

BUSINESS REVIEW 2017

THERE'S MORE TO MURPHY



J . M U R P H Y & S O N S L I M I T E D
Improving life by delivering world-class infrastructure
W W W . M U R P H Y G R O U P . C O M

TABLE OF CONTENT

WELCOME TO MURPHY	1
MURPHY AT A GLANCE	2
WHAT WE DO	3
CHAIRMAN'S STATEMENT	7
CEO'S REVIEW	11
OUR TEN YEAR PLAN	14
OUR PEOPLE, CULTURE AND VALUES	17
TRAINING, DEVELOPMENT AND CULTURE	19
SAFETY AND SUSTAINABILITY	21
ENGINEERING INNOVATION	23

SECTORS

TRANSPORTATION	25
POWER	29
WATER	33
NATURAL RESOURCES	37
CONSTRUCTION & PROPERTY SERVICES	41

SPECIALIST BUSINESSES

MURPHY PLANT	45
GROUND ENGINEERING	49
HIGHWAYS & STREETWORKS	53
UTILITY CONNECTIONS	57
PIPELINE TESTING SERVICES (PTS)	61
SPECIALIST WELDING SERVICES (SWS)	63

INTERNATIONAL

IRELAND – MURPHY INTERNATIONAL LIMITED	65
CANADA – SURERUS MURPHY	69

CORPORATE UPDATE

FINANCIAL PERFORMANCE	71
GOVERNANCE AND RISK	74
RISK SUMMARY	75
AUDIT COMMITTEE	76
REMUNERATION COMMITTEE	76
RISK AND OPPORTUNITY COMMITTEE	77

CONTACT INFORMATION

OUR OFFICES	80
-------------	----



WELCOME TO MURPHY

What we do is essential to our everyday lives - infrastructure keeps our societies moving and growing. It often goes unnoticed, but the hard work and expertise it takes to deliver world-class infrastructure is vital in today's fast-paced world.

That's the difference we make at Murphy. Across our range of skills and capabilities, we strive to deliver the best results in the right way. All 3,500 of our colleagues live and breathe our values - whether they are working on connecting renewable generation to power grids or driving innovative techniques on wastewater projects. The breadth of what we do makes us the perfect partner.

In this review, we take a look back at how that breadth of expertise performed in 2017. It was a year in which we made great strides delivering high-impact projects. After all, there's more to Murphy than 60 years' expertise; more than self-delivering plant, people and equipment; and more than a united workforce working as 'One Murphy'.

There's more to Murphy...

MURPHY

WORLD-CLASS INFRASTRUCTURE

MURPHY AT A GLANCE

Murphy is a leading global, multi-disciplined engineering and construction company founded in 1951 that improves lives by delivering world-class infrastructure.

Operating in the United Kingdom, Ireland and Canada, Murphy provides a range of services to sectors including transportation, water, power, natural resources and construction & property.

Headquartered in London, the company also has a number of related businesses – Ground Engineering; Murphy Process Engineering; Utility Connections; Murphy Plant and Highways & Streetworks.

Murphy directly employs more than 3,500 engineers, professional managers and skilled operatives around the world. It has specialist expertise in delivering pipelines, process engineering, design, marine, structural steel, tunnelling, fabrication, bridges and piling, and it invests heavily in its substantial holding of plant, equipment and facilities.

CORE SECTORS

INTERNATIONAL

TRANSPORTATION

POWER

WATER

NATURAL RESOURCES

CONSTRUCTION
& PROPERTY

MURPHY PLANT

GROUND ENGINEERING

UTILITY CONNECTIONS

PIPELINE TESTING SERVICES

SPECIALIST WELDING SERVICES

HIGHWAYS & STREETWORKS

MURPHY PROCESS ENGINEERING



WHAT WE DO

Transportation

From building and maintaining new infrastructure to responding to emergencies, our range of vital transportation services helps keep our societies moving. We bring innovative solutions to complex problems in the rail, highways, aviation and port sectors. Working with the likes of Crossrail, HS2, Network Rail and Transport for London (TfL), our skills in project management, pre-construction and supply chain management help us deliver major programmes of work.

Power

Our team provides cost effective, innovative and integrated solutions that strengthen the electricity network, vital in keeping the lights on and the power flowing. From the design and build of substations to installing large cable management systems in deep tunnels, open copper grid sites and operational rail infrastructure, our expertise is integral in meeting the UK's energy needs.

Water

We provide world-class water and wastewater services, focusing on treatment plants, reservoirs, pumping stations, tunnelling, pipeline networks and the construction and renovation of water mains. We are also proud to offer fully integrated design, build, operate and maintain capabilities, as well as process engineering expertise, plant performance advice and in-house fabrication and testing services. Using innovative solutions, we support clients including Thames Water, Bristol Water, Sutton and East Surrey Water, United Utilities, Irish Water and Northern Ireland Water.

Natural Resources

We have a long history of providing innovative solutions to onshore and offshore oil, gas and energy infrastructure and assets. Embracing our 'One Murphy' and self-delivery approach, we offer comprehensive capabilities in consultancy, design, maintenance, modifications and new-build to decommissioning in the oil, gas and energy markets both within the UK and internationally.

Construction & Property

Our comprehensive services support ambitious new-build projects, complex conversions, and joint-venture developments and refurbishments. We work collaboratively with private developers, investors, landlords, local authorities and residential providers to deliver end-to-end services using our unique 'One Murphy' approach. Simply put, this means we provide the expertise, equipment and people to combat any construction and logistical challenge on even the most difficult sites.



Transportation



Power



Water



Natural Resources



Construction & Property



Ground Engineering



Pipeline Testing Services (PTS)



Murphy Plant



Highways & Streetworks



Utility Connections



Specialist Welding Services (SWS)



International

Our Canadian joint venture, Surerus Murphy, carries out large-diameter pipeline construction throughout Western Canada, focusing on major oil and gas projects in Alberta and British Columbia. In Ireland, Murphy International Limited offers expertise in civil engineering, structural steel fabrication, piling, construction, process engineering for water and wastewater on design-build and design-build-operate contracts.

Ground Engineering

Murphy's in-house specialist piling and ground engineering business delivers a range of piling and geotechnical techniques throughout the UK and Ireland. Offering in-house pile design, value engineering and bespoke technical solutions, our direct delivery specialist team ensures our clients receive a reliable and adaptable service.

Murphy Plant

With a fleet value of over £100m, Murphy Plant manages and maintains a substantial holding of plant and transport equipment. It has a vast inventory of over 15,000 assets including excavators, dumpers, cranes, compactors, piling rigs, tunnelling and pipeline equipment.

Highways & Streetworks

Murphy is a contractor of choice for hard landscaping, security and street infrastructure, particularly in central London. We work with multiple stakeholders and partners, in areas such as feasibility, construction and traffic management. Clients include Lendlease, Laing O'Rourke and Grosvenor Estates.

Utility Connections

Utility Connections offer a unique one-stop solution that connects gas, power, water and telecommunications for residential and commercial developments, and also alters and disconnects them. Our clients include Persimmon Homes, Redrow Homes, Barratt Homes and Taylor Wimpey, as well as industrial and commercial developers such as St. Modwen. We have also become an Independent Gas Transporter (IGT) and Independent Distribution Network Operator (IDNO), allowing us to own and operate electricity and gas networks.

Pipeline Testing Services (PTS)

PTS provides a specialist testing service to the oil, gas, water and process industry. We carry out all aspects of pipeline pigging, pressure testing, cleaning, chlorination, drying and joint management activities throughout the UK and Ireland.

Specialist Welding Services (SWS)

SWS provides support to the natural resource and marine sectors in the UK and Ireland, providing welding solutions incorporating inspection, welding engineering, non-destructive testing (NDT), testing certification and as a technical authority for Murphy.



DEPENDABLE PROJECT MANA
WIN-WIN RELATIONSHIPS

PASSIONATE ABOUT SH
BETTER ENGINEERED DIRECT

FIT TO START
ENGINEERED
DIRECT

STRATEGIC
DRIVERS

VALUES

NEVER HARM
WAYS DELIVER
AND RESPECT
LY IMPRO
TEAM - ONE

Alastair Kerr
Chairman

CHAIRMAN'S STATEMENT

There's more to Murphy

The second year of our ambitious growth plan saw no let-up in the pace of change, as we took positive strides to successfully develop the diverse expertise that exists at Murphy.

Our Ten Year Plan is in place to give us the scale and resilience to bring the best out of what Murphy has to offer. Our commitment to our values; recruiting and retaining our own people; and our operational excellence helped us make real progress in year two of that strategy.

Murphy is a well-run business that is taking steps to excel in everything it does. We have a crystal clear purpose and path to success, and having this focus gives us a platform on which to deliver and manage change. Coupled with the family ownership that fully supports the long-term nature of where we are going, we have a solid business model set for growth.

Family values

One of the biggest changes we announced in 2017 was a new Chief Executive. Building on our family legacy, it was with great pleasure that we welcomed our founder's grandson John Murphy into the role.

John has been part of the company since 2003 and has held pivotal leadership positions for a number of years. He has stepped into the role at the perfect time to lead Murphy forward, and I look forward to working with him for many years to come as we continue this exciting journey.

I would like to record my warmest thanks to Steve Hollingshead for his tenure as CEO;

for his thorough handover with John; and for all the work he did to set us on the path we now find ourselves. I am pleased he has chosen to stay within the Murphy family as an independent non-executive director and chairing our newly-formed risk and opportunity committee, and continuing to play his part in our strong approach to governance.

Governance

We continue to make steps in developing and improving our corporate governance and controls. We now have three independent directors leading three separate subcommittees, and we continue to adopt governance policies that are recognised as setting the benchmark amongst the top publicly listed companies.

To deliver the growth targets we are working so hard towards, it's vital we bring the right kind of projects into Murphy. By applying our revised key risk parameters, it makes sure we do exactly that, taking into account the right balance of risk and reward. Alongside that, we have introduced a more disciplined, rigorous and consistent process for project and business reviews.

We have also welcomed more senior leaders to deliver our plan and support this approach to corporate governance. Peter Anderson joined us in February as Managing Director for our southern business units, and has since become our Chief Operating Officer. The summer of 2017 also saw two senior leaders join Murphy in newly-created roles — Kevin Moriarty as our new Group Investment Director, and David Brewer as our new Group Strategy and Communications Director.

CHAIRMAN'S STATEMENT

Our people

Indeed, there have been many changes as our colleagues across Murphy have continued to deliver world-class infrastructure.

This report highlights some of the ways we continue to do that for our clients.

As well as our operational excellence, I am pleased that 2017 saw a step change in making Murphy a more attractive place to work and keeping the people we need. From our updated cultural development programme to an improved staff benefits package, the company is developing into an even better place where people are rightly rewarded for their efforts, and can enjoy long-term, fulfilling careers.

Our people are what make this company such a great place to work, and we are committed to making sure this continues through our self-delivery model. It's appropriate that as we take time to review 2017, I offer my sincere thanks and gratitude to all those who work so hard to deliver success across the company.

Challenges

While infrastructure investment in the UK remained relatively steady year on year for 2017, many companies suffered from the challenges of problem jobs or changing markets, while the uncertainty of Brexit still remained.

There is no doubt - in the UK in particular – there still exists a clear need for investment. Be that updating transport networks, making new renewable energy connections or the ongoing maintenance of existing utility grids, the infrastructure sector still needs to deliver and keep our

economy running. I believe the breadth of our offering at Murphy, coupled with the long-term support of our owners, gives us the resilience to overcome any cyclical sector challenges and grab the right opportunities as they arise. Globally, I also feel this trend will continue and given our previous experience in Australia and the ongoing success of our Surerus Murphy joint venture in Canada, we have a skillset and capability that can be exported around the world.

Working smarter

As we continue to do what we do best, our challenge will be doing that better and smarter. We are working hard to further develop our best-in-class project management function. These improvements will make sure we have a consistent approach to delivering even better projects while coping with market cycles.

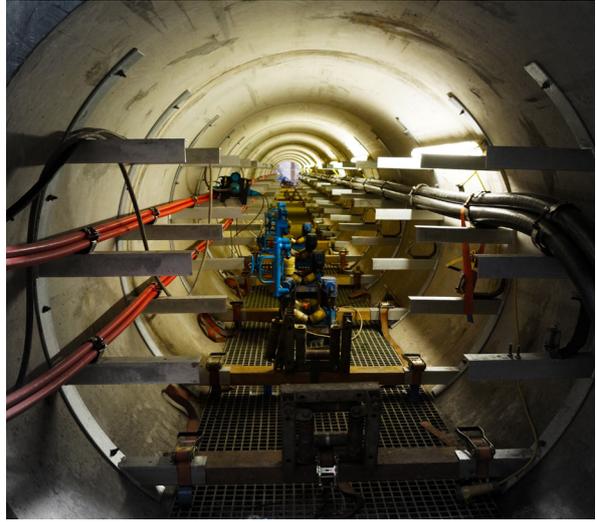
We must also embrace more innovative approaches to deliver world-class solutions for our clients, taking into account the needs of their customers. To help us do that, we need to attract and retain a more diverse range of people into Murphy and the sector. We are taking the right steps forward, but we need to do more to properly reflect the talent and skills out there in the communities where we work.

Above all, we need to make sure that we have the breadth of offering across the company that makes us resilient to the challenges we face.

There's a lot more to Murphy than most people know, and I'm looking forward to telling that story over and over again in the years to come.



Alastair Kerr
Chairman



“ I am immensely proud of what Murphy has become — a diverse infrastructure business based on enviable project delivery, authentic family values and a rich legacy that make Murphy the successful, dynamic company that it is today... ”



John Murphy
Chief Executive Officer

CEO'S REVIEW

There's more to Murphy

Taking over the reins was a proud moment in my career. Having been at Murphy since 2003, I was extremely honoured to be announced as the new CEO in October 2017. This gave me time for a thorough handover with Steve Hollingshead, and I'm extremely grateful for his support and all he did during his tenure as Murphy CEO.

