

2016 annual review

Building advantage together



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Introduction

To read the review online visit:
volkerwessels.co.uk/2016annualreview



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Building advantage together – our teams, partners and supply chain delivering optimal solutions for our clients.



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Our skilled and experienced people are critical to our success.



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We support local charities and community projects like the 'Bike around the Borough' event in Hackney, London.



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The Thameslink depot at Hornsey will house new high speed trains as part of Thameslink's upgrade programme.



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The Blackfriars Pier was successfully relocated to facilitate enabling works for the Thames Tideway Tunnel project.



39

Gatwick Airport regeneration involved extensive surfacing on this busy taxiway.



42

The Blade factory in Hull – a state of the art wind turbine blade manufacturing facility for Siemens.

Clients choose VolkerWessels UK because of its consistent reputation for delivering projects to the highest quality. Our people are committed and dedicated to delivering success through their specialist skills and experience. This, along with our clear strategy and approach, allows us to drive performance in every area of our business.

About us

VolkerWessels UK is a multi-disciplinary contractor that delivers innovative engineering solutions across the civil engineering and construction sectors including rail, highways, airport, marine, energy, water and environmental infrastructure and commercial and industrial building. Our collaborative approach allows us to help clients build advantage in their markets.

Building advantage together

We bring together best practice through five business units: VolkerFitzpatrick, VolkerRail, VolkerStevin, VolkerHighways and VolkerLaser. These businesses each have a long and successful heritage built on delivering quality and bespoke projects as well as providing specialist skills, plant and equipment. Our success is founded on our ability to deliver in challenging environments, exceeding expectations and winning repeat business from established clients.



Amidst the challenges and the uncertainties in our economic environment, I am proud to report that we have achieved another successful year.

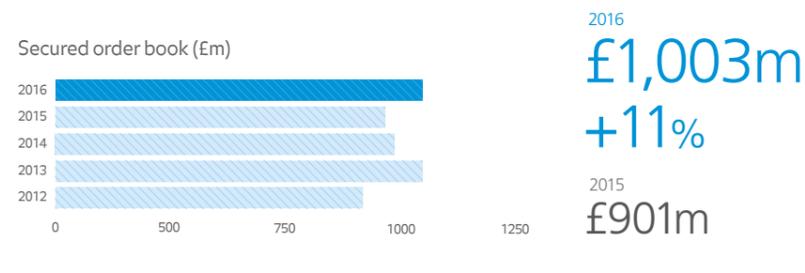
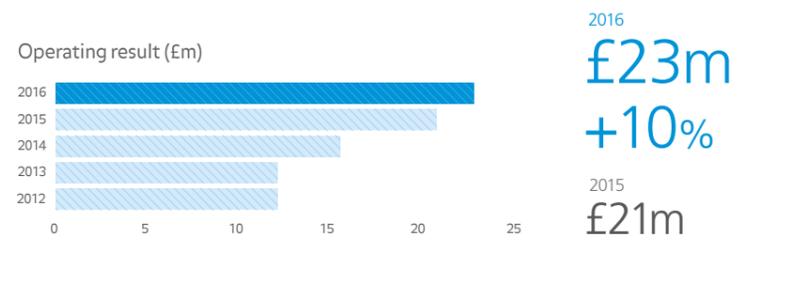
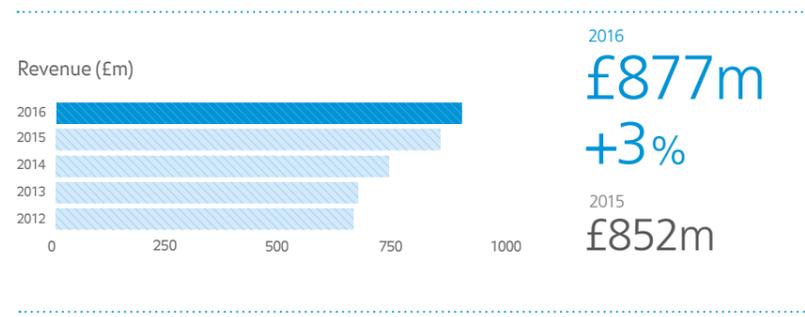
Alan Robertson
 Chief executive officer
 VolkerWessels UK

Financial and performance highlights

2016 was another successful year for VolkerWessels UK, building on the value we add to our clients by delivering results. Our strong heritage and consistent quality of work has established our reputation in the marketplace and within the industry.

We have continued to build on our sound financial results, delivering yet another year of profitable growth despite challenging market conditions. Our financial strategy is to manage growth with an emphasis on profitability and cash; bidding and winning work that generates positive margins and cash flows. Managing our overheads and capital investment appropriately has enabled us to continue to deliver improvements on all our key financial performance measures. Each of our business units has contributed positively to these results through the delivery of quality projects and services in their specific markets.

For the first time since 2013, the year end secured order book stands at over £1billion and VolkerWessels UK continues to have a strong pipeline of quality work. This increase follows a number of significant wins for VolkerFitzpatrick, VolkerStevin and VolkerHighways in particular.



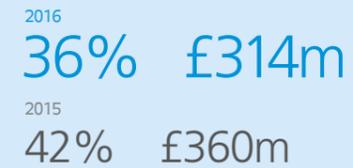
By utilising the specialist skills of each business within VolkerWessels UK, we are able to provide unrivalled resources and expertise to our clients. This collaborative approach allows us to provide a truly integrated quality service.

For more information about the sectors in which we work visit: volkerwessels.co.uk



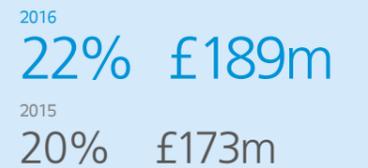
Rail infrastructure

Renewals and enhancements of mainline rail infrastructure and systems including track, signalling and electrification, plant, maintenance depots, stations, and metro and light rail track construction.



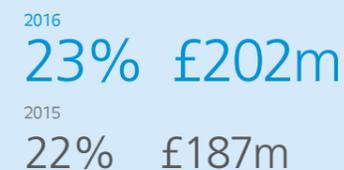
Marine, energy, water and environmental

Extensions to ports and harbours, marine piling, flood alleviation and coastal protection, water utilities infrastructure, horizontal directional drilling and high voltage cable works.



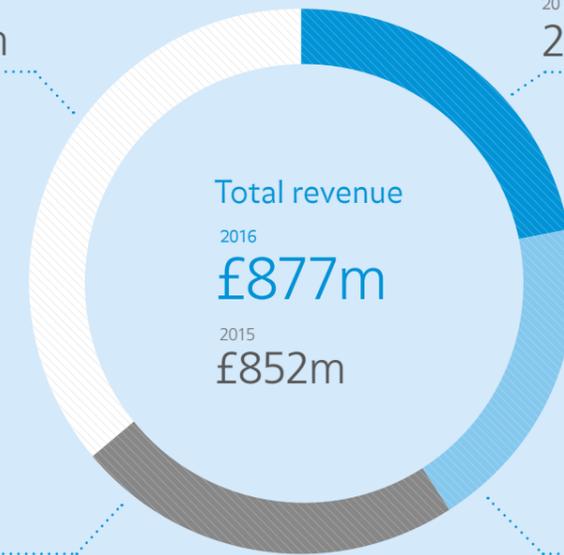
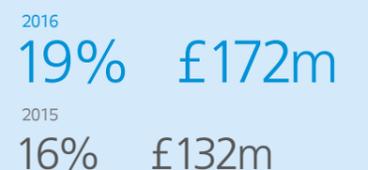
Highways and airport infrastructure

Maintenance, renewals and civils for highways networks, airports, bridges and tunnels, providing surfacing, strengthening and waterproofing, term maintenance, lighting and traffic management.



