend someone starting an apprenticeship and why?

I would highly recommend taking up an apprenticeship to further your education as it gives you endless possibilities in a wide range of sectors. Gaining experience early on enhances your career opportunities in the future, as well as having that industry recognised qualification to accompany that.

What role you'd like to have in 5 years' time?

After completing my 4-year course at Sheffield Hallam University, I would have hopefully achieved a BEng Hon Electrical & Electronic Engineering degree. With also having 5 years' experience working for Waldeck, I would hopefully like to have a higher role within the department.

This would come with more responsibility which I am willing to take to add benefit to the company.

In the face of a skills gap and lack of people choosing a career in STEM subjects, how would you inspire someone, to take a similar route into the workplace?

Apprenticeships are available in a wide range of subjects nowadays, especially in STEM subjects. STEM apprenticeships allow for people who have a key interest in the Science, Technology, Engineering and Maths departments to get into the world of work, as well as working towards a great qualification.

The career opportunities for these subjects are endless and you'll never get bored working in this industry, which is why I highly recommend any young person to take up this route.