2017 was the second year of our Ten Year Plan growth strategy. We continued to make significant investments in strengthening our broad functional and operational capability. This included improving the consistency of our operating processes through the launch of Murphy Integrated Management Systems (MIMS), as well as continued investment in our people, finance systems and our project leadership capabilities.

We delivered excellent projects to our clients and stakeholders throughout the year to high standards of safety and quality. We are constantly challenged either due to timescales, location or complex engineering but our teams rose to these challenges and overcame them.

Operational

We have started progressing and delivering important projects using the diverse capabilities and skills we have across Murphy.

Along with our joint venture partner, 2017 saw the first boots on the ground for HS2's enabling works. We completed a complex rail bridge job in Bolton's Skylink project that demonstrated our self-delivery business model in action by using skills from across Murphy as a whole. We also acquired an exciting new business – AECOM's design and build Ireland team joined us, adding significant process engineering expertise to our already successful water sector offering.

We continued to win new contracts. Our teams working in the power sector won notable successes in connecting renewable energy to the national power network. The Innogy-owned Triton Knoll wind farm, situated more than 30km off the coast of Lincolnshire, chose Murphy to install 60km of underground cable and carry out the largest number of horizontal directional drills ever on a single infrastructure project. We were also successful in securing similar cable work for Scottish Power Renewables to connect the East Anglia ONE offshore wind farm. In rail, we won a TfL Access for All contract in December. Furthermore, our work in the water and wastewater arena saw some notable success in Ireland as Irish Water chose Murphy to design, build and operate major treatment works, in a contract worth around €25m.

CEO'S REVIEW

Our people

Murphy is nothing without its people. As we continue to invest in the company, we have seen a raft of changes that bolster our current delivery programme and get us fit to deliver the growth we are aiming for.

We have welcomed new people to our senior executive team, bringing a wealth of skills and experience to deliver our Ten Year Plan. We also introduced changes to our operating and governance structure, to embed real clarity of responsibility in the business, and make sure our operational delivery has best in class functional support. We launched our strategic drivers – five key areas that give us a laser focus on our improvement areas.

2017 also saw us reach world-class levels of safety performance. On the back of a number of initiatives around reporting, we made a real step change in driving our core value of 'Never Harm'. While we can never take our eye off the ball and still have lessons to learn from last year, I'm proud to see commitment to safety well and truly embedded across Murphy. Our planning started last year to make sure we stay true to that, not least through our revitalised cultural development

programme but also through welcome recognition, such as picking up a RoSPA Gold award for the second year running.

Throughout 2017, the development of our engineering expertise really took root. From the Irish process engineering acquisition to setting up our 'Engineering Tomorrow Forum'; from our professional development programme to achieving BIM level 2; and from launching our new 'Innovation Foundation' to embedding engineering earlier in our work winning process; I feel we have taken huge strides forward.

To support all this, we backed it up with steps to make Murphy an even more attractive place to work. This included an industry-leading maternity policy as part of an improved staff benefits package; a new employee benefits portal; greater focus on innovation; and better performance reviews and professional development for our people.





Children from Liverpool attending the Constructionarium event at the CITB in Bircham Newton, Norfolk. Engineering Director, Alastair Smyth was on-hand to talk about engineering and the exciting career opportunities it offers.



Bright future

I'm proud of what the people of Murphy are achieving every single day, and optimistic about the future of the company. Having the backing of owners who support a long-term approach, coupled with our ongoing investment in hiring and retaining our own people, plant and assets, is the right business model that will result in a successful and sustainable business.

There's a lot more to Murphy than initially meets the eye, and I'm keen we continue to thrive – consistently delivering world-class infrastructure for our clients, and with Murphy people who enjoy long and rewarding careers with us.

A handwritten signature in green ink, which appears to read 'John Murphy', is positioned above the name and title of the Chief Executive Officer.

John Murphy
Chief Executive Officer

Our purpose is to deliver world-class infrastructure that keeps economies running. Our Ten Year Plan gives us the focus to do that, while developing the diverse range of expert capabilities Murphy has to offer.

By 2025, we are committed to operating a broad-based business model that delivers £2bn in revenue and a 10% profit margin.

We will deliver our revenue through a blend of operating income and investment returns from across our broad range of service offerings.

OUR STRATEGIC VISION

OUR STRATEGIC DRIVERS

We have introduced our strategic drivers to provide a clear focus for the coming years on where we need to improve.

Each driver has an executive lead, and covers a range of improvements in that area. All our strategic drivers have been put in place to address the challenges we face today and to set us apart from the crowd in the future.

DEPENDABLE PROJECT MANAGEMENT

Effective planning, execution and review of project delivery

WIN-WIN RELATIONSHIPS

Actively develop trusted relationships with our customers

PASSIONATE ABOUT DIRECT

Best use of all of our capabilities to stand out from the crowd

BETTER ENGINEERED

Smarter. Safer. Faster. And right first time.

FIT TO START

Nothing will start until we are properly ready

OUR VALUES

HOW WE WORK

Our values underpin everything we do — from our biggest project to our smallest office, everyone at Murphy works and behaves in line with our values.



ONE FAMILY - ONE TEAM - ONE MURPHY

Collaborative working gives our clients a seamless, integrated service



ALWAYS DELIVER

A 'can do' attitude delivers high quality projects on time and on budget



NEVER HARM

We look after people, their communities and the planet — no matter what



CONTINUALLY IMPROVE

Innovation is integral to our success



INTEGRITY AND RESPECT FOR ALL

Transparent, honest and professional — we act with integrity, embrace diversity and our stakeholders trust us

OUR TEN YEAR PLAN

OUR TEN YEAR PLAN

Operating in our chosen international markets



Broad delivery across infrastructure sectors



Deliver safely, reliably and sustainably with respect for the environment



Invest in sustainable long-term careers for our people



Work as One Murphy



Direct delivery of works to strengthen relationships with our clients



Reinforce our values to our people as an integrated, open and collaborative business



Increase our investment activities



Improve our profitability across a portfolio of products to at least 5% net PBT growing to

10% BY 2025

Generate sustainable revenue of

£2bn



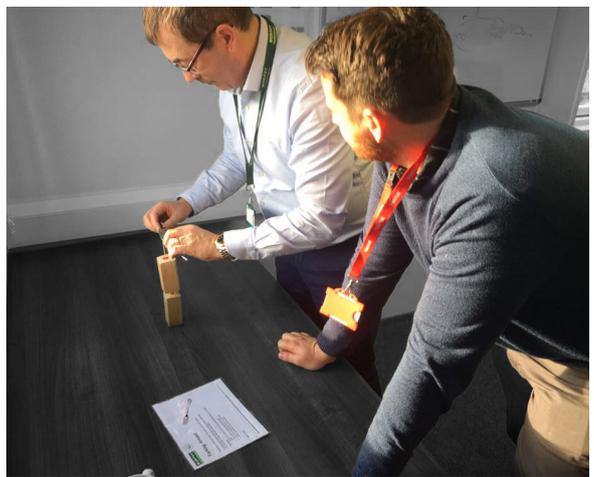


MURPHY
WORLD-CLASS INFRASTRUCTURE

OUR PEOPLE, CULTURE AND VALUES

We are proud of what we do, and the commitment we have to our values and the 'One Murphy' ethos that drives our inclusive culture. As we deliver world-class infrastructure for our clients, it's vital we continue to develop new ways of working safely and sustainably, and protect the communities where we work.





TRAINING, DEVELOPMENT AND CULTURE

Reaching beyond industry norms

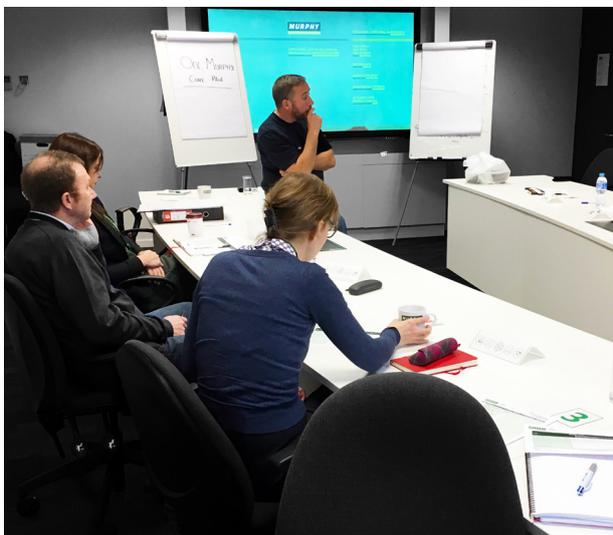
To continually improve as a business and reach the targets set out in our Ten Year Plan, we have to train, engage and develop brilliant people at every level of our business. In 2017, the People team took major steps in transforming the way we do this. Subsequently, we are building a platform that allows every Murphy employee to fulfil their potential.

The key changes

Huge strategic and process changes have given Murphy a new degree of focus in terms of training, developing and retaining skilled people.

Business partners were appointed to work alongside each of our business leadership teams, and a shared service centre set up to provide support and advice to all our people. New online tools were also introduced to streamline our processes.

Even more crucially, we started to develop a new people agenda, focused on acquiring, developing and retaining talent. These changes are already helping us on our journey to becoming an employer of choice.



New core values training has been developed



CDP (Cultural Development Programme) training helps sustain high levels of employee engagement

As part of an improved staff benefits package, we have introduced an industry-leading maternity policy to make Murphy an even more attractive place to work — something we are extremely proud of.

Alastair Kerr, Chairman



Brindle Chapel underbridge, near Preston

Cultural Development Programme (CDP)

We expanded our cultural development programme to cover each of our five core values, doubling the size of our in-house coaching team. Following 18 pilot events in 2017, the first three modules were ready for deployment in Q1 2018, with the final two to follow in Q3. The team continued to provide on-site coaching support in the UK, Ireland and Canada as well as to our joint ventures. Furthermore, new cultural induction events will run from June 2018 for new starters.

The CDP team visited **180** sites in total delivering key events such as our One Summer Safety Campaign. This particular campaign visited **29** sites and engaged **850** employees over the course of two weeks. The team had requests for **108** bespoke events and many more roadshows — proof of the increasing appeal of our CDP in action.

Key achievements

- We had a total of **58** apprentices working across nine different disciplines. Notably, we also hired our first Plant apprentices — and all **10** are performing well at their training course in York
- A continued focus on technical training and professional development saw an impressive **6,541** people complete training courses in 2017. Of these, **1,796** courses were mandatory core courses, including emergency first aid. Across the group, **394** different training courses were delivered
- In rail alone, **34** different courses were on offer, **185** were delivered and an impressive **992** delegates completed a course
- The Fairness, Inclusion and Respect Steering Group was established — made up of representatives from each business function. The team is looking at how we become an employer of choice in line with our Ten Year Plan. Key themes include the employment of people from an ethnic background, ex-offenders and ex-forces. The group is also committed to removing any equal pay gaps for each job grade by 2019
- The Murphy Pride Network was established, ready for launch in January 2018 — an innovative support network for LGBTQ+ employees
- Our graduate programme was completely redesigned for the 2018 intake — and more broadly, our employee communications have been refreshed, from strategic drivers through to roadshows and training packs
- Our surveys revealed a very positive employee engagement rate of around **85%**
- Staff benefits have been greatly enhanced following extensive consultation, and maternity leave has been improved



Our engineers train to use the latest advances in BIM visualisation and design



Murphy is using state-of-the-art VR technology as an interactive training tool



Operatives receive extensive training in site safety and first aid

SAFETY AND SUSTAINABILITY

Building a better business for everyone



One of Murphy's core values is to 'Never Harm' — and that applies to people, the environment, and the communities we work in.

This guiding principle places safety and sustainability at the heart of every project we deliver, and at every level of our business.

A safer business

In January 2017, we held a series of Safestart events with a particular focus on keeping people safe in the presence of plant. We challenged our employees to remain vigilant to the risks we face every day and captured commitments to make 2017 our safest year ever.

We have subsequently improved our investigation capabilities and post-incident review processes, which has enabled us to mobilise our teams more quickly. In turn, this has improved the speed with which we are able to report and analyse the causes of serious incidents.

Key safety highlights:

- Use of our new 2-1-2 reporting system increased by over **200%** — giving a clearer picture of SHESQ risks
- Average incident severity reduced by **20%**
- RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013) reportable accidents reduced by **68%**
- Number of accidents requiring medical treatment reduced by **19%**
- Lost time due to work-based accidents reduced by **85%**
- Awarded RoSPA Gold for the second year running at the Royal Society for the Prevention of Accidents Awards

As these numbers suggest, huge strides have been made in 2017.

2017 also saw the successful introduction of our innovative 'One Summer' events. Historically, the number and severity of safety incidents increase in the summer months. We decided to launch events that not only raised awareness of the increased risk, but also of the positive benefits of safe on-site practices.

Compared to the same period in 2016, accidents reduced by **42%**, and we were **100% RIDDOR-free**. One Summer was a key driver of these positive changes.

A more sustainable business

Our commitment to never harm extends to the environments we work in.

We are extremely aware that as a pioneer and major player in the construction and engineering industries, we are duty-bound to go above and beyond when it comes to sustainable practices and eco-innovation.

2016 saw some important steps in the right direction, as sustainability became a learning module for new employees for the first time. In 2017, this module became part of the standard company induction.

Elsewhere, having reduced carbon emissions by a third between 2010 and 2016, 2017 saw a variety of new environmental milestones.

Our environmental incident frequency rate (EIFR) is one third of what it was in 2010, now standing at 0.07.