Commercial, industrial and educational construction

Refurbishment and new build construction, civil engineering, design and planning for distribution centres, office and industrial buildings and multi-modal, educational and community facilities.



Richard Offord
Managing director
VolkerFitzpatrick

Steve Cocliff
Managing director
VolkerRail

Alan Robertson
Chief executive officer
VolkerWessels UK

Naomi Connell
Chief finance officer
VolkerWessels UK

Matt Woods
Group commercial director
VolkerWessels UK

Rob Coupe
Managing director
VolkerStevin



Chief executive's statement

Once again I am pleased to report that VolkerWessels UK has seen positive growth in all our business units. Our consistent approach and selective bidding strategy has enabled us to focus on delivery and this has resulted in strong financial results and increased growth in our order book.

From vision to reality

In the year to 31 December 2016, our revenue increased by 3% to £877million and operating results grew by 10% to £23million. This confirms that our efforts to exceed our stakeholders' expectations and meet the demands of the market are paying off. We have established a growing reputation to consistently provide high quality services and solutions for our clients.

VolkerWessels UK and its businesses are uniquely positioned to address the current needs within the industry.

The wide range of disciplines and extensive experience of our people enables us to deliver integrated engineering solutions to the UK infrastructure and construction market. We have continued to develop strong relationships with public sector and blue-chip clients through involvement in multi-year framework contracts, combined with a high level of repeat business. This has provided a solid platform for us to build on our capabilities in core markets, expanding our involvement in infrastructure sectors and increasing market share in sectors such as ports and harbours, highways, energy, rail and airports.

£ million	2012	2013	2014	2015	2016
Revenues	691	697	747	852	877
Operating results	12	12	16	21	23
%	1.8%	1.7%	2.1%	2.5%	2.6%
Net cash	58	76	92	77	67
Net assets	71	80	102	80	78
Secured order book	819	1,005	973	901	1,003

We have delivered a number of prestigious projects right across the country, including the completion of the Second City Crossing on Manchester Metrolink, the extension to the berthing facilities in Portsmouth Harbour for the Royal Navy's new Queen Elizabeth class aircraft carriers, the opening of the Thameslink Hornsey train depot and the new Siemens Wind Turbine Blade factory in Hull.

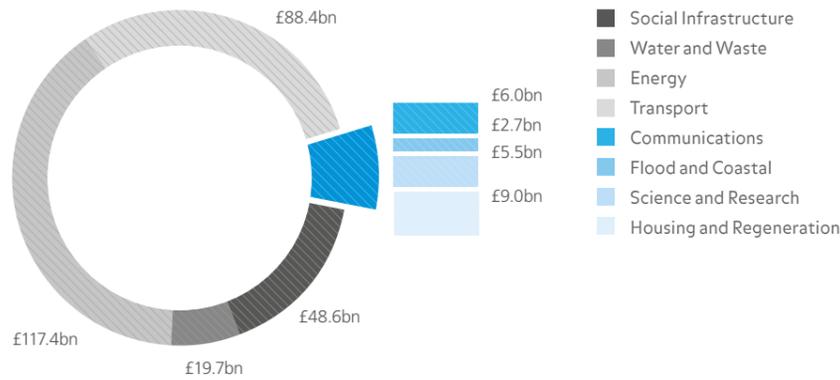
An opportunity to build

The UK government's commitment to infrastructure investment, as set out in the National Infrastructure Delivery Plan (NIDP), details plans representing over £500billion. This provides VolkerWessels UK with a great opportunity. The government sees infrastructure as the foundation on which the economy is built and this new pipeline will generate even more investment extending beyond the planned timeline. This will mean significant growth across the UK within the social and housing markets, energy, water, transport and civils infrastructure.

As an industry leader, we need to be ready to deliver as the pipeline of work evolves. It is an ambitious and exciting undertaking that will change the shape of our industry. We will need to be more innovative – open to using new technologies and processes, adaptable with our resources and our ability to utilise our skill sets. We know that these increasing volumes will lead to a significant skills gap across our industry and addressing this is a key aspect of our strategy for growth. By comprehensively developing and investing in our people, processes and infrastructure we are positioning ourselves to become the strategic delivery partner of choice.

A commitment to infrastructure

Infrastructure investment, by sector, spend from 2016-17 to 2020-21



Source: Infrastructure and Projects Authority, Major Infrastructure Tracking Unit

Innovation at work

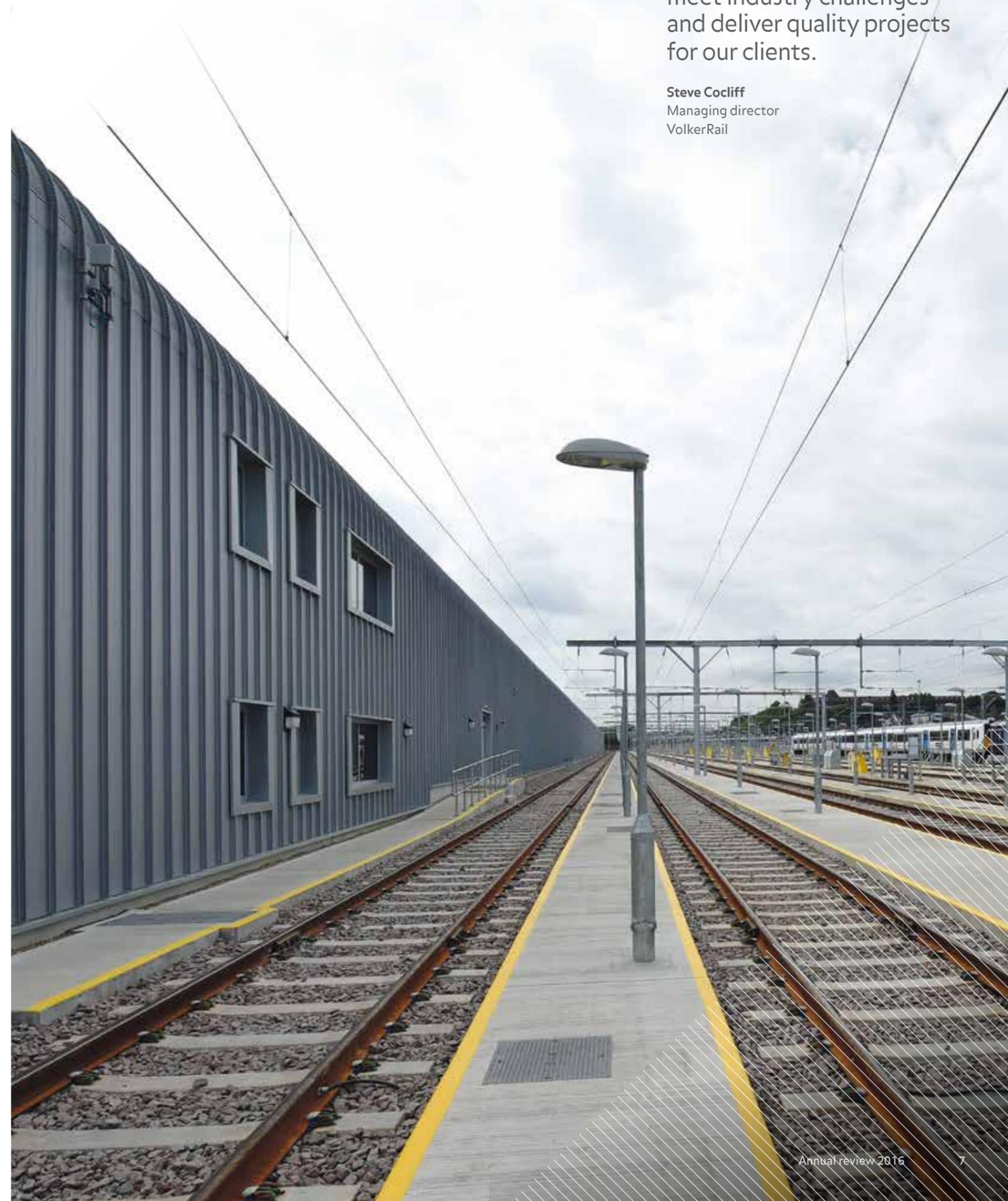
VolkerWessels UK undertakes a number of large complex projects every year. In 2016 we increased our level of collaboration between our businesses in order to deliver more integrated multi-disciplinary services.