2017 saw us make measurable improvements in reducing our carbon emissions, which are now 32% lower than in 2010. This is certified to ISO14064-1 through the Achilles Certified Emissions Management and Reduction Scheme (CEMARS), and keeps us on course to reach our 40% reduction target by 2020.

This excellent progress has continued to be driven by exploring every opportunity and taking advantage of new-generation vehicles and plant. For example, we estimate that since 2010 we have saved more than 21m litres of fuel, or 60,000 tonnes of CO₂ through improvements in plant and equipment.

In 2017, we used hybrid power pods (HPPs) at 31 of our sites. Working alongside conventional diesel power, the pods automatically switch from diesel to internal batteries at given times or according to certain power demands. This has resulted in a remarkable saving of nearly 270,000 litres of diesel in 2017 and over 725 tonnes of CO₂ emissions.

A more charitable business

Murphy supports a huge number of charities every year and 2017 was no different.

The business once again supported its two nominated charities, Macmillan and Great Ormond Street Hospital (GOSH), throughout the year and raised in excess of £60,000 for them.

In July, we held the first ever Murphy annual golf day at the Forest of Arden golf club. The event brought together Murphy employees, clients and suppliers to help raise money for Macmillan and GOSH. The day was a huge success and raised a fantastic total of £13,000.



Murphy staff clearing ground for charity



Environmentally friendly electric vehicle used by LMJV - the Laing O'Rourke and Murphy joint venture

ENGINEERING & INNOVATION

Better Engineered



Collaborating to engineer a better world

Since our inception, our founder John Murphy fostered a culture of engineering innovation. A trailblazer in the introduction of ready-mixed concrete batching plants to the UK, his pioneering spirit remains a fundamental part of Murphy's DNA.

Today that spirit continues, with a renewed focus on engineering and innovation – brought into greater focus by our strategic driver: 'Better Engineered'. Fundamentally, engineering and innovation are both about problem solving – and that, in a nutshell, is what Murphy does best.

Applied engineering makes us a better, smarter, safer business to work with, whether you're a partner, client or employee.

A landmark year for engineering

Several events in 2017 were pivotal in moving our engineering capabilities forward.

We launched our 'Engineering Tomorrow Forum' to drive our engineering strategy in line with Murphy's Ten Year Plan.

The forum is tasked with expanding applied engineering to meet big, real-world engineering challenges. Comprising innovators and industry leaders – including two past presidents of the Institution of Civil Engineers (ICE) – it puts innovation at the front and centre of the business.

2017 also saw a greater focus on developing the best and brightest engineering minds of the future.

We became accredited by the Institution of Mechanical Engineers to deliver an in-house development scheme for engineering graduates. This sits alongside our accredited ICE program and pending accreditations for the IET and IEI. Murphy currently has 170 engineers and technicians undergoing professional training so we can develop the capability to deal with increasingly challenging and complex projects.

We have invested significantly in our technical capabilities in order to drive a competitive advantage for our clients with expertise across all of our sectors and disciplines. We also launched Murphy Applied Engineering, an in-house design consultancy that supports our internal and external clients in producing pragmatic and practical engineering solutions.

Meanwhile, the engineering innovations that are the fabric of almost every Murphy project up and down the country continued apace. Indeed, the Carter's Bridge project in Wigan for Network Rail won the Medium Civil Engineering Project of the Year at the ICE North West Awards.



2017 WICE awards finalist, Junley Chan joined Murphy as a graduate engineer in 2011. Currently a Senior Engineer, Junley is studying for ICE Chartered status.

Innovation moves into the heart of the business

In 2017, it was recognised that despite innovating for over 60 years, our breakthroughs have often occurred spontaneously and informally.

While we wanted this culture of new ideas to continue, we also wanted to improve the ways in which we monitor, promote, encourage and share them throughout the business. Our 'One Murphy' value is all about collaboration throughout the company.

Huge steps have been taken, including:

- The creation of the Innovation Foundation – which assesses the viability of new ideas, provides funding, and drives our innovation strategy
- The election of 60 innovation champions throughout the business – making innovation a tangible responsibility in every team
- Our first major new innovation project progressing, with funding approved by the Engineering Tomorrow Forum
- Hiring an innovation co-ordinator to help innovators throughout the business collaborate
- Doubling our R&D claims capability – a reflection of innovation moving into the heart of our business

To remain competitive in the infrastructure sector, innovative solutions are essential. We are now bringing together our own engineers and innovators as well as supply chain experts, academics and SMEs. They include the 60 innovation champions enlisted from across Murphy by the end of 2017. From multiple disciplines, they not only share knowledge, ideas and best practice but, importantly, inspire others around them.

Owing to our renewed drive to deliver and appreciate our innovative capability, we have since been shortlisted for two innovation awards. Ultimately, our efforts ensure our innovations benefit every one of our projects, as well as the wider world beyond them.



London Power Tunnels project



A Murphy engineer surveying in Kirkham



UKPN substation, Islington



Cable Tunnel project

TRANSPORTATION

Keeping the UK moving

From major infrastructure projects to responding to emergencies, our range of vital transportation services help to keep the UK and Ireland moving.

We work across rail, highways, aviation and ports to bring innovative solutions to complex problems. Working with the likes of Crossrail, HS2, Network Rail and Transport for London, our skills in project management, pre-construction and supply chain management help us deliver major programmes. In addition, our 'One Murphy' approach – our ability to provide a truly end-to-end service – is helping us become a market leader.

Our main strategic aim in 2017 was to expand our offering across all aspects of transportation. Building on our well-established rail business, we are now expanding our capabilities into the highways, ports and aviation markets.

Ultimately, we aim to become an end-to-end service provider to the transportation sector – an expansion that matches the ambitious goals of the Ten Year Plan.

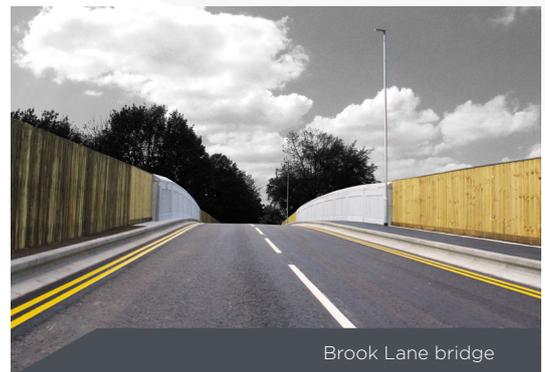




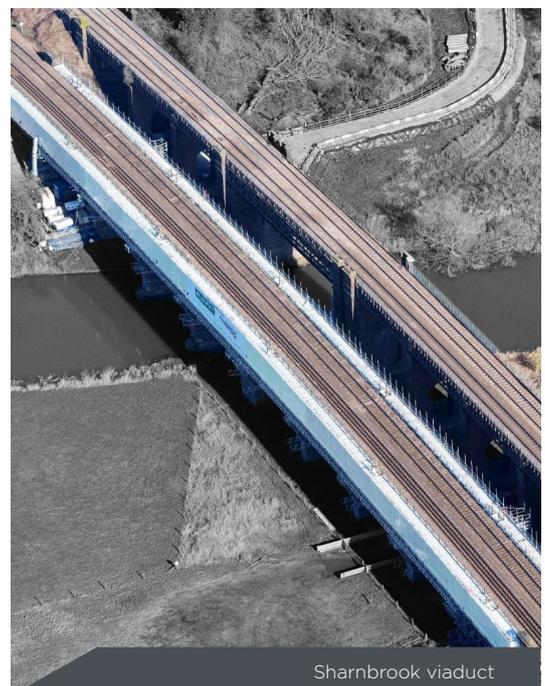
Mauldeth Road, Manchester

Transportation highlights:

- CP5 Frameworks (central region): Framework agreement extended with Network Rail for a further two years
- Building and Civils Frameworks: A large portion of this national framework has been awarded by Network Rail
- HS2 enabling works package: Awarded a joint venture contract in association with Laing O'Rourke worth approximately £300 million
- East of Leeds Transpennine Route Upgrade: Positive progress on this £1.2 billion project with our joint venture partners
- Gospel Oak to Barking Overground upgrade: Project completed, with a value of £56 million
- StART accreditation for highways: Murphy is progressing StART accreditations to expand our transportation portfolio to include Highways England works
- Dozens of other Network Rail projects completed: Including vital emergency repairs to the West Coast mainline, refurbishment of Aylesbury Station, and the construction of the iconic Bolton Skylink footbridge



Brook Lane bridge



Sharnbrook viaduct

Contract wins and completions

2017 saw a number of significant contract wins and completions, all reflective of our growing reputation as a tier 1 supplier.

Network Rail extended our Control Period Five Frameworks within the central region for a minimum of two more years, based on our continued high performance and excellent safety record. We were also awarded a significant portion of Network Rail's Building and Civils Frameworks, giving us a great opportunity to remain their go-to contractor of choice for years to come.

In a joint venture with Laing O'Rourke we were awarded a contract to deliver one of the major HS2 enabling works packages. The team has seen the first boots on the ground with the commencement of this flagship project, which has an approximate value to the business of £300 million.

Murphy's role in the alliance that won the East of Leeds section of the Transpennine Route Upgrade contract has grown in stature. By identifying and designing innovative solutions, we have helped to push proposals addressing the significant challenges presented on this £1.2 billion project.

Meanwhile, in terms of project completions, the complex upgrade of the Gospel Oak to Barking Overground line in London was finished. This £56m project brought significant innovation to Network Rail, with Murphy identifying solutions to mitigate road closure and congestion in this central London location.



Brindle Chapel bridge

North West Electrification Project — Phase Three

We were awarded the £27m civils package on Phase Three of Network Rail's North West Electrification project in January 2017. Work included:

- Installation of 1,094 foundations
- Demolition and reconstruction of six platforms at Blackpool North Station
- Installation of electrification infrastructure at Layton and Salwick stations
- Reconstruction of Kirkham & Wesham Station — including construction of the new platform three, reconstruction of platforms one and two, and installation of a new Access for All footbridge and lifts
- Installation of road rail access points and site compounds to allow access along the 17 mile route

Although engaged under a build-only contract, we worked with the principal contractor and design team to find innovative solutions. We utilised new technologies and engaged with the supply chain to identify new material types to ensure the challenging project demands were successfully met.

Murphy is helping to deliver the Great North Rail Project, which is a multi-billion-pound rail industry team effort to transform train travel for customers across the north.

Despite a challenging programme, Murphy achieved all our client's key milestones. We did this by taking advantage of the flexibility of our own directly employed teams and working 24/7 to deliver the project on time and under budget. The culmination of our work means that more reliable electric trains are now able to run between Preston and Blackpool North.



POWER

Leading the charge
for renewable energy

Murphy's work in the power sector has helped position the company as a trusted leader in power generation, transmission and distribution solutions that enhance networks and ensure reliability.

As well as our comprehensive direct delivery capability — which is enhanced by in-house design and engineering expertise — we have developed long-term strategic partnerships with leading technology providers to deliver next generation solutions. Those solutions are aimed at tackling a clear challenge: lowering emissions and becoming more energy efficient.

**Continual improvement:
innovation the key on various power projects**

In the UK, 2017 saw nearly £12bn invested in the energy sector.

Ongoing investment in the sector has enabled the UK to generate electricity using more efficient power plants, low carbon technologies, and diverse solutions like new interconnectors with Europe, which in turn will help to reduce costs and increase network security and resilience.

Murphy's focus on innovation helps us remain at the forefront of this change. Our clients work with us because they recognise the depth and end-to-end experience of our staff, our responsiveness to challenging tasks and our ability to always deliver a quality product.





Hornsea One offshore wind farm project

Power highlights:

- Ongoing cabling and power generation support for world-renowned Hornsea One, the first offshore wind farm in the world to exceed 1GW capacity
- Awarded the prestigious East Anglia ONE onshore civils package
- Nemo Link project – over 1 million man hours of zero harm recorded on this prestigious project of European common interest
- Continued support for Northern Powergrid keeping the lights on for 8 million people across the North East, Yorkshire and northern Lincolnshire
- Construction of multiple new-build substations for UK Power Networks in the complex and challenging footprint of the UK capital, London



UKPN substation in Islington

Positioned for future growth

As 2017 drew to a close, Murphy was actively engaged in the acquisition of Carillion's UK power business.

Apart from enhancing our existing delivery capability, one of the principle objectives was to secure a key position on the National Grid framework contracts. Specifically, these contracts cover installation of overhead lines, underground cables and substations. This in turn provides the opportunity to deliver planned replacement and refurbishment schemes on National Grid's transmission network across England and Wales for the remaining T1 regulatory period and beyond.

In 2017, Murphy supported the development of Hornsea Project One, working with Ørsted (formerly Dong Energy) to deliver the onshore cable installation package for what is set to be the world's largest offshore wind farm.

Located off the Yorkshire coast, it will be capable of powering well over 1 million UK homes. Spanning 407km², with 174 wind turbines, it will be the first offshore wind farm in the world to exceed one gigawatt in capacity. Murphy are laying over 350,000m of onshore cable along a 38km route, comprising 220kV and 400kV cables, across three circuits.

Simultaneously, increasing prowess in this area saw Murphy awarded the East Anglia ONE Onshore Cable Civils contract from Scottish Power Renewables.

East Anglia ONE offshore wind farm covers an area of around 300km². It includes a single offshore substation inside the wind farm and two AC circuits connecting to an onshore substation at Bramford, adjacent to the existing National Grid substation.

The Murphy team mobilised in early October 2017 and are completing the cable civil construction work with trench excavation, duct installation, reinstatement, proving of joint bay locations and connections to HDDs across the 37km onshore route into 2018.

Maintaining traditional contracts and building connections with Europe

Elsewhere, our traditional business goes from strength to strength.

The team has provided support to our customer base which ranges from reactionary fault services for Northern Powergrid, to completing a series of full turnkey new-build substations for UK Power Networks – including Greenwich Peninsula and Islington Grid under an EPC arrangement.

Works were ongoing at an onshore substation for Vattenfall's Aberdeen Offshore Wind Farm, which has an installed capacity of 93.2MW. This produces enough electricity every year to meet the annual demand of almost 80,000 homes which is more than the equivalent of 70% of Aberdeen's domestic electricity demand and 23% of Aberdeen's total demand.

Working in partnership with Siemens, Murphy reached substantial completion of the 1,000MW Nemo Link Interconnector converter station in the South East of the UK. The converter station is located on an eight hectare site, formerly occupied by the Richborough Power Station, and will form part of the Richborough Energy Park. The system will ultimately transfer power between the UK and Belgium. This interconnecting of power with Europe is an important step for energy efficiency, and another milestone in the team's quest to innovate.

2017 saw the successful completion of a particularly challenging and significant substation project in East London. The Limmo Peninsula contract, required to support the Crossrail project, challenged the team to find a number of bespoke solutions to unique problems.

Limmo Peninsula substation for UK Power Networks

The Limmo site is located in the Canning Town area of London.

Limmo was Crossrail's primary work site for the eastbound tunnel boring machines. It's an area of huge regeneration, and Murphy was asked to complete the design, supply and construction of a 24MVA, 132/22kv substation to provide non-traction power for Crossrail.

In addition to building the substation, Murphy was asked to complete the installation of the primary point of connection. The newly constructed substation connects to Brunswick Wharf B 132kv substation via a double circuit 132kv 300mm XLPE cable system, which itself was installed by our directly employed EHV installation team.

Murphy also supported the delivery and installation of the two required 132kv transformers. They had a combined height equal to a double decker bus, so were painstakingly moved through the streets of London with specialist low loader articulated vehicles. Weighing around 50 tonnes each, the transformers will help to power the new Elizabeth line that connects east and west London by 'transforming' high voltage electricity from the substation to safely power electronic systems, ventilation and lighting.



The Murphy team has been a pleasure to work with and consistently pushed the envelope of engineering principles by applying innovative practice.

Nicholas Ralph, project manager for UK Power Networks

WATER

Enhancing our capabilities
and strengthening our reputation

Murphy is a well-established provider of water and wastewater engineering and construction services throughout the UK and Ireland, with major clients including Thames Water, Irish Water, Northern Ireland Water and United Utilities.

Our specialities include treatment plants, reservoirs, pumping stations, tunnelling, pipelines and the construction and renovation of water mains.

We're increasingly renowned for offering end-to-end services that align with the wider 'One Murphy' values of the group. That's largely due to our in-house capabilities, our laboratory services, and the recent integration of the Murphy Process Engineering (MPE) business. More broadly, these abilities are not only strengthening our reputation in the market, but ensure the Water team's ambition matches that of the group's Ten Year Plan.

2017's strategic aims

The key strategic goal for 2017 was to acquire and integrate the MPE business, giving us a platform for design and process engineering expansion. This enabled the introduction of plant operation and maintenance to the sector – all of which strengthen our value proposition. MPE integration also ensures we keep pace with the changing needs of AMP6 – and assists our preparation for AMP7 in 2020.

The successful integration of the MPE business was 2017's most significant aim – but it underpinned many others too. We were keen to rebuild our capability in the north of the UK by targeting key opportunities such as Yorkshire Water's Huddersfield Energy Recovery Facility. Equally, we are keen to secure a stronger relationship with Thames Water and strengthen our position in the south.

Louth Scheme

Bristol Sewer

€25m

£45m

200 weeks
of free
STEM
training

for young
adults ✓



Murphy carries out laboratory testing for water quality

Water highlights:

- Re-branded AECOM's Design Build business in Ireland after acquisition in February as Murphy Process Engineering – driving Murphy Water's end-to-end project capabilities
- Continued to operate 27 water / wastewater treatment plants and 19 pumping stations
- Secured the Louth Water Supply Scheme project, worth €25m
- Selected as preferred bidder for Wessex Water's North Bristol Relief Sewer, worth £45m
- Worked with Thames Water and our alliance partners to strengthen the Infrastructure Alliance
- Developed the Works Performance Initiative – real-time wastewater reporting, improving our value proposition
- Successfully implemented STEM training through Deephams contract in Enfield, London



Staff delivered STEM training for local people



Exterior - Leixlip waste water treatment works, Ireland

Creating fluidity and new business through the MPE integration

The Murphy Process Engineering (MPE) business was fully acquired and integrated in February 2017 — a huge landmark for the business. It followed the acquisition of AECOM in Ireland, which brought a range of new design, build and operational skills to the team and it led to almost immediate successes.

Within weeks, we secured the lucrative Louth Water Supply Scheme project — worth approximately €25m to the business — which was the first of many key contract wins and developments throughout the year. We also negotiated the Dungannon Nereda project for Northern Ireland Water, which is due to start in 2018.

We were selected as the preferred bidder for Wessex Water's North Bristol Relief Sewer, a project valued at £45m.

We continue to pursue opportunities with South East Water as their reserve delivery partner.

Meanwhile, we pre-qualified, in partnership with Arcadis, for Severn Trent Water's Integrated Design and Build framework, which included a range of infrastructural and non-infrastructural work. We are also currently tendering for Yorkshire Water's Huddersfield Energy Replacement Facility.

Equally importantly, we have continued to work closely with Thames Water and our Infrastructure Alliance partners, to improve operational and delivery performance. The significant efforts of the whole team has strengthened the integration and continues to provide a solid platform for the future.

Improved wastewater intelligence and skills training in Enfield

2017 was a big year for innovation in the water sector, both in terms of operations and community engagement.

We continued development of our Works Performance Initiative (WPI) which will offer intelligent, real-time data on all our active wastewater sites. This will enable a number of vital benefits to the business, and our clients.

Our WPI will give us a better understanding of our client's operating assets, and demonstrate how we can improve their performance over time. It also improves plant efficiency through real-time reporting, and assists our clients in making informed decisions on future investments. Additionally, it integrates intelligently with other sectors and achieves significant operational cost savings. Ultimately, all these benefits strengthen our offering and enhance our ability to win new business.

We have also been going above and beyond in terms of creating new employment and skills training opportunities — most notably on the Deephams Sewage Treatment Works project in Enfield, London.

Rachel Groves, our customer care manager, successfully carried out 200 weeks of free training to young adults in the local community. This involved a number of events, career fairs, and a variety of STEM-related (science, technology, engineering and mathematics) learning opportunities.

The requirements were delivered 13 months ahead of target, and two students subsequently took up careers in the industry — one of whom is employed by Murphy. Needless to say, it's been a great success.

Thames Water Infrastructure Alliance

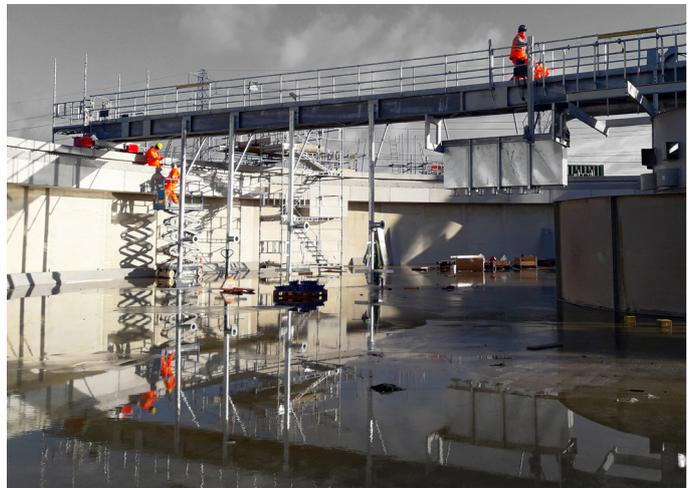
Building and strengthening our relationship with Thames Water was a key aim for 2017 – and our progress has been heavily influenced by the great ongoing work within the Infrastructure Alliance contract.

In our joint venture with Morrison Utility Services (known as Agility), Murphy is providing planned, essential and reactive network services worth a total of over £1bn over the AMP6 investment period.

During the course of 2017, in conjunction with Thames Water and the other contracting businesses supporting the Alliance, we have reinforced the entire management team and enhanced the level and competency of the operational teams. We have also refined our systems and processes to enable sustainable and effective delivery of maintenance and repair services, developer services, small capital works and much more.

An integrated monitoring, assurance and compliance team ensures quality across the board and as a team we remain focused on striving to outperform targets. As Murphy, we continue to enhance our own team's productivity and effectiveness in the relentless drive to meet demanding leakage targets and ensure customer satisfaction.

The Infrastructure Alliance is pivotal to future opportunities in this vital region and we are rising to its challenges.



NATURAL RESOURCES

A legacy of excellence and a bright future

We have a long, proud history of working in the natural resources sector, providing onshore and offshore oil, gas and energy infrastructure services throughout the UK, Ireland and internationally.

Embracing our 'One Murphy' approach – which describes our ability to provide end-to-end services on every type and size of project – we offer consultancy, design, maintenance, modifications, new build and decommissioning services.

Developing an engineer-led approach

2017 has been a very successful year for our natural resources sector, and that success has been driven by a shift in strategy.

We decided to take a more engineer-led approach to construction, utilising our in-house engineering expertise. One of our greatest assets is breadth of capability on demand, and so we felt it pertinent to promote it more effectively – which has paid dividends.

A number of key contracts were awarded to us by National Grid gas NTS, gas distribution networks & private clients, which were directly linked to our new approach. Furthermore, we are now gaining a reputation for innovative solutions to complex engineering challenges.

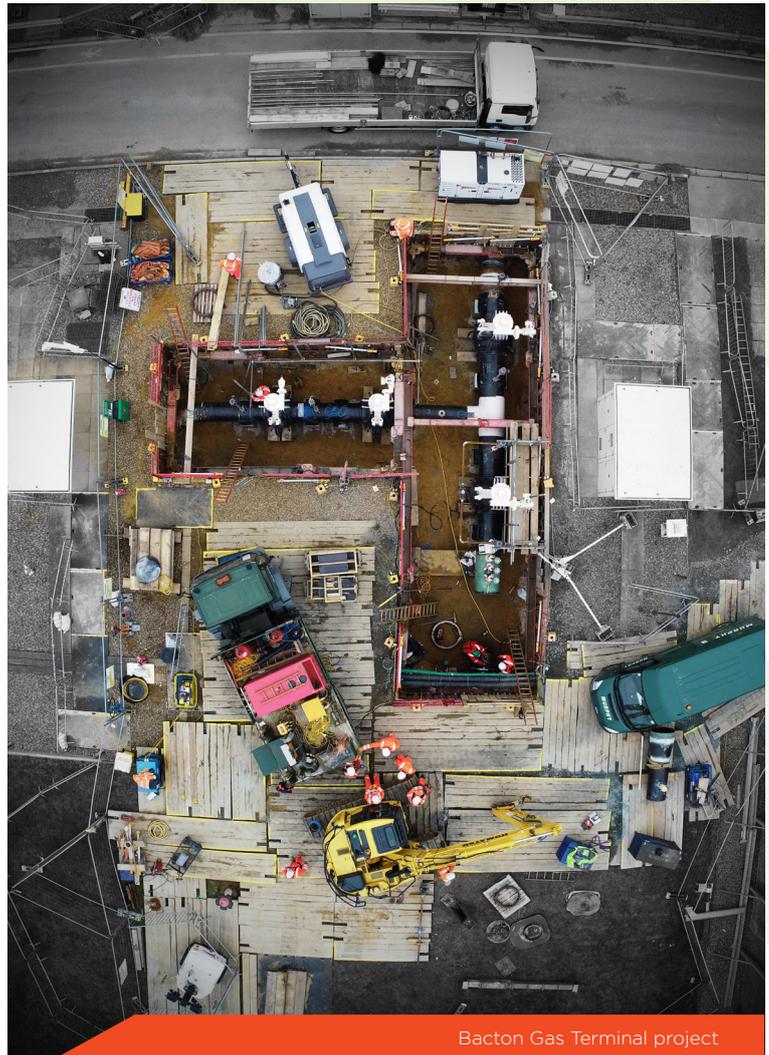




Operatives lower a section of pipe into position at Bacton

Natural Resources highlights:

- Bacton Gas Terminal contract secured with National Grid, worth £30 million
- Nationwide Valve & Civils project won with National Grid
- Two projects at Barrow Gas Terminals completed for Spirit Energy
- Installation of three cables at Ardnail Bay in Troon for Prysmian completed in January – a particularly challenging project
- Great advances in BIM and 3D scanning of National Grid assets
- In-house offsite fabrication facility developed



Bacton Gas Terminal project

'One Murphy' in action

The project wins and completions in 2017 were a great illustration of how our 'One Murphy', engineering-led approach is moving the business forward in a variety of ways.

At the Barrow Gas Terminals in Barrow-in-Furness, Cumbria, two projects for Spirit Energy demonstrated our ability to innovate.

A condensate tank roof replacement was completed in September. The bulk of the work was carried out offsite, utilising our prefabrication expertise. The project involved many other innovations, including the release of the original roof by ultra high pressure water cutting.

September also saw completion of an amine tank replacement. It presented a variety of complex challenges for our team. The original tank was faulty but had to be kept in operation, and that meant the new tank had to be built elsewhere. As a result, an exact replica of its concrete base was required. A bespoke transportation frame was designed by the Applied Engineering team to move the new tank in one piece.

This project once again demonstrated the strengths of our in-house engineering prowess.

Strengthening ties with National Grid

Our engineering-led approach has strengthened our relationship with National Grid. In 2017 this was perfectly exemplified by the award of the Bacton Gas Terminal project.