To build upon our approach, we are encouraging and supporting our people to be more entrepreneurial and innovative. We continually provide our clients with the solutions they need to successfully complete their projects. We also are very selective in our supply chain – using the best available and working with them to problem solve and develop new materials to better serve our clients' requirements and budgets.

Innovation is important to us, it is something that we proactively invest in and embrace. It reaches every aspect of our business, and we are beginning to see results.

VolkerFitzpatrick developed a polystyrene solution to extend a platform at Cambridge North to guarantee its safe delivery in an area with poor ground conditions. VolkerStevin used a pre-cast concrete approach to construct two large water and waste water tanks at the AMP6 project at Oswestry using Design for Manufacture and Assembly (DfMA) process. In VolkerRail a blockade approach was used to complete critical track and points works to bring a platform into service at Bromsgrove station with minimal long term disruption.

Project
Thameslink Hornsey Depot
Location
London
Client
Siemens Rail



/// We are one of the leading infrastructure contractors in the UK. Our wide range of expertise positions us to meet industry challenges and deliver quality projects for our clients.

Steve Cocliff
Managing director
VolkerRail

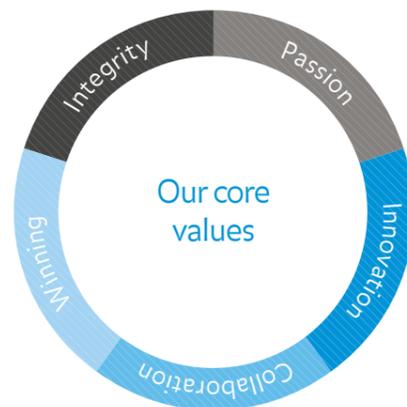
Chief executive's statement

VolkerWessels UK people are dedicated, focused and ambitious. We are proud of who we are and the way we work, with a collective goal to provide quality and add value to our clients.

Good people, strong culture

Our culture is a key part of our success, and all our teams operate in line with our core values which have been further articulated through our Vantage Business Model (read more on P10). It is how we enable success and it has made us stronger as an organisation.

We are clear about what is important and focus our attention on delivery and consistency to ensure our clients experience excellence. We have also further developed our core risk management approach and our clients and staff are all benefiting from this enhanced protection.



Our core values

Our core values define our organisation's ethics and guide our decisions, actions and behaviours, which results in best in class delivery, quality and people.

<p>Integrity</p> <p>We are open and totally honest; our business is ethically and morally strong and each of us is accountable.</p>	<p>Passion</p> <p>We are committed in heart and mind, and enjoy what we do.</p>
<p>Innovation</p> <p>We strive to be ahead of the game by continually improving the way we do things for ourselves and our clients.</p>	<p>Collaboration</p> <p>We collaborate in all aspects of our business, we work as a team to take advantage of our collective genius so that we succeed together.</p>
<p>Winning</p> <p>We never settle for second best; we always deliver high quality work and we strive to exceed expectations.</p>	

Building future talent

Across VolkerWessels UK we are committed to reaching out to schools, colleges and universities to develop our graduate programme which welcomed 42 graduates this year. We have also increased our apprenticeship and work placement intakes to expose as many young people as we can to our business and the industry. We actively engage with the communities where we run projects to promote engineering and construction and the possibilities for all individuals to enter the profession.

These are exciting times, and it is important to us that we play a significant part in developing the next generation of engineers. We will continue to identify and develop talent, build up the skills of our people and create opportunities for people to grow within the industry. To facilitate this we will provide learning and development opportunities through our skills academy, using mentoring as a way of developing people internally and our leadership development programme which focuses on nurturing strong, strategic leaders for tomorrow. This is in addition to supporting our people to become accredited and advance in their professional career through industry bodies like CITB, ICE and CIOB.



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new graduates within the business

Each VolkerWessels UK business has adopted a behavioural safety programme and we are seeing incremental improvements in our safety performance.



We have embedded a culture of good health and safety across our businesses; working closely with clients, partners and our people, and achieving continued success throughout 2016.

Richard Offord

Managing director
VolkerFitzpatrick

Recognition of our achievements in safety

We are committed to the highest standards of safety throughout our business. This year we have received a variety of industry awards for our work across the country.



10 British Safety Council 'International Safety' Awards



Two RoSPA Gold Medals and four Gold Awards



Focus on safety

Through the initiatives and processes we have in place, we are proud to report a consistently strong safety record, exceeding industry standards for 2016, as for previous years. Each VolkerWessels UK business has adopted a behavioural safety programme and we are seeing incremental improvements in our safety performance. This is an indication that these processes are fully embedded with our teams and those working with us on sites. We know that it is critical that we keep our people safe and not cause harm at work and we do not allow complacency in light of positive results. Our corporate responsibility department consistently provides incredible support and challenges the business in terms of preventative safety methods and health management.

This year we have also been recognised for our achievements in good health and safety results across the business.

Our future growth

In 2016 VolkerWessels UK reviewed its operations and structure in light of the sectors and market and decided to merge VolkerInfra into the wider VolkerStevin business. The integration will deliver commercial and operational benefits for a stronger platform and future growth of the business. This change has meant Rob Coupe managing director of VolkerStevin will assume responsibility for VolkerInfra. We are also pleased to announce Rob's appointment to the VolkerWessels UK Board, who along with Richard Offord (MD of VolkerFitzpatrick) and Steve Cocliff (MD of VolkerRail) joins us to strengthen the engineering focus at board level, and bringing our businesses even closer together.

VolkerWessels UK is increasing its presence within our target sectors and we are growing our recognition as a leader in engineering and construction across the country. As we continue to develop and invest in our business we will increasingly make a positive impact in the industry across the UK.

Alan Robertson

Chief executive officer
VolkerWessels UK

For more about our core values visit:
volkerwessels.co.uk/corevalues

Building advantage together

At VolkerWessels UK we have strengthened our culture through the Vantage Business Model by clarifying what we do, how we work and the standard we expect to see from our employees and partners.