The £30 million campaign is scheduled to run until 2020 and involves a range of services. We will replace 30 full bore large diameter valves, replace all bolts, and carry out ancillary civil work and on-site design.

We are becoming the preferred contractor for National Grid when it comes to large mechanical replacement work, and this proved itself again with the ongoing Valve & Civils contract. In 2017 we worked across 12 different gas sites, and in 2018 we are scheduled to carry out work on a further nine.

The project is a complete end-to-end design and build campaign. From Bishop Auckland to Devon, we have been surveying, designing and fabricating up and down the country.



Barrow-in-Furness Gas Terminal project

Valve & Civils – National Grid

Securing the ongoing Valve & Civils contract for National Grid has been a real coup for Murphy.

This complete design and build project takes us all across the UK, replacing and repairing assets on the National Grid's gas transmission system. Previous valve replacement work with National Grid was key to the win, showcasing specialist expertise such as our applied engineering and in-house welding teams.

The campaign, which aims to identify and upgrade assets across gas infrastructure, involves a huge array of services including:

- Initial surveys
- Conceptual designs alongside Premtech Ltd
- Complex safety process design and implementation
- Fabrication of valves and fittings
- Hydrostatic off-site testing
- Site mobilisation
- Demolition
- Fitting of new equipment
- Commissioning
- Site clearance

In 2017, work continued across 12 different sites, and in 2018 we are scheduled to operate on nine. We are now also developing conceptual designs for work to be carried out in 2019.

Working closely with National Grid staff and partners, we are further cementing this valuable relationship.

The Valve & Civils contract is the perfect manifestation of 'One Murphy' in action, utilising all of our expertise across all parts of the business. Working as one, our strength is self-evident – and the 'One Murphy' approach is clearly where our future lies.



CONSTRUCTION & PROPERTY

Putting 'One Murphy' into action

The Construction & Property team supports residential and commercial new-build projects, conversions and refurbishments, joint-venture developments and modular construction. We work in the public and private sectors, delivering ambitious projects for local authorities, residential providers, investors and developers.

2017 has been a year of change. We have progressed from being a specialist business to one of Murphy's core sectors. It is a strategic move that is perfectly aligned with the goals and strengths of the wider group. Better still, it is a direction that supports our Ten Year Plan objectives.

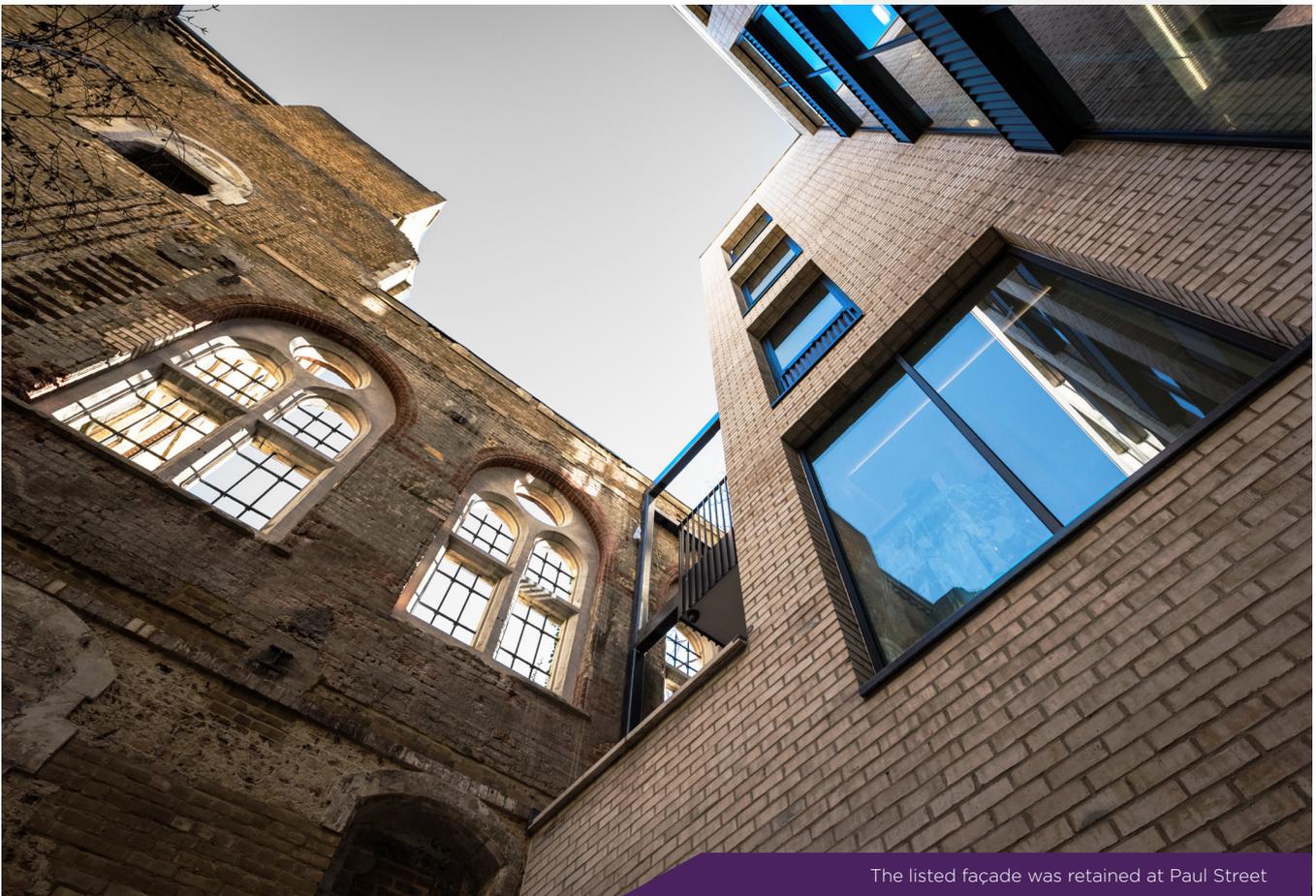
From specialist business to core sector

A fundamental aim for 2017 was to become a more established business in the construction and property sector.

We also wanted to direct more focus on particular markets – namely, new-build residential-led developments, rooftop developments, modular construction, conversion and refurbishments and our 'One Murphy' projects. This is where we bring in our specialist engineers from around the business to make the most difficult projects or sites viable, managing risk through our directly employed operatives and specialist businesses.

2017 was all about playing to our strengths. Whether using our plant to overcome logistical headaches, our licences to install utilities independently, or our in-house engineers to handle one-off challenges, we make difficult sites workable whether for our own developments or our increasing number of external clients.

By pursuing this approach, we've brought the construction sector into the heart of the wider business, and the 'One Murphy' value to life. As the Ten Year Plan progresses, the platform we're building will keep us in line with its aims.



The listed façade was retained at Paul Street

Construction & Property highlights:

- Appointed as Murphy's fifth core sector
- Completion of c£15m mixed-use development at Paul Street
- Commenced phase one of a c£9m residential development at Warriner Gardens, Battersea
- Commenced hugely complex King's Cross Bridge project, valued at c£9m
- Reported two years RIDDOR-free
- Sale of phase one properties began at our Dalston Lane Terrace development in Hackney
- Balfe Street reached topping out
- Secured a place on the Homes England DPP3 Construction & Development Framework



Warriner Gardens, Battersea Park, London

Building a reputation for overcoming challenging sites

In 2017, we commenced and completed some hugely challenging projects.

The £15m mixed-use commercial and residential development at Paul Street was completed towards the end of the year. Significant challenges, including avoiding damage to adjacent listed buildings and ensuring safety in a high footfall area, were overcome. This resulted in the project being delivered ahead of schedule.

Elsewhere, we began phase one of a residential development in Warriner Gardens, which involved the demolition of former industrial buildings. These nine Victorian-style terraces sit in a densely populated area, with the construction occupying 100% of the site's footprint. By using our logistics know-how, we successfully implemented CLOCS and FORS systems to ensure the safe and efficient functioning of the site. The £9m project will be completed in 2018, and our in-house engineers and project team continue to make this challenging build possible.

We also began an even more challenging project at King's Cross Bridge, again worth £9m. Following the complex demolition (which has been completed), we will construct a commercial building above the existing London Underground disused platform and basement. With the site also sitting above two rail tunnels (one is a London Underground line, the other a Network Rail line), and on one of the busiest cross-sections in London, this project will truly prove our capabilities.

We have employed a host of engineering innovations — including adapting cranes to attach to the existing structure, complex cantilevering and installing

anti-vibration bearing springs. Our newly acquired gas and electricity licences have allowed us to take control of utility implementation, which has been pivotal to the smooth running of the project. However, perhaps the biggest challenge has been the range of permits required — with many approvals processes being unprecedented, given the unusual nature of the project.

The work at King's Cross Bridge continues, and there's no greater testament to the growing reputation of the Construction & Property team.

Industry leaders for safety and culture

We are very proud to have now achieved two full years of being RIDDOR-free (reporting of injuries, diseases and dangerous occurrences regulations). This is a huge achievement, and a reflection of the strong reputation for health and safety we have — as proven by our RoSPA Gold award.

We commit not only to employing local workers on every project, but ensuring they can build a lasting career with us through initiatives like the Murphy Academy and the Murphy Graduate Programme. As a result we have seen a large increase this year in graduate and apprentice numbers.

Meanwhile, the group's Cultural Development Programme is being actively promoted within the construction team to great effect. Volunteer days at the regenerated Ingestre Woods near our head office in Kentish Town have proved hugely popular. Recently, the team's involvement in a DIY SOS project for a policeman disabled by the attack on Westminster Bridge was screened on the BBC.

The Paul Street development in Old Street, London, comprises a mix of flats, offices, retail units and cultural space.

The development replaced a derelict petrol forecourt, car showroom and offices, but the demolition phase was complicated by the Grade II listed party wall; a challenge overcome through careful underpinning and temporary supports.

Other major challenges concerned the proximity of residential and commercial neighbours, and the high footfall of the area. In terms of noise, hydraulic pulverisers and crunchers were used, an innovation that was covered in Construction News. To help support the local community we recruited local labour, assigned apprentices to work on site and held community events. This included a 'Changing Places' road safety event attended by both drivers and cyclists alike – it was organised to combat risk on the cycle superhighway that runs past the development. We even invited local artists to decorate the hoardings that surrounded the site.

The development helps address housing shortages in the area, and was completed ahead of schedule.

Key Facts:

- 5,500sqm of retail space and 2,100sqm of commercial space
- Nine flats over four floors
- Design and artwork reflects original architecture
- Nominated for a CCS award due to apprenticeship programme, local labour and community Changing Places initiative
- Innovative hydraulic pulverisers used to minimise disruption
- Party wall retained through temporary supports and underpinning



MURPHY PLANT

A year of improved efficiency and pivotal innovation

The Murphy Plant team manages and maintains more than £100m worth of plant, transport and equipment for Murphy.

We have a fleet of more than 15,000 assets, which includes standard equipment such as excavators and dumpers, as well as one of the UK's largest crawler crane fleets. In addition, we provide specialist plant for rail, piling, pipeline, tunnelling and marine projects.

Along with a fleet of thousands of vehicles, our Plant division offers comprehensive in-house support across the entire group.

Continued growth and streamlined processes

In 2017, we generated £78.6m of revenue – a significant increase on the £52.8m generated in 2016. Meanwhile, we delivered equipment to 33,199 individual contracts on 681 different projects, and during 2017 we invested nearly £20m in capital expenditure, with plans to increase the level of investment further in 2018.

Underpinning this growth was our wider strategy: to lay the foundations of an efficient service business by aligning people, systems and processes. An excellent example of our strategy having been fulfilled is the Syrinx Project.

Syrinx is a third-party IT system that has fuelled a more informed and agile approach to plant and transport hire. Among its many benefits, it gives the team visibility in real-time of everything on hire from a centralised, intuitive portal. This improved technology was successfully introduced in 2017, and is already proving its worth.





Murphy owns and operates an extensive fleet of vehicles

MURPHY

PLANT

value of plant

£100 million

33,199 contracts

681 projects

£78 million revenue



15,000+ assets



Total Site Solutions



Apprentices, improved safety and the world's largest offshore wind farm

It was a breakthrough year for the Plant team in many ways with a number of notable highlights:

- **Syrinx implementation:**
Our new IT system has added efficiency and flexibility to plant and transport hire processes
- **Hornsea Project One:**
The team overcame huge challenges and introduced a range of innovations to install cabling for the world's largest offshore wind farm
- **HavWear Project:**
HavWear is a wrist worn device that advises workers of tool vibration risk. We made HavWear available on all Murphy projects
- **Apprentice Programme:**
Our first ever apprentice programme was initiated in the Plant division and delivered in conjunction with Askham College in York. We employed 10 apprentices
- **Procurement Frameworks:**
We launched phase one of our supply chain forum which consolidates suppliers across the business, offering better value for money
- **Reimplementation of the LeasePlan agreement:** This agreement and other strategies are helping us move towards more hybrid and low-emission vehicles over the next four years
- **Safety initiatives:** We launched the People and Plant Interface Forum securing the safety of everyone across the group working with plant, while the Driver Risk Forum was re-launched to reduce driving risks across the group
- **The Safety & Survey Business:** We brought the business back into the Plant team, having previously been managed externally. The business stores, maintains, tests and calibrates the safety and survey fleet from our Ollerton base

Hornsea Project One

Hornsea Project One will be the UK's largest offshore wind farm, powering 1 million homes with green energy, and spanning 407 sq km.

Murphy was awarded the cable installation contract for Hornsea One, and the Plant team has been instrumental in making the complex project possible. The cable route passes through farmland, roads, rail crossings, canals, river crossings, ditches and, in some cases, roads which are problematically narrow.