Establishing foundations of excellence

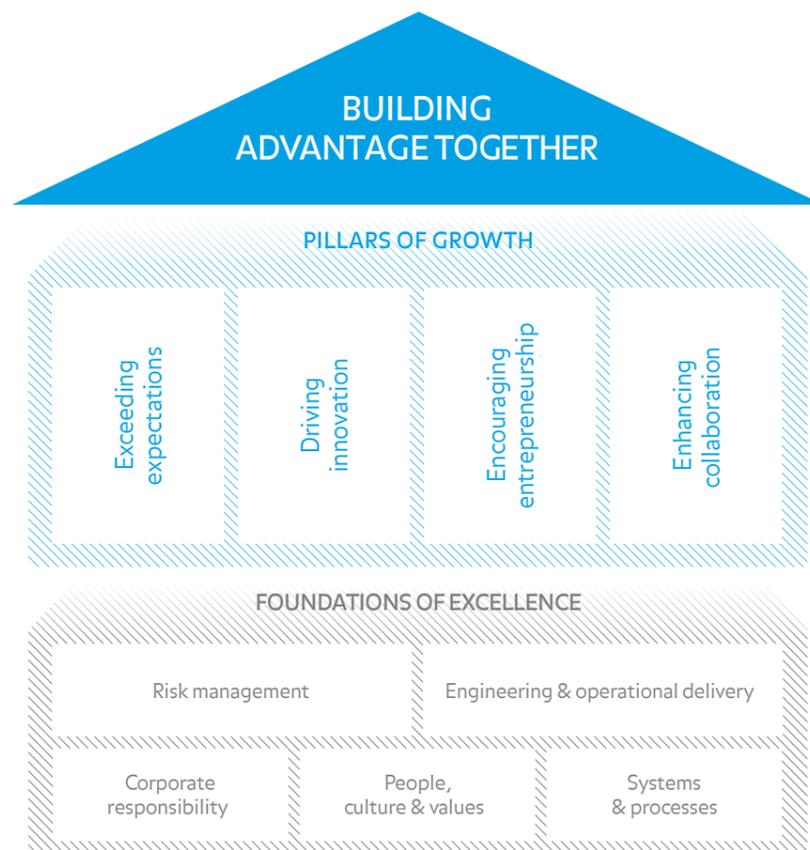
At the base of the model are the foundations that underpin everything we do. We continue to promote and establish good corporate responsibility and health and safety to safeguard our people. We develop our talented and dedicated people, living our core values and ensuring all our systems and processes work for us. This supports our approach and work.

The second layer has enabled us to continue to be successful contractors and really stand out. It is all about balancing risk management with good engineering and operational delivery.

Developing pillars of growth

We are driving our performance ever further, as we apply what we believe are key pillars of growth in all we do. By targeting these areas individually we are able to gain advantage in the marketplace.

Exceeding expectations means being industry leaders in efficient delivery for all our stakeholders. Driving innovation is about bringing these solutions to the forefront. We want our people to look for and capture innovation in their daily activities. Encouraging entrepreneurship is giving our people the confidence to come up with new ideas, exploring new lines of business and markets. Enhancing collaboration means working together internally, with our partners and supply chain to come up with optimal results.



Foundations of excellence

Our approach is embedded across the organisation and frames how we work with our clients and supply chain. Having a strategic approach to risk management, delivery and processes will play a part to further establish us as a leading contractor within the industry.

Engineering and operational delivery

VolkerWessels UK is committed to raising the profile of our engineering discipline. We recognise the importance of our engineering teams in the development and growth of our business. This increased focus enhances the engineering expertise that lies at the core of everything we do.

Within the industry there is a continuous demand on us to drive improvements and deliver value for money. This is, in part, due to the UK government's ongoing commitment to infrastructure investment and the requirement it opens up for skills to support existing and planned future programmes.

We have become consistent in our markets, brands, structure, talent, teams and results. We are seeing controlled and sustainable growth in all areas and work hard to maintain a balance between strong governance and entrepreneurship.

VolkerWessels UK and its five businesses feature multiple engineering disciplines and the ability to work in a number of sectors, as a result collaboration, is integral to how we operate. Internally we encourage this environment and focus our energy on solutions, understanding our strengths and sharing best practice. Externally we build long term collaborative relationships with our clients and supply chain, securing our position and raising our profile as a leading provider of dependable integrated services.

Systems and processes

VolkerWessels UK aims to have the most efficient and effective systems and processes in place to support every aspect of its business, to drive improvements and delivery. We also provide a professional shared service, to complement the in-business support provided locally. Balancing the needs of the business for local support, and the efficiency of sharing resources to guarantee consistency of approach is how we maintain quality standards to meet our clients' requirements.

People, culture and values

As with any successful business, people are at the heart of everything we do and are extremely important, along with our culture and values, and as such we have a dedicated section on developing our people on page 14.

Corporate responsibility

Similarly we take our corporate responsibility very seriously indeed and have a dedicated section on page 18.



The Vantage Business Model has encouraged us to streamline efforts and concentrate on the things that positively impact our business.

Naomi Connell
Chief finance officer
VolkerWessels UK

Read more on our
Business Model at:
[volkerwessels.co.uk/
ourvision](http://volkerwessels.co.uk/ourvision)

Building advantage together

///
We recognise the need to guarantee consistency within our approach – it enables us to maintain high quality standards to meet our clients’ requirements and our corporate goals.

Matt Woods
Group commercial director
VolkerWessels UK

Risk management
We actively identify and manage our risks across our business and operations through the entire project life cycle. This provides the platform for us to fully scrutinise and understand every activity from pre-contract to design through to construction and delivery.

Our clients trust us to deliver and follow the advice we provide, therefore we work very closely with them to ensure risks are understood, managed and clearly apportioned. We recognise that managing risk is critical to the success of any project and company and we liaise with our colleagues across the business to improve and explore better ways to support them in this area.

A holistic approach
Our approach to risk management covers every aspect of our business.



Pillars of growth

We aspire to be the contractor of choice with clients, strengthening our position as leaders in the industry with the help of these pillars of growth.

Exceeding expectations

VolkerWessels UK, and its people, have a strong work ethic and a culture of excellence. Delivering to the highest standards is embedded in how we work. Our honest and clear approach to each project is maintained as we involve the client at every stage of the process. Taking time to understand our clients’ needs and what they want to achieve is important to us.



Our building projects consistently achieve BREEAM ratings demonstrating a commitment to sustainability.

Driving innovation

The majority of our projects are complex in nature and our project teams have to regularly explore innovative ways to complete a project to standard and on time. We not only encourage our people to look for innovative solutions, we are taking it a step further by investing. We apply solutions identified as best practice and implement new technology to enhance our delivery.



Our flood defence and recovery work includes designing and constructing effective structures to prevent flood damage and protect assets and communities across the UK.

Encouraging entrepreneurship

VolkerWessels UK has always encouraged entrepreneurship – it is in our heritage. We allow our people to step up, develop ideas that either help our clients and their experience with us, or generate additional new work through relationship management. The idea is to give staff the confidence to present new solutions as we explore new lines of business and opportunities in the marketplace.



We develop early careers by creating opportunities for graduates, apprentices and work placements from local universities and schools.

Enhancing collaboration

Collaboration is key to how we operate. With five unique businesses, all featuring specialist skills and expertise, we are able to offer an integrated service, increasing our ability to meet our clients’ needs. Many of our current projects include more than one of our businesses. As a result working collaboratively with our clients, partners, suppliers and teams has become second nature to us.



Our expertise in delivering light rail projects includes the ability to work closely with contractors, local businesses, councils and suppliers to achieve success.

At VolkerWessels UK, people are critical to our success. We pride ourselves on having a strong culture of commitment, dedication and hard work; demonstrated through the high level of skill and expertise we have as an organisation.



VolkerWessels UK aspires to become a learning organisation and as such we have made a significant investment in development throughout 2016.

We are passionate about development and enabling growth for everyone, at all levels of their experience with us. Strategically our values align and inform us on how we need to work to achieve success. We have seen our teams become fully integrated and this has enhanced the services we provide to our clients.

A clear strategy for people

Our people consistently achieve a high level of performance; to maintain this we are improving all related areas. Our strategy therefore focuses on four main drivers – recruitment, employee development, retention and performance.

Engagement and values

The level of engagement amongst our staff is important to us, we recognise that engaged people are more productive and loyal. Across VolkerWessels UK we have embedded our values and approach to work, and results from our employee engagement survey indicate that we are on the right track.

Employee engagement

Survey results show positive levels of engagement at VolkerWessels UK.



15%

above the benchmark average for similar companies



Developing and retaining our people

Through our many in house programmes we have developed our own people and throughout 2016 we have increased our investment in order to generate positive growth. Keeping our people professionally trained, skilled and knowledgeable will ensure that a sustainable pool of talent is available at VolkerWessels UK, that is equipped to successfully support the industry.

In order to encourage the right behaviours and to achieve our priorities, VolkerWessels UK has developed a set of core behavioural and technical competencies. VolkerFitzpatrick is leading the way with this programme to improve how we measure performance, ensuring that our people are competent at all levels. It identifies the key areas to be developed and ensures our staff are better engaged and encouraged to move forward with their careers. This year, we introduced a new learning management system (LMS) to support this and to provide the tools needed to deliver improved learning and knowledge sharing across all disciplines within our business.

The wide range of construction and civil engineering disciplines used across all VolkerWessels UK businesses provides an opportunity for new talent to gain experience on a variety of exciting projects. We actively promote opportunities internally to make sure team members gain the right experience on some of the largest infrastructure projects across the country.

We work closely with industry based educational organisations, such as the Construction Industry Training Board (CITB), Chartered Institute of Building (CIOB) and the Institution Civil Engineers (ICE) to help our people achieve professional accreditation. Through these relationships we are able to identify the right work placement candidates, apprentices and graduates, who are in the process of getting qualified. Many of these individuals end up working with us permanently.



Developing our people

VolkerWessels UK recognises the challenges in the industry to fill the skills gap, especially as the government's infrastructure plan is initiated. Our response is to continue our apprentice and graduate programmes, developing early careers in the industry to support the next generation of engineers.

We support the Careers & Enterprise Company and other similar organisations, providing help and advice to a number of schools and colleges to promote engineering and construction careers and raise awareness.

Investing in early careers is important to us and we see apprenticeships, work placements and the graduate scheme as a central part of our future skills and talent strategy. Each VolkerWessels UK business is fully engaged and offers a variety of opportunities aligned to their specialist skill set. Our experienced managers also offer mentoring and coaching, enabling the sharing of a wealth of knowledge and experience in engineering and construction.

Investing in a generation
VolkerWessels UK is part of the industry led young person's recruitment initiative, The 5% Club.



Celebrating success
Throughout 2016 a number of our people were awarded for their outstanding performance from industry awards and organisations. At the end of the year we prepared for our annual Platinum awards that celebrated outstanding work to demonstrate high achievements of individuals, teams and projects.

VolkerWessels UK in 2016 has seen:

5%
increase in headcount

34%
of the organisation made up of qualified or certified professionals

36%
increase in apprentice intake

VolkerWessels UK is built on the experience of our people. We consistently recruit and develop the very best professionals to achieve our vision of becoming the contractor of choice.

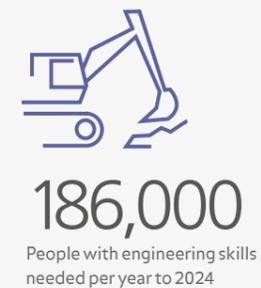
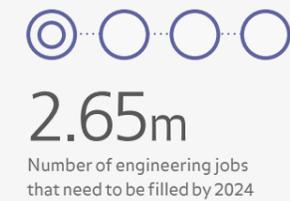
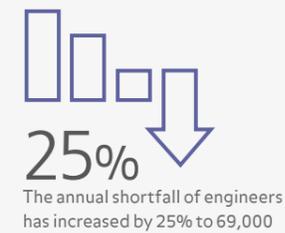
Andrew Edge
Human resources director
VolkerWessels UK



Construction Manager of the Year Awards
Rakesh Chavda, project manager, VolkerFitzpatrick won Gold at the Chartered Institute of Building's 2016 Construction Manager of the Year Awards.

Addressing the skills gap

VolkerWessels UK is committed to developing future skills and providing opportunities for new talent to develop careers within engineering and construction.



Source: Engineering UK 2016: State of Engineering



Magda Wasielewska
Graduate quantity surveyor
VolkerFitzpatrick



Q&A with Emma Harrison,
Assistant quantity surveyor, VolkerRail

- Q What's your background and how has your career progressed?**
A I started in signalling and power in 2014 as a trainee quantity surveyor after transferring from a payroll position in the finance department. I decided to change career to challenge myself, and saw quantity surveying as a good fit. This led me to complete my qualifications in commercial management, which included civil engineering. My plan is to become a fully qualified quantity surveyor within the next two years.
- Q How are you involved in the industry?**
A Very few women work in rail and operations. I hope to become one of the most successful, proving that being a woman does not affect my ability to work in construction and rail. I would like to see more women in the industry as I feel it would add value – companies are missing out. VolkerRail is involved in programmes to encourage women to become engineers and operational staff, and in some ways I have become an ambassador for this as one who has found it to be a very positive experience.
- Q What are you most proud of?**
A Reaching the stage where I was able to manage my own project was great. I'm also proud of winning the company's Platinum award for 'best training and development professional of the year. I was recognised for my hard work and the successful progress of my career so far. It has made me strive for further success within VolkerWessels UK and I would like to repay VolkerRail by helping them to become the most successful rail contractor within the industry.

VolkerWessels UK is committed to maintaining the highest standards of health and safety, sustainability and integrity throughout all our business activities.

Health and safety

Central to our corporate responsibility approach is having a culture where our people consistently demonstrate the right behaviours and apply best practice, especially as it relates to health and safety.

We continually aim to prevent work related injuries and the ill health of our employees and anyone associated with our activities, while also improving their wellbeing. We maintain the right culture, combined with effective systems to deliver quality projects in a safe and sustainable manner.

Established best practice

Well established behavioural programmes have enabled our workforce, employees and supply chain, to actively engage to maintain a safe working environment; introducing a range of proactive and preventive improvements to how we conduct our operations.

In 2016 VolkerWessels UK achieved significant improvements across the range of safety performance indicators. These results reflect our lowest recorded year end safety results and our best safety performance to date, well below industry averages.

Maintaining the mental and physical health of employees is the cornerstone of our occupational health strategy, delivered through a directly employed occupational health team. In addition to health surveillance, we place particular focus on raising awareness and the importance of maintaining good mental health. This includes training for line managers and supervisors on tackling health risks specific to construction while providing any support and guidance required.

In 2016 VolkerWessels UK achieved significant reductions across the range of safety performance indicators.



Our people demonstrate a clear determination to succeed and take pride in their endeavours, actively working towards having a workplace free of injury and ill-health while we pursue excellence in construction.

Adrian Shah-Cundy
Corporate responsibility director
VolkerWessels UK

Sustainability

Our business strategy seeks to ensure ongoing environmental, social and business sustainability. Construction has a significant effect on the environment. We consistently plan our activities to be as socially and environmentally responsible as possible.

Carbon

We are reducing our carbon emissions year on year by focusing on resource efficiency across our activities, and seeking carbon reductions within our construction operations by increasing our commitment to lower carbon solutions.

Carbon emissions were reduced by more than 9% in 2016. 17.1% reduction per employee (10.1 tCO₂e) and a 20.3% reduction per £1m turnover (28.4 tCO₂e).

Energy

We continually improve the energy efficiency of our activities, goods and services through a more sustainable use of electricity and fuel. This includes the promotion of alternative specifications and technologies to influence energy efficiency in the structures we design and build, and the use of more energy efficient methods of transportation.

Biodiversity

We play our part in the prevention of overall habitat and species loss, habitat fragmentation and disturbance by protecting and enhancing the ecosystems affected by our activities.

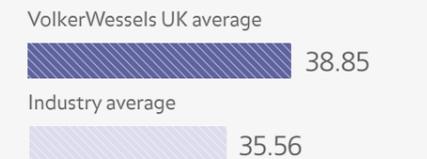
Waste

We aim to reduce the amount of waste we produce from our activities, with a particular focus on the prevention of construction, demolition and excavation waste sent to landfill.