This necessitated the Plant team's development of bespoke trailers to carry 30 tonne drums on site – just one of many innovations that have made a significant impact.

Other cable innovations implemented:

- Cable drum lifting with reach stackers – eliminates the use of cranes, allows drums to be carried further, and ensures safer, quicker drum handling
- Trenching with V bucket – removes the need for trench support
- Triple cable roller system – ensures one-time setup and pulls three cables instead of three individual passes
- Cable lifting frame – enhances on-site safety



GROUND ENGINEERING

Key investments to hit the ground running

Murphy's specialist piling and ground engineering business delivers a range of piling and geotechnical techniques throughout the UK and Ireland. We develop solutions for ground conditions varying from soft organic and alluvial material to high strength rock, and have a long track record of completing minor and major work across a range of industry sectors.

In 2017, we wanted to make strategic evolutions that allowed us to grow at scale. This primarily targeted the improvement of internal procedures and systems, the development of quality analysis, and the creation of a more robust structure.

With Murphy's Ten Year Plan marching onwards, we had to ensure we built a platform that would enable our part of the business to keep pace with the wider group strategy.





Bauer BG30 - with casing oscillator

Ground Engineering highlights:

- Support from Murphy Plant through investments in plant, rigs and equipment: building a platform for long-term growth
- Acquiring FPS membership: an accreditation that builds trust with clients
- Real-time engineering reviews introduced: capabilities enhanced through instrumentation across new rig fleets
- Work on technically demanding contracts: piling on high-profile water projects successfully completed



Bauer BG30 with Murphy Plant attendances

Consolidating and improving our business

In 2017, Ground Engineering was formally established as a specialist Murphy business, benefiting from the focus and support this brings. We took important steps to consolidate our business by aligning processes and resources to focus on the most important markets and clients. We enhanced our internal relationships and became integral to group bids involving ground engineering.

Our specialist business partner Murphy Plant invested in key plant and equipment to support our long-term growth plans – most significantly acquiring larger piling rigs to enhance our capabilities.

Instrumentation across the rig fleets was enhanced to provide real-time engineering reviews – a unique selling point for the business. Our tendering process was also improved, as was our customer relationship management system, all of which has improved our efficiency.

These investments in equipment and infrastructure were complemented by investments in people; 2017 saw the recruitment of key personnel, and the development and training of the existing team to support our ambitious business

development plans. We also acquired our Federation of Piling Specialists (FPS) membership – an industry-trusted accreditation that improves our reputation.

In terms of projects we undertook, 2017 was another busy year taking on more challenging ground conditions and technical requirements.

The standout contracts were actually several related schemes on part of Severn Trent's Birmingham Resilience Project and further works with Severn Trent on their Newark Project. These projects upgraded the water supply into Birmingham from its source in the Welsh valleys, and upgraded the existing Newark sewage and storm drain systems too. The projects combined had a value of over £2.5million in 2017, building on work undertaken in 2016 and leading to further opportunities in 2018 and beyond.

The team was proud to complete these projects successfully, combining resource from the UK and Ireland to optimise delivery and demonstrate all of the skill, experience and capability Murphy are renowned for.



Birmingham Resilience Project

Murphy Ground Engineering undertook piling work on Severn Trent Water's Birmingham Resilience Project.

The work consisted of large diameter segmentally cased rotary bored piles for a variety of structures. It coincided with the purchase of two Bauer BG30 piling rigs into the Murphy Plant fleet, with a significant spend on rotary tooling and casing to support the operation. The Bauer BG30 rigs are 110 tonnes with state-of-the-art capability. They were specified with the additional capacity of a casing oscillator attachment, as well as torque and crowd boost functions. These features were much needed on the most significant structure at Elan Valley Aqueduct, a 32 metre secanted shaft required for the launch of a tunnel boring machine.

At Elan Valley, in addition to the length of segmental casing needed to install and extract using the full performance of the Bauer BG30, the high strength rock (up to 200MPa (UCS)) put serious demands on the rig and bespoke rock tooling. In addition, the team was challenged with maintaining quality and safety during periods of very cold weather. Similar shaft structures of varying depths were constructed at Stourport and Newark, in addition to general bearing and thrust piles. This work continued into 2018.

To familiarise our highly trained rig operators with the enhanced capability of the Bauer BG30, some of our operatives were sent to Bauer's head office and production facility in Germany to undertake an intensive one week training course. This made sure we were able to get the best out of the rigs, and was backed up by Murphy Plant fitters completing Bauer fitter training. With the experience of our Ireland team, these projects really showcased what can be achieved when we all work together and put us in a strong position for 2018 and beyond.



HIGHWAYS & STREETWORKS

Developing the Developer market

Murphy has been building, maintaining and improving the nation's highways and streetscapes since the 1950s. With a reputation for tackling challenging, high-profile projects, we have improved some of the country's most famous locations.

We carry out projects including footway and carriageway upgrades, pedestrianisation, build-outs, parking improvements, street furniture, signs and white lining, public lighting, hard and soft landscaping, resurfacing and security. Among others, our clients include Lendlease, Laing O'Rourke and Grosvenor Estates.

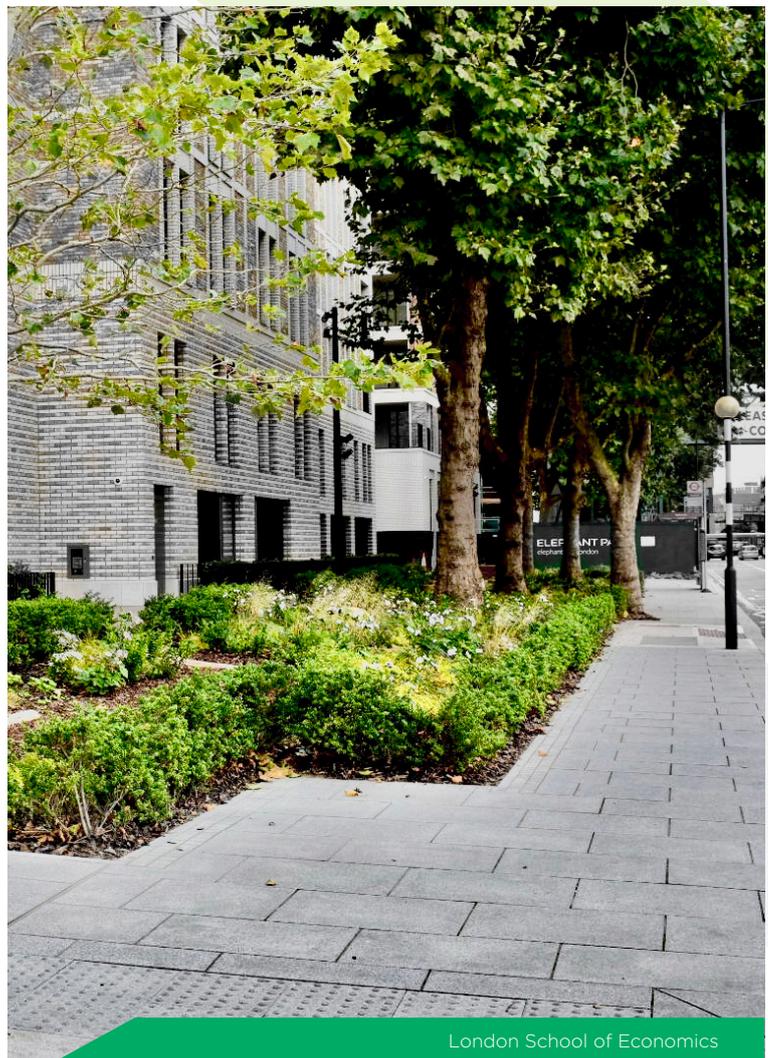




Elephant Park, London

Highways & Streetworks highlights:

- Tottenham Court Road: High-profile Crossrail contract with Laing O'Rourke secured
- Elephant Park: Project extended thanks to excellent work in regenerating Elephant & Castle
- Curtis Green, Victoria Embankment: Counter-terrorism measures implemented, increasing our security infrastructure reputation
- Albany Courtyard: Urban renewal project secured and recently completed in Piccadilly, London
- Lyndhurst Gardens: A basement sub-structure, London
- Royal School of Music, London: construction of new step free access to the main academy building



London School of Economics

Helping to run and restore London's busiest areas

2017 was a year of change. Closure of our long-term framework with Royal Borough of Kensington and Chelsea proved the catalyst for a clearer and stronger focus on the developer market.

We looked to build new relationships, but also focused on developing existing relationships with clients like Lendlease and Laing O'Rourke. This renewed motivation bore positive results.

Working with Laing O'Rourke, we won a prestigious contract on the Crossrail project at Tottenham Court Road, one of the busiest cross sections in the capital. The tender process was extremely competitive, so this was a real coup for Murphy. We were also awarded and recently completed an urban renewal project at Albany Courtyard, Piccadilly in the centre of London.

Our work at Elephant Park has resulted in an increased project scope, as we continue to shape vital public spaces in the rapid regeneration of Elephant & Castle in London. Traffic-free areas, communal open spaces and a new high street are vastly improving liveability in this densely populated location.

In 2017 we also successfully installed street security measures on Curtis Green, Victoria Embankment to guard against incursions and terrorism. This experience will undoubtedly help us further extend our reach into the security infrastructure market.

With a burgeoning reputation and the unrivalled capability of our 'One Murphy' approach, we expect many more high-profile contract wins in the near future, throughout the UK.



St. James Market

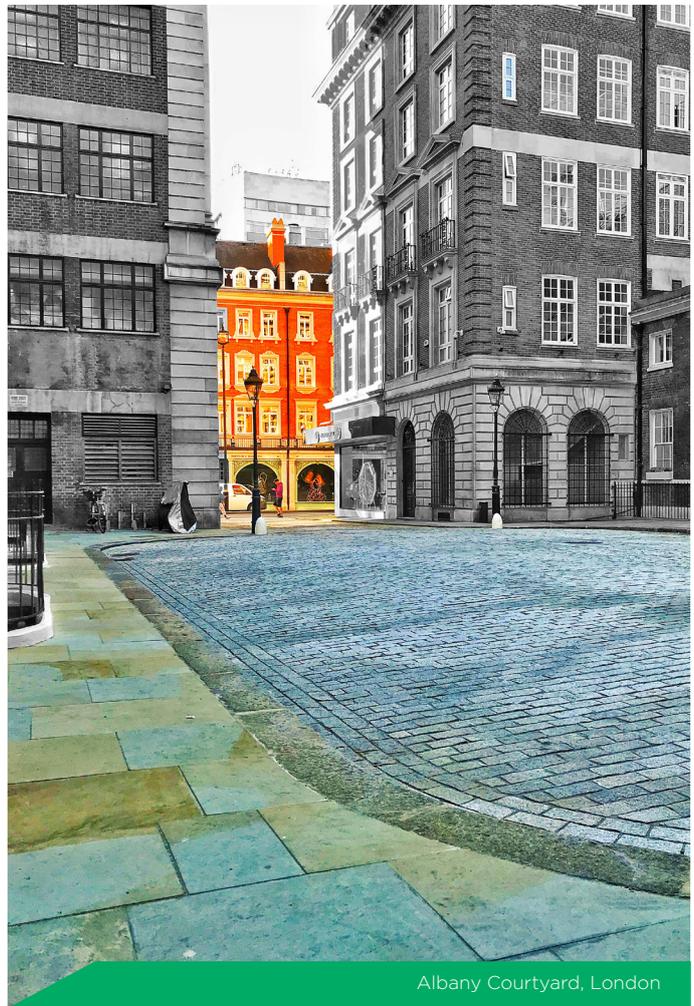
Albany Courtyard, London

Albany Courtyard is located directly adjacent to the main thoroughfare of Piccadilly in London.

We were employed by the Trustees of Albany Courtyard to return it to its former glory following a series of inappropriate interventions over the last fifty years. The improvements aimed to rectify work that had previously been carried out and were not in keeping with the history of the site.

The work initially involved carefully removing the road surface over the existing vaults that are located throughout the courtyard. Existing kerbs were re-laid and new Yorkstone slabs were laid to complement the existing paving.

Finally, the whole of the courtyard was transformed using new granite setts. This important urban space was carefully renewed and restored, on time and on budget.



Albany Courtyard, London



Elephant Park, London

UTILITY CONNECTIONS

Becoming proud owners of our own gas and electricity networks

Murphy Utility Connections has an established reputation for installing gas, water, electricity and telecoms for residential and commercial developers throughout the UK. We work on construction projects of all sizes, from installing mains to altering or disconnecting services. Last year we delivered 4,829 connections.

Our Utility division is central to the 'One Murphy' approach of the wider business. The multi-skilled team provide clients with a dependable, truly all-inclusive service.

Adding a USP for Utilities and long-term income

The goal for 2017 was clear: to become an independent licensed operator of our own gas and electricity networks across the UK. Transporting energy to consumers will provide long-term revenue for the business.

During the development of Murphy Asset Services, a significant strategic project, we demonstrated our ability to build and operate networks safely to the satisfaction of key regulatory bodies. As a direct result of the success of this venture, the regulator Ofgem granted Murphy with both an Independent Gas Transporter (IGT) and Independent Distribution Network Operator (IDNO) licence.

Ultimately, this gives the wider business another unique selling point when securing future contracts, as well as revenue that could grow exponentially in the coming years. Acquiring these licences is a major achievement for Murphy, paving the way to explore the potential acquisition of assets in other markets.