Water

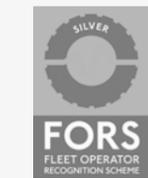
We commit to eliminating the unnecessary and improper use of water (potable and non-potable) in addition to influencing improved water efficiency of the structures we design and build.

Our aim is always to maximise opportunities to mitigate and limit any adverse impacts on the environment.



This year we have achieved an average score of 38.85 over 62 Considerate Constructors Scheme assessments, compared to an industry average of 35.56.

VolkerWessels UK achieves FORS Silver



Planet Mark™ Certificate achieved for continuous improvement in sustainability.



Corporate responsibility

Integrity

VolkerWessels UK believes that integrity is of paramount importance – it is one of our core values. Every one of our employees, and those who work closely with us, are accountable to this key value.

We expect our people to be open and honest, to run our business ethically and to be morally strong. Long term success is dependent on the recruitment, development, wellbeing and retention of exceptional people that share the right core values and culture.

We have a zero tolerance attitude towards fraud and unethical behaviour. We consistently maintain effective oversight and scrutiny processes, carried out with independence and impartiality. This is supported by a full suite of policies, to ensure that all our activities are conducted to the highest ethical standards.

Giving back to the community
Our offices and sites work actively to become a part of the communities in which they work. We respect all people and their local environment. Our aim is to add value to our society, inspire others and support colleagues, clients and suppliers in their own efforts to share time, skills and resources in their chosen way.

Our business wide hazard / near-miss / close-call reporting campaign includes a £1 donation for every card raised – which led to over £44,000 being donated to Mencap over the past three years. Also to extend our fundraising for Macmillan Cancer Support, we plan to start a new partnership in 2017.



Our decision making is linked to ethical values, compliance with corporate, legislative and other requirements, and we are always prepared to seek further improvements.



We are also committed to working with established industry-based charities that use our expertise as engineers and contractors, like the work we do with CRASH in the UK and building projects run by Operation Raleigh in third world countries. VolkerFitzpatrick's building division are involved in CRASH, the construction and property industry charity that aims to improve the lives of the homeless, and develop, hospices.

Operation Raleigh

VolkerFitzpatrick in partnership with development charity Raleigh International, sent three graduates to a building project in Juito, Costa Rica.



Donating my time and skills was a once in a lifetime experience. The project was incredibly rewarding and the new school room will make a huge difference to the people and community at Juito.

Matthew White
Assistant quantity surveyor
VolkerFitzpatrick

We work collaboratively with our teams, partners and supply chain, enabling us to deliver optimal solutions for our clients. We are recognised for the value we add to their projects and programmes.



Our relationship with VolkerRail is an excellent example of great collaboration. Our long standing service support contract has produced some very tangible benefits for both parties, which should be more commonplace in our industry.

Kevin Townsend
UK Managing director
Matisa



VolkerRail do everything they can to aid me with the progression of my apprenticeship and the support they have given me is phenomenal.

Glyn Oliver
Apprentice project engineer
VolkerRail

In 2016 we faced our biggest challenge in managing flood risk in Cumbria and Lancashire. Thankfully the strong relationship and trust we have built with the team at VolkerStevin, over a number of years, paid dividends in our time of need. A five star effort by all involved.

Andy Brown
Flood and coastal risk manager
Environment Agency



The project team delivered a challenging large scale project, the likes of which we haven't seen before in West Berkshire – on time, on budget, and in an absolutely professional manner. It has been a pleasure to work with VolkerHighways.

Nick Dale
Senior electrical engineer
West Berkshire Council

We are proud to have safely delivered the Hornsey train depot for Siemens. We constructed this flagship project in a challenging environment on this key route into London.

Chris Evans
Managing director
VolkerFitzpatrick



Working for VolkerStevin is immensely satisfying. I have worked on some technically challenging projects, alongside some incredibly skilled people.

Manuel Bräu
Graduate engineer
VolkerStevin

It has been a pleasure working with the team at VolkerFitzpatrick who underwent a robust assessment process to be one of the first companies to achieve BIM level two certification with BSI, against the requirements of PAS 1192-2.

Andy Butterfield
Global head of construction product certification
BSI



Project
IEP Doncaster Carr depot
Location
Doncaster
Client
Hitachi Rail Europe

We are widely recognised as leaders in the rail sector, bringing a collaborative and innovative approach.

The rail infrastructure sector is a major part of VolkerWessels UK operations, with our companies involved in a large number of multi-year frameworks across the country.

VolkerRail deliver and maintain heavy and light rail infrastructure for major projects including electrification, high voltage power distribution, overhead line, track, signalling, rail plant and welding. Main clients include Network Rail, Transport for Greater Manchester, Transport for London, Siemens and Hitachi Rail Europe.

VolkerFitzpatrick lead the way in depot building across the country. We also deliver multidisciplinary solutions in rail infrastructure, stations and earthworks within large-scale frameworks like the Anglia Route Collaboration (ARC), a partnership with Network Rail and Atkins.

VolkerGround Engineering and VolkerLaser also provide specialist services to the rail industry. VolkerGround Engineering recently installed steel sheet piling for the Thameslink Hornsey depot and VolkerLaser delivered key repair and refurbishment works for several of the UK's rail overbridges.

I am proud to say that we continue to grow our market share in the rail infrastructure industry on the back of dependable safe delivery and a collaborative approach.
Steve Cocliff
Managing director
VolkerRail



Our rail infrastructure projects were delivered by

- VolkerFitzpatrick
- VolkerRail
- VolkerStevin
- VolkerLaser

£314m
Revenue across 4 businesses

Projects featured

- IEP Doncaster Carr Depot
- Thameslink Depot, Hornsey
- Cambridge North station
- National Tamping contract
- Manchester 2CC
- Bromsgrove upgrade



Rail infrastructure

IEP Doncaster Carr Depot

VolkerFitzpatrick was commissioned to build a new facility to house Hitachi Rail Europe's newest fleet of Class 800 large capacity long distance trains.



Thameslink Depot Hornsey

Siemens appointed VolkerFitzpatrick as construction partners to design, build and commission two depots – Hornsey, London and Three Bridges, Crawley. At Hornsey, the project included the redevelopment of two separate areas of existing infrastructure, including the operational depot and derelict sidings. The challenge was to construct this within a live operational rail environment, which drew on the team's significant experience and expertise to achieve success.

The depot was developed to facilitate new rolling stock for the Thameslink upgrade programme developing rail links between Brighton and Bedford. Construction works included building a new three-road, 12 car maintenance shed, two carriage washing machines, offices, all associated depot infrastructure. A large part of the project involved extensive work on the sidings and the widening of two bridges over the New River and Turnpike Lane to enable access.

VolkerRail provided the permanent way, overhead electrification and signalling works collaborating to deliver the requirements of this complex project, safely and on time.

The Doncaster Carr site has been a railway depot location for over 100 years. VolkerFitzpatrick were commissioned to build a new facility to house Hitachi Rail Europe's newest fleet of Class 800 large capacity long distance trains. The trains will replace the current intercity fleet, increasing passenger capacity.

Works included the demolition of the existing buildings, and the construction of an 15,000m², 12 car rail maintenance depot. The facility will enable the inspection, cleaning, repair, maintenance and refuelling of trains. The depot is also equipped with twin level access gantries and monorail hoists.

15,000m²

12 car rail maintenance depot

Other facilities include a wheel lathe, bio-pit, train wash and cleaners' accommodation. In addition, associated railway depot infrastructure works were upgraded, including new signalling and overhead line equipment (OLE) construction in accordance with the relevant Network Rail standards. Road access to the depot will also be improved as part of the works. Once in operation, the depot will accommodate a minimum of 5 twelve-car trains which will be housed there every night.