Barratt Homes site, Darlaston Road, Wednesbury

Highlights: Contract wins with major housebuilders, and apprenticeship growth

In addition to the huge achievement of securing our own power networks, there were other key highlights:

- Major schemes awarded: among others, the team secured 33 schemes with top-10 housebuilders, including Barratt Homes, St. Modwen Homes, Redrow, Persimmon Homes and Taylor Wimpey
- Gas safety achieved: in addition to acquiring our gas licence, we also secured the necessary, HSE-approved Gas Safety Case
- Involvement in HBF Utilities Conference 2017: Ash Nixon, responsible for business development, exhibited and presented at this prestigious event
- Apprenticeships completed: Joe Fisher and George Brookes, who were Utility apprentices, completed their training this year and are now on-site service layers for gas and water

All in all, with the successful acquisition of our utility licences, and a growing relationship with leading UK housebuilders, 2017 was a year of progress for Utility Connections.

MURPHY

UTILITY CONNECTIONS

<h2 style="font-size: 48px; margin: 0;">4,829</h2> <h2 style="font-size: 48px; margin: 0;">plot</h2> <p style="font-size: 24px; margin: 0;">connections</p>	<p style="font-size: 24px; margin: 0;">electricity</p> <p style="font-size: 24px; margin: 0;">gas</p> <p style="font-size: 24px; margin: 0;">water</p> <p style="font-size: 24px; margin: 0;">telecoms</p>					
<h1 style="font-size: 48px; margin: 0;">licences</h1> <table style="width: 100%; font-size: 18px;"> <tr> <td style="width: 50%;">Independent Gas Transporter (IGT)</td> <td style="width: 50%;">Independent Distribution Network Operator (IDNO)</td> </tr> </table>		Independent Gas Transporter (IGT)	Independent Distribution Network Operator (IDNO)			
Independent Gas Transporter (IGT)	Independent Distribution Network Operator (IDNO)					
<h1 style="font-size: 48px; margin: 0;">33</h1> <p style="font-size: 24px; margin: 0;">MAJOR schemes</p> <table style="width: 100%; font-size: 18px;"> <tr> <td>Barratt Homes</td> </tr> <tr> <td>St. Modwen Homes</td> </tr> <tr> <td>Redrow</td> </tr> <tr> <td>Persimmon Homes</td> </tr> <tr> <td>Taylor Wimpey</td> </tr> </table>		Barratt Homes	St. Modwen Homes	Redrow	Persimmon Homes	Taylor Wimpey
Barratt Homes						
St. Modwen Homes						
Redrow						
Persimmon Homes						
Taylor Wimpey						



Crab Hill — St. Modwen Homes

The team was awarded phase one of a scheme in Crab Hill, Wantage, Oxfordshire, by St. Modwen Homes.

Multi-utility connections were required for 150 plots at a value to Murphy of more than £500,000. The quality of our work has secured phase two of this project, which will require connections to a further 1,350 plots. The anticipated value of this extra work is approximately £3.6 million.

This project is not only delivering income to the business but is strengthening our relationship with one of the UK's biggest housebuilders. Furthermore, it's in a region that will see some of the biggest growth in new housing developments over the coming years.





A multi-utility job at Darlaston Road in Wednesbury for Barratt Homes

PIPELINE TESTING SERVICES

Establishing a sales pipeline and enhanced portfolio

Pipeline Testing Services (PTS) is a specialist Murphy business based in Leeds. It conducts a wide variety of pipeline pre-commissioning, commissioning and integrity management services. These services include flushing and cleaning, pneumatic pressure testing, desiccant drying, leak detection and remedial works.

For 2017, the strategic aim was to increase our presence in asset management across various sectors by focusing on our technical capabilities. The key was to pre-qualify with clients by proving our expertise, for which we needed to build processes and procedures. We were also eager to emphasise the unrivalled design and engineering know-how we have at our disposal through the wider business.

Supporting Morgan Sindall in delivering essential infrastructure asset services to Europe's most complex nuclear site.

We were contracted directly to carry out hydrostatic and pneumatic pressure testing, desiccant air drying and CCTV camera inspection work.

The large-scale work was successfully completed in 2017 and given the significance of the project, this will help to strengthen our reputation in the market.





High pressure assembly with in fluid temperature transducers

Pipeline Testing Services highlights:

- New, industry-leading testing equipment implemented
- Testing, drying and assessment work at Europe's most complex nuclear site completed
- New facilities in Leeds established
- New processes and procedures covering everything from tendering to operational activities implemented – building a strong foundation for growth
- Projects completed for Palm Paper, Storengy and Thames Water
- New and continuation scopes received from Air BP, National Grid - National AGI Renovation Campaign & Bacton Outages, SGN's Erskine Bridge pipeline replacement project, Storengy pipeline and AGI project
- Successfully pre-qualifying and tendering for external works



Pipeline chlorination

SPECIALIST WELDING SERVICES

Building the facilities
and services to grow

Specialist Welding Services (SWS) provide project services to the natural resources sector. Our specialisms include offsite piping fabrication packages, specialist welding engineering, inspection management with site supply of specialist pipe welders, and supply of industry qualified inspection personnel and non-destructive testing packages.

The goal for 2017 was to deliver pipe fabrication and welding services to an even higher standard, incorporating the very best practices and technologies. Ultimately, this would strengthen our reputation as an in-house supplier, utilising our ‘One Murphy’, cross-business capabilities.

Expanding our welding facilities

We won a variety of projects with oil and gas clients in 2017 – boosting business revenue and improving our growing reputation.

Significant upgrade work was performed at our fabrication facility in Leeds. We created 1,800sqm of welding space, and large lifting and movement is now possible. Multiple welding stations, semi-automated welding, laydown areas and cutting bays were also built – allowing us to deliver more productive and industry-leading services to our clients, and strengthen our reputation in the market.





Large diameter piping fabrication

Specialist Welding Services highlights:

- Large-scale upgrades to our welding facilities in Leeds – boosting our capabilities
- Multiple contract wins for a variety of oil and gas clients: National Grid, National AGI Renovation Campaign & Bacton Outages, SGN's Erskine Bridge pipeline replacement project, Storenergy pipeline and AGI project
- Group leading project co-ordination tools now installed utilising Power BI across all contracts, giving transparency and effective reporting and planning capabilities



Gas tungsten arc welding 'TIG'

IRELAND

A breakthrough acquisition and major contract wins

John Murphy founded the Irish branch of the Murphy business in 1968 — 50 years ago this year.

Today, Murphy International Limited (MIL) flies the flag for Murphy in Ireland, offering a full range of services including engineering, steel fabrication, piling and construction, among others.

The aim for 2017 focused on growing the business in line with the group's Ten Year Plan. Specifically, we wanted to expand our capabilities as part of the wider group to broaden our client base.

Acquisition of Aecom Design Build Ireland (ADBI)

2017's most significant achievement was the acquisition of ADBI to broaden our reach in the water market.

Not only did ADBI's existing clients include Irish Water and Northern Ireland Water, but their design, commissioning, engineering and operational expertise added huge capability to our water offering in Ireland and elsewhere.

The acquisition fits perfectly into our ambitious growth plan, opening doors to more complex and integrated projects. In the short-term it adds immediate value through ADBI's existing contracts and relationships.





Curragh Racecourse

Highlights at a glance:

- Acquisition of ADBI — strengthening our capabilities and value in Ireland
- Completion of iconic Apple Market in Waterford
- Completion of €5.5m Curragh Racecourse project
- A wide range of contract wins including the Gas to the West project in Northern Ireland and the Listowel Gas Project
- A huge number of major projects completed including Texaco Yard at Dublin Port and Bolton Skylink



Apple Market, Waterford



Dozens of contract wins and project completions

2017 saw the completion of the remarkable public realm Apple Market project in Waterford — a high-profile build that featured innovative designs, sustainable materials and a striking reflective canopy. This beautiful building is testament to the depth of skill in the Ireland team and is playing a key role in the regeneration of this historic city.

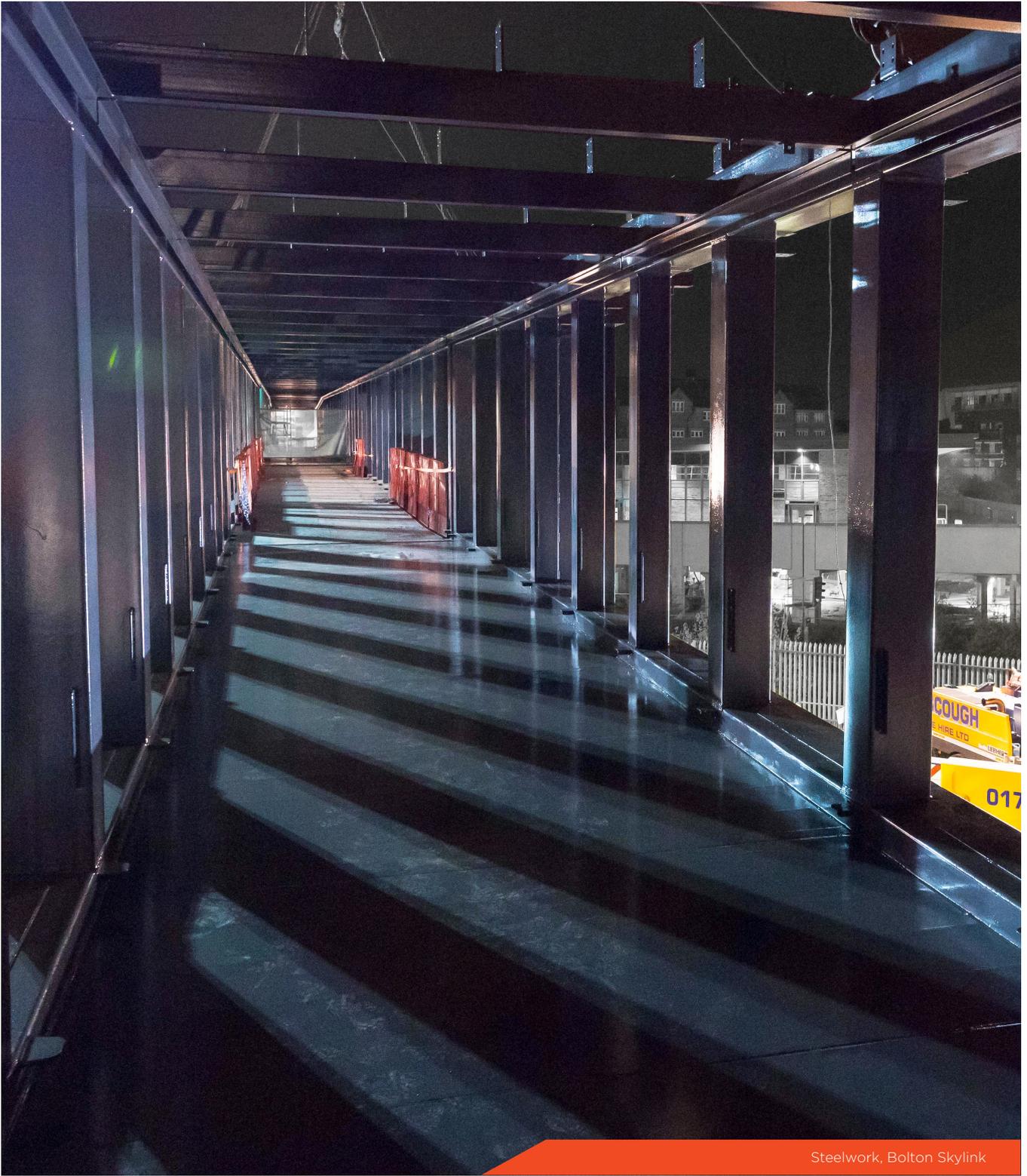
The Curragh Racecourse project, worth €5.5m, was a complex assignment including demolitions, deconstructions, reconstructions and temporary installations, all in time for the racing season. A variety of challenges were overcome, including the reconstruction of the original stone viewing building incorporating the queen's room which dates back to 1850.

Elsewhere, major contract wins included the Listowel Gas Project, the Gas to the West project in Northern Ireland, the Deephams FST Scrapers Project and the Louth Water Treatment Projects.

Other significant projects also reached successful completion in 2017. They include the complex Texaco Yard project at Dublin Port, the 102 metre-long Bolton Skylink, Lough Mask, Mullinahone HP Gas main repair, Newbury Station Footbridge, Salt Cake Cells and Craggs AGI Extension.

All in all, it's been a busy and rewarding year in Ireland.





Steelwork, Bolton Skylink



Deephams FST Scrapers

CANADA SURERUS MURPHY

Becoming a major player in Canadian oil and gas

Our Canadian joint venture, Surerus Murphy (SMJV), carries out large-diameter pipeline construction throughout Western Canada for the oil and gas industries.

2017 was a big year for SMJV.

We were chosen as a preferred supplier on the \$7.3 billion Kinder Morgan project, and are set to complete 20% of the project – equating to around 180km of 36 inch pipeline. Permits are currently being approved and we are set to commence work imminently.

Meanwhile, we also became a preferred supplier to TransCanada, the second-largest oil and gas transporter in North America. Towards the end of 2017, we were awarded the first phase of a fuel line expansion project that will, in 2018, expand across 320km of 12 inch pipeline. With the first phase in hand, we are in a strong position to secure further work on this project – this opens up the prospect of working with industry giants like Suncor, Shell and Esso.

These projects have not only fuelled growing revenues for SMJV but offer huge opportunities in the coming years, with the likes of TransCanada projecting significant investment. To ensure that growing opportunities are capitalised upon, the senior team has been strengthened with the addition of Julie Story, Finance Director; Padraig Leahy, Commercial Director; Chris Pezoulas, VP Operations and Heather Eddy, Human Resources and Development Director.



High Pine project showcases innovation

One of 2017's key projects was the High Pine pipeline expansion in Chetwynd, British Columbia. The 42 inch pipeline project is one of the most challenging developments in recent Canadian history, and involved many innovations to ensure safe and successful delivery.

The 30km route involved challenging mountainous terrain, including one particular 1.5km stretch of slope at angles between 20 and 50 degrees. Complex winching, innovative 3D modelling and the use of helicopters to remove trees and personnel were essential to success, despite 56 inches of snow falling during the construction.

Highlights at a glance:

- 3.3 million man-hours across the year
- More than 300km of pipeline installed
- SMJV was one of the largest employers of pipeline professionals in Canada
- Major contracts secured with Kinder Morgan and TransCanada – with more to follow
- Complex High Pine project in British Columbia overcome successfully, thanks to exceptional design and logistical innovation
- Longest pipeline project completed by Surerus Murphy, the Fox Creek to Namao project was completed on time, despite a 25km reroute



FINANCIAL PERFORMANCE



David Burke – Chief Financial Officer

FINANCIAL HIGHLIGHTS*

Profit before tax

£12.4m

Revenue

£711.9m

Cash balance

£61.9m

Balance sheet net assets

£218.5m

Order book

£993m

* Unaudited figures

2017 was the second year of our Ten Year Plan. We have been investing in our people, processes and systems to build the platforms that will support sustainable growth and efficient delivery through the rest of the ten year period. Much of the foundation building is complete but with further work set to continue for 2018.

Revenue grew by **16%** to **£711.9m**, largely attributable to an increase in activity on projects in Canada and the acquisition in February 2017 of AECOM's Irish water business now operating as Murphy Process Engineering (MPE). We are committed to building our engineering, technical and specialist capabilities to allow us to help our clients find innovative and efficient solutions. Murphy Process Engineering represents a further step up in our applied engineering expertise; we will be working through 2018 to identify opportunities to leverage this capability in Ireland and in our other core geographies. We will also, through 2018, continue to explore targeted acquisitions which build specialist capabilities that complement our existing offer.

In September 2017 we disposed of our share in the Australian JV, Murphy Pipe and Civil (MPC) for a profit on disposal of **£2.1m**. After several highly successful years, Murphy Pipe and Civil had established a leading position in the Australian natural resources, mining and engineering sectors and the timing was right for us to sell. Murphy remain positive about the opportunities in Australia in other sectors.

Profit before tax in 2017 decreased to **£12.4m** (2016: £23.3m). Whilst the growth in revenue in 2017 was in line with our Ten Year Plan objectives the profit performance was behind our targeted position. This was driven by losses on some challenging contracts such as pipeline contracts in Canada and power projects in the north of the UK. In addition to this, there was an increase in costs as we continue to invest in the business to establish our platform for continuing sustainable growth. We pride ourselves on our responsible management of the business, stewarding sustainable growth and managing for the long term.

As such, we adopt a prudent approach to project accounting in terms of cost and value recognition; this is reflected in our 2017 figures.

Murphy remains committed to its direct delivery model. This approach, coupled with an established and skilled supply chain, is highly attractive to our clients. To support this approach, we continue to invest in training for all our employees. We also remain proud of our culture and approach to safety with the resulting statistics demonstrating that our approach works; lost time due to work-based accidents reduced by **85%** in 2017.

Cash balance

The group ended the year with cash balances of £61.9m (2016: £96.9m). We continued to invest in plant and equipment, funded primarily through third party debt. We also maintained our commitment to pay our suppliers promptly.

The group continues to review its credit support arrangements, and we will ensure that we have adequate facilities and headroom to meet our future projections.

Balance sheet

The group continues to maintain a healthy balance sheet with net assets of £218.5m (2016: £214.1m). There has been an increase in tangible fixed assets in respect of the capital expenditure on plant and equipment; the ongoing investment in our IT infrastructure; and the investment (and revaluation) of our property portfolio.

The group operates three defined contribution pension schemes with the assets held in independently administered funds. Additionally, the company sponsors a defined benefit pension scheme that closed to new members in 2012. Due to the effect of Brexit on the gilt market, this scheme is running at an actuarial deficit of £18.0m. We consider this deficit to be temporary and continue to contribute at a rate of £1.5m per annum, as agreed with the trustees of the scheme.



A view of our Paul Street Development

Order book

The group order book at the end of 2017 stood at £1.0bn (2016: £1.2bn), with the decrease largely due to the loss of order book following the disposal of the MPC business in Australia.

With the size and visibility of our pipeline we are confident of delivering our budget for 2018 and continuing to grow sustainably into 2019.

Finance transformation

The Finance Transformation Programme remains on track with a new system go-live in Q3 2018.

This will enhance our project accounting discipline across the business.

Conclusion

The group is privately owned, and we acknowledge the support of our shareholders who are fully supportive of the business strategy. We also benefit from short lines of communication that enable swift decision making.

Overall, 2017 was a year when the business overcame some challenges in the market and continued to develop our capabilities in line with our Ten Year Plan. With a new finance system in place and an increasing focus on our strategic drivers, we look forward to 2018 and achieving our financial commitments for year three of our plan.

GOVERNANCE AND RISK



Alastair Kerr — Chairman

Murphy is committed to a high standard of corporate governance.

Delivering the Ten Year Plan needs a solid bedrock of sound corporate governance and a rigorous approach to managing risk. The company's owners are committed to ensuring we embed an ethical approach to delivering world-class infrastructure and building on the Murphy legacy.

Having an ambitious business plan and growth strategy means we have to adopt best practice in this area. This is a continuous process of improvement and development. From monthly leadership reporting to project risk profiling, we are taking steps to ensure we continue to deliver in line with our values.

A solid reporting and governance structure

Our governance framework remains in line with international standards and practices in order to safeguard the effective functioning of the governing bodies of the company. We ensure the company is in full compliance with the law, all applicable rules and regulations, as well as our own company policies.

Our main board comprises ten directors, four of whom are independent non-executive directors, including the chairman. Four of the directors are Murphy family non-executive directors. The chief executive officer sits on the main board, reporting into the non-executive chairman. The company's chief operating officer and chief financial officer also sit on the main board. Murphy has four board committees:

- The Group Executive Committee (GEC) is led by the CEO and is made up of key executives, operational and functional leaders from across the company. This group is responsible for the day to day running of the company. It's effectiveness should be reviewed by the main board. The GEC is supported by a Group Operations Board comprising the chief operating officer and representatives from the business units.
- There is an Audit Committee, a Risk and Opportunity Committee and a Remuneration Committee, all chaired by independent non-executive directors and including family non-executive directors (see committee summary reports on page 76).

Given the importance of safety to our culture, there is also a Safety, Health, Environment, Security and Quality (SHESQ) Committee, made up of leaders with responsibility for these areas.

Managing our risk

We categorise our risks in four main areas: strategic, operational, financial and regulatory. An Executive Risk and Opportunity Committee meets on a monthly basis to identify its potential impact, producing a measurement we can practically apply to our work. Whether that risk is within tolerance, at tolerance, uncomfortable or critical gives us a clear rationale for how we progress.

RISK SUMMARY

STRATEGIC

BIDDING/WORK WINNING

Risk

Electing and winning the right work opportunities is key to the success of the business.

Mitigation

This is managed by a process with a number of approval and review stages, from the presentation of the initial opportunity through to contract completion. We have introduced key risk parameters as part of the bid review process, identifying risks which are and aren't acceptable to the business as part of that process.

ECONOMIC ENVIRONMENT

Risk

The business will always be subject to changing market and economic conditions particularly in the regulated utility sector.

Mitigation

This is mitigated by having a diverse workload in sector and geography, ensuring a range of sectors and clients are engaged on an ongoing basis.

REGULATORY

BUSINESS CONDUCT AND COMPLIANCE

Risk

Failure to observe the highest standards of business integrity can result in legal sanction, financial penalties and reputational damage.

Mitigation

This is managed by having clear policies in place with a designated compliance officer and an independent confidential phone line for reporting concerns.

SUSTAINABILITY

Risk

Operating sustainably, working considerately and minimising the impact on the environment around us is vital to ensure we deliver our business growth and win the right contracts.

Mitigation

Our sustainability roadmap sets out our strategic objectives, making sure we do not harm the communities where we work. This is supported by having detailed policies and procedures in place.

OPERATIONAL

HEALTH AND SAFETY

Risk

The wellbeing of our colleagues and the communities is essential if we are to succeed as a business.

Mitigation

Managing the risk of injury or harm to our people is done by having the right behaviours in the business. This is driven by our Culture Development Programme, as well as having detailed health and safety policies and procedures in place and our 'Never Harm' approach embedded in our company values.

PEOPLE

Risk

We need to attract and retain the best people to work in line with our business plan.

Mitigation

We manage this through our performance development process, and by minimising staff turnover through appropriate remuneration, incentive packages and appropriate succession planning.

PROJECT EXECUTION

Risk

Poorly delivered projects harm the company's reputation and prospect of winning new or repeat business.

Mitigation

Project delivery plans and monthly commercial reporting ensure that projects are delivered on time and to budget.

OPERATING ENVIRONMENT/SYSTEMS

Risk

The business depends on its IT infrastructure and operating systems to support its success.

Mitigation

We are investing heavily in our IT capability and performance to support the business and deliver its growth plan.

AUDIT COMMITTEE



Huw Davies
Independent non-executive director

The Audit Committee is chaired by Huw Davies, an independent non-executive director of Murphy's main board.

The committee's membership consists of independent non-executive directors and the family directors.

The primary focus of the committee is the integrity of the group's financial statements, the effectiveness of internal controls, the performance of the internal audit function, the performance and independence of the external auditors, and compliance with legal and regulatory requirements.

During the year the committee conducted a review of the external auditors and undertook a tender process which resulted in the appointment of Ernst & Young for the 2018 financial year audit.

REMUNERATION COMMITTEE



Mike Toms
Independent non-executive director

The Remuneration Committee is chaired by Mike Toms, an independent non-executive director of the company's main board.

It is responsible for reviewing the remuneration of senior executives, the ongoing appropriateness and relevance of the remuneration policy, determining the policy for the annual pay review and bonus scheme, and overseeing any major changes in employee benefit structures. The committee consists of non-executive directors to ensure independence and transparency and family non-executive directors.

In addition to its normal cycle of setting salaries and bonuses for senior executives, and setting targets for the incentive schemes, during the year the Committee undertook a broad ranging review of reward policy for staff and agreed a programme to modernise the reward structure. It also considered the requirements of gender pay gap reporting and put in place measures to ensure compliance from 2018.

Moving forward, the committee aims to continue adopting best practice, ensuring the relevant approaches are implemented by Murphy to support its Ten Year Plan.

RISK AND OPPORTUNITY COMMITTEE



Steve Hollingshead
Independent non-executive director

The Risk and Opportunity Committee was established by the Board in November 2017. It is chaired by Steve Hollingshead, an independent non-executive director of the main board.

The committee's membership consists of the independent non-executive directors and the family non-executive directors.

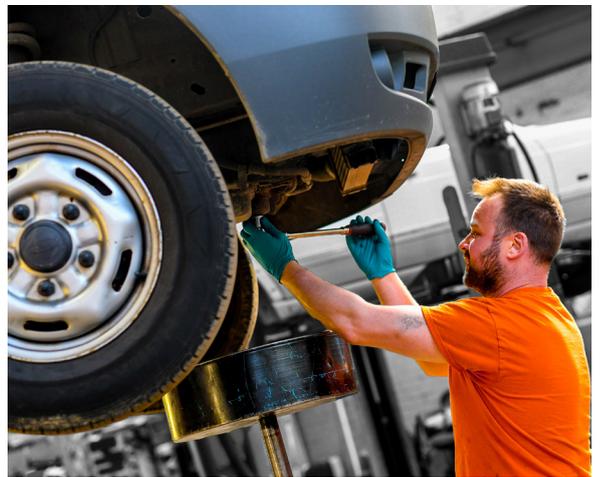
As well as continually reviewing the company's overall approach and effectiveness to managing risks and opportunities, the purpose of the committee is to:

- monitor risks of uncomfortable and critical concern
- review anticipated and probable opportunities for the business
- identify new types of risk and opportunity in the business
- monitor the risk and opportunity management system
- review the risk and opportunity profile for the business
- review the company's codes of conduct, ethics and related corporate responsibility policies.

Additionally, the committee also has duties covering compliance, whistle-blowing and fraud. These include:

- to review the adequacy and security of the arrangements for its employees to raise confidential concerns about possible wrongdoing in financial reporting or other matters
- ensure these allow proportionate and independent investigation and appropriate follow up action
- review the company's procedures for detecting fraud
- review the company's systems and controls for the prevention of bribery and receive reports on any alleged or suspected non-compliance.





OUR OFFICES

London (Head Office)

Hiview House
Highgate Road
London NW5 1TN
+44 (0)20 7267 4366

Midlands & South West

Hawks Green Lane
Cannock
Staffordshire WS11 7LH
+44 (0)1543 466 711

North East

Long Causeway
Cross Green
Leeds LS9 0NY
+44 (0)113 235 0611

North West

Wigan Road
Golborne
Warrington WA3 3UB
+44 (0)1942 725 326

North West

1 Bridge Court
Yew Tree Road
Stonecross Business Park
Golborne WA3 3JD
+44 (0)1925 917 171

Murphy Plant

Rushcliffe House
Newark Road
New Ollerton
Nottingham NG22 9PZ
+44 (0)1623 861 238

Swindon

Regus House
Windmill Hill Business Park
Whitehill Way
Swindon
SN5 6QR
+44 (0)1793 600 711

Canada

Surerus Murphy JV
#1600, 605 5th Avenue SW
Calgary
AB T2P 3H5
+1 403 930 1358
www.surerus-murphy.com

Ireland

Great Connell
Newbridge
Co. Kildare
+353 454 31384



IMPROVING LIFE BY DELIVERING WORLD-CLASS INFRASTRUCTURE



Business Review 2017
THERE'S MORE TO MURPHY

WWW.MURPHYGROUP.COM