A professional electrification service

With the ability to manage all phases and aspects of railway electrification projects, VolkerRail developed an innovative, UK certified, four module high output wiring system. The overhead line electrification system has the capacity of full line tension winding in and out of the conductor wires, together with handling and access units. It is fully supported by our specialist rail mounted plant and trained maintainer operators, enabling us to provide a coordinated single point electrification delivery team for projects across the UK.

VolkerRail is completing the overhead line electrification works at Hitachi Rail Europe's new train maintenance depot in Doncaster. Once complete the team will have installed over 8,000m of overhead line and 140 overhead line equipment (OLE) structures.

An innovative solution

VolkerRail developed an innovative, UK certified, four module high output wiring system at Hitachi Rail Europe's new train maintenance depot in Doncaster.



8,000m

overhead line

140

overhead line equipment (OLE) structures

Award winning tamping and plant services

As part of the National Tamping contract, VolkerRail's plant division supply, operate and maintain 11 On Track Machines (OTMs) for Network Rail. Nine tamping machines and two ballast regulators were provided, along with experienced machine operators and management services.

Tamping and plant works is a specialist area for VolkerRail and is critical to our ability to provide a fully inclusive service. To achieve this we have a highly experienced team

in place who have a good reputation of delivering quality. Considered some of the best drivers and operators in the country, VolkerRail's plant team maintain a high level of performance, regularly exceeding reliability and safety targets. They have undergone extensive training and work closely with suppliers, Matisa UK, to provide an excellent standard of service.





Manchester Metrolink 2CC

VolkerRail continues to deliver work as part of the MPT consortium, to develop the UK's largest light rail system: Manchester Metrolink.

The team successfully completed the final line as part of the Phase 3 works at Second City Crossing (2CC), and are set to deliver the project ahead of schedule. 2CC will provide a more frequent, reliable and flexible tram network, which now provides more than 35million journeys a year.

This was achieved by working collaboratively with clients, utility companies, the local council and stakeholders.



Keeping Manchester moving

The Trafford Park line will call at six new tram stops – Wharfside, Imperial War Museum, Village, Parkway, EventCity and the Trafford Centre.

They also achieved two years RIDDOR free, due to positive behaviours and the input of the onsite team, which led to an innovative approach implemented to support health, safety and the environment. VolkerRail was recognised at the Global Light Rail Awards, where they won the 'Safety Initiative' category and highly recommended for the Environment and Sustainability entry.

Moving forward, MPT are now working to construct a new 3.8km line to Trafford Park, which will increase the size of the Metrolink network to over 102km.

Bromsgrove upgrade

In partnership with Network Rail and Siemens Rail Automation, VolkerRail successfully completed works as part of the upgrade in Bromsgrove, Worcestershire. In a 12 day blockade the team constructed new track and points on the approach to the new Bromsgrove station, bringing a new platform into use.

The blockade approach is an effective way of completing complex and intense works with minimal long term disruption to rail operations. It requires a large amount of detailed planning and management, with multiple interfaces with stakeholders to ensure successful delivery. Collaborating well with all partners, the VolkerRail team worked to an exemplary standard to achieve the desired results in a short timescale.

This project forms part of Network Rail's Panel Framework. This five-year framework will see VolkerRail complete enhancements and renewals to the London North Western routes.

Reducing disruption

The 12 day Bromsgrove blockade enabled us to complete complex works with minimal disruption to rail operations.

- 3.2km track constructed
- 1.8km drainage constructed
- 3km cables recovered
- 7 points ends installed
- 2 platforms demolished

New Cambridge North station
Network Rail appointed VolkerFitzpatrick to design and construct a new railway station between Waterbeach and Cambridge stations on the West Anglian main line in Cambridge.

VolkerFitzpatrick rail division, as partners in the Anglia Route Collaboration (ARC), were appointed to design and construct a new railway station between Waterbeach and Cambridge stations on the West Anglian main line in Cambridge. The new Cambridge North station will relieve congestion, improving the experience for local residents and businesses while enabling better access to the wider public transport network.

This extensive project included the development of a single faced platform, an island platform and a platform extension to accommodate 12 car trains. The original platform extension design called for ground improvements due to poor conditions. The team used a polystyrene platform that required minimal ground preparation and

improved installation times, reducing the amount of possessions needed and guaranteed a quality finish.

A footbridge was built to provide disabled access from the station building to all platforms. A new car park, cycle path and road extension were developed for pedestrians, motorists and cyclists to provide easy connection to the bus station. In addition to the new station, existing sidings were reconfigured and extended to optimise freight movement.

VolkerFitzpatrick were recognised by the CIRIA's Big Biodiversity Challenge for diverting waste from landfill, reusing site materials and developing a new habitat for species found on-site, as well as preserving the local flora and fauna.



Q&A with James Ramsden
Senior project manager, VolkerRail

Q Describe your role

A As a senior project manager within VolkerRail involved in the CP5 contract, I have been able to fully use my experience as an engineer, in delivering multi-disciplinary projects.

Q What was the benefit and impact of this project?

A As part of the development for the new Bromsgrove station, electrification works and overhead line equipment (OLE) were installed from Barnt Green to Bromsgrove. This will allow the existing Cross City line (powered by OLE) to be extended, increasing the service to three trains per hour to align with the wider transport strategy to extend Cross City services to a 20 minute frequency into Bromsgrove.

Q With a project of this complexity, how did you manage safety and reliability?

A We delivered significant remodelling to the track, drainage, points heating and multiple civils interventions all leading up to the 12 day blockade in October 2016. The project was delivered with an exemplary level of safety throughout, attracting a number of internal safety awards for the team.

We implemented innovative construction techniques to facilitate drainage installations using 'new to market' materials/equipment to prevent individuals entering excavations. This was just one of the ways used to keep the site safe while allowing us to meet key milestones.

In addition to positive feedback from Network Rail, we were commended by the Office of Rail and Road (ORR) and Department for Transport for our safety management. We achieved an unprecedented level of quality standards, handing back the project ahead of schedule with zero re-work for defects.

Marine, energy, water and environmental infrastructure



We have a long history and well-earned reputation for delivering clean and wastewater infrastructure and non-infrastructure projects.

VolkerWessels UK carries out extensive and varied work across the marine, energy, water, and environmental infrastructure sectors

In these growth areas for VolkerWessels UK, we work with a number of central government departments and blue chip clients including the Environment Agency, Defence Infrastructure Organisation (DIO), United Utilities and National Grid.

VolkerStevin is an expert in the provision of marine infrastructure and a leading provider of engineering solutions for flood risk management and water infrastructure in both clean and wastewater. They have an excellent reputation based on strong client relationships and consistent high quality of delivery.

Across the energy sector, VolkerStevin provides specialist onshore and near shore extra high voltage cable systems and horizontal directional drilling supporting the renewal and upgrading of the UK electricity supply network. VolkerGround Engineering and VolkerBrooks provide specialist piling and plant services through internal collaboration and for external partners across a wide range of industries. VolkerFitzpatrick's main focus in this area is civil engineering and enabling works for waste management and the development of processing facilities to deliver renewable energy. VolkerLaser is a specialist in waterproofing, strengthening, insulation and repair services to suit a variety of surfaces and projects.

/// We have gone from strength to strength over the last 12 months, continuing to grow both our turnover and overall profitability. We have achieved this success by investing in our people – developing successful delivery teams and ensuring the future of our business, and industry, via our investment in graduates, trainees and apprentices.

Rob Coupe
Managing director
VolkerStevin



Our marine, energy, water and environmental infrastructure projects were delivered by

VolkerStevin

VolkerFitzpatrick

VolkerLaser

£189m

Revenue across 4 businesses

Projects featured

- QEC Berth, Portsmouth
- Thames Tideway Tunnel
- AMP 6, Oswestry
- Asset recovery (Ipswich, West Yorkshire)
- Rampion



Project
**Queen Elizabeth Class (QEC)
Base Porting infrastructure project**

Location
Portsmouth,

Client
Defence Infrastructure Organisation (DIO)

Marine, energy, water and environmental infrastructure

Water

We support major utility companies and other private sector clients, helping to maintain and improve their assets to ensure that households and businesses across the UK receive good quality water, sanitation and drainage services.

We also ensure they comply with strict legislation and demands imposed by population growth, climate change, carbon reduction and rising energy costs.

Our engineering teams have significant experience in all aspects of water contracts through the delivery of asset management frameworks and substantial in-house Mechanical, Electrical, Instrumentation, Control and Automation (MEICA) expertise.

Opening up the River Thames

Construction of two new floating piers at Blackfriars and Victoria Embankment to facilitate access to the Thames Clipper Water Taxi.



Victoria Embankment



Blackfriars

Improving London's water infrastructure

There is a growing demand to address pollution levels in the River Thames, London. This includes repairing the sewerage system and improving the quality of the water. The Thames Tideway Tunnel project opted to use combined sewer overflow interceptor structures to address the problem and appointed VolkerStevin to conduct enabling works in advance of construction.

As part of the enabling works, VolkerStevin is constructing new floating piers at Blackfriars and Victoria Embankment and will oversee the subsequent relocation of the 'President' and 'Tattershall Castle' vessels. The new piers will also facilitate access to the Thames Clipper Water Taxi

Service. Main works include public access improvements, tubular piling, sheet piling, pier pontoon installations, dredging and scour protection.

In May 2016 work commenced on the tunnel's east section, constructing temporary works that reclaim areas of the river to accommodate the reception and drive pits for the tunnel sites. The works will prepare the two sites for the main tunnelling, creating dry working areas to provide access to construct the tunnel. The two sites are located along the river front at Chambers Wharf and King Edward Memorial Park Foreshore, Wapping.



AMP6 Oswestry

AMP6 is a design and construct framework covering the full range of works required for both water treatment and wastewater.

Improving water quality and supply

United Utilities appointed C2V+, a VolkerStevin and CH2M joint venture, as one of its capital delivery partners for AMP6. This five year programme comprises multidisciplinary activities including design, project management, construction, testing, commissioning and maintenance of water and waste water treatment works, pipelines, pumping stations, reservoirs and mechanical and electrical installations.

During 2016, VolkerStevin worked on several projects including flagship schemes at Oswestry in Cheshire and Anchorsholme Park on the Fylde coast. At Oswestry they are delivering a £54m water treatment works to include a treatment process, a first for the UK, which harnesses chlorine dioxide,

a powerful oxidant to remove manganese. The project involved the construction of two large rectangular tanks – using 2,000 precast concrete sections. Design for Manufacture and Assembly (DfMA) was extensively used to develop materials and products off-site to minimise activities on-site. This allowed for a safer and more efficient construction process

Oswestry will treat raw water from Lake Vyrnwy Reservoir which provides drinking quality water to one million domestic, commercial and industrial clients in Liverpool and parts of Cheshire. Once the upgrade project is completed it will provide up to 210MI/d (mega litres per day) of drinking water to the latest standards, sustaining this area both for now and the future.



Preparing materials off-site improved safety and saved time

2,000
precast concrete sections

11,000t
concrete precast off-site

7,000hrs
reduced on-site man hour

700t
steel products fabricated and assembled before delivery

We have had another strong year, expanding our operations in infrastructure and energy sectors by investing in the delivery of a wide range of self-delivered specialist services, our people, processes and procedures.

Mike Weaver
Managing director
VolkerLaser

Marine, energy, water and environmental infrastructure



Flood risk management

VolkerStevin has vast experience in the construction of flood defence projects throughout the UK in both urban and rural areas. Flood and coastal defence projects include sheet pile and reinforced concrete flood walls, earth embankments, river realignment, habitat and wetland protection, de-mountable flood protection systems, lock gate installation and refurbishment, hard and soft landscaping and mechanical, instrumentation and electrical works.

VolkerStevin, through its joint venture with Boskalis Westminster and Atkins (VBA), is one of six asset delivery partners for the Environment Agency's Water and Environment Management (WEM) Framework. It focuses on reducing the risk of river and coastal flooding, as well as securing social and environmental improvements across England and Wales.

Following the devastating flooding of Winter 2015/16, the Environment Agency instigated an Asset Recovery Programme (ARP) to ensure damaged defences are repaired or improved, and new defences designed and constructed ahead of Winter 2016/17. VolkerStevin was awarded ARP packages for Cumbria, Lancashire and the Calder Valley in West Yorkshire. Our multidisciplinary teams work closely with the client to assess every individual asset and develop the required solution to bring each one back up to standard. Through a committed and collaborative approach we successfully achieved 'winter ready' status in the required areas.

A collaborative approach

Our close work with the Environment Agency has ensured that areas devastated by flooding achieved 'winter ready' status.



VolkerStevin is widely regarded as one of the UK's top marine civil engineering and energy contractors.

Marine

We deliver the full range of marine engineering projects including jetties, port and harbour infrastructure, marinas, quay walls, linkspans, submerged tube tunnels, and floating structures.

Making an impact in the defence sector

VolkerStevin was appointed by the Defence Infrastructure Organisation (DIO) to design and construct a secure tidal berth at Her Majesty's Naval Base Portsmouth (HMNB Portsmouth). QEC berth will house new Queen Elizabeth class aircraft carriers, the biggest ships ever built for the Royal Navy.

Construction involved upgrading the existing jetty to withstand berthing, mooring and operational forces expected when the new carriers arrive. The works fully utilised VolkerStevin's multidisciplinary skills and experience in civil, mechanical and electrical engineering.

This complex project required an integrated service including the skills and expertise of our internal divisions – VolkerLaser, VolkerInfra and VolkerBrooks, to ensure the quality of delivery remained high. This large-scale infrastructure project further established VolkerStevin in the defence market and confirms its ability to deliver complex schemes in challenging environments.



Q&A with Stuart Newby, Contracts manager, VolkerStevin

Q Describe your role

A I am a regional framework manager covering the North of England. My area of responsibility includes flood and coastal projects for key clients like the Environment Agency (EA), National Grid and local authorities.

Q Tell us about a recent flood risk project

A A number of communities in Cumbria and Lancashire were affected by extreme flooding in Winter 2015/2016. This was a national emergency aggravated by adverse weather conditions and required urgent work to help these communities. We mobilised up to 50 members of our team on the ground to multiple sites to get involved. They put in place temporary measures to protect against further flooding and to recover where possible.

Q How did we add value to the client and guarantee success?

A VolkerStevin has worked with the EA for over 15 years, so we have developed a mass of knowledge on how best to work with their assets. It goes without saying that we have built a strong relationship with their teams over the years.

When we were awarded the Cumbria and Lancashire package of works the anticipation was that the recovery project would include 30 sites to be completed by the end of September 2016. We have now been involved at over 50 sites with work still being added to the package and the client extending the contract to September 2017.

Energy

VolkerInfra has made a name for itself by providing complete cradle to grave solutions for extra high-voltage cable systems from 50 to 400 kVA, and trenchless techniques, specifically horizontal directional drilling (HDD), where rivers, roads, railways and existing cable and pipeline networks have to be crossed.

Onshore drilling and cabling

VolkerInfra was appointed by E.ON and partner UK Green Investment Bank, to complete major horizontal directional drills (HDDs) on Rampion Offshore Wind.

The works include onshore major HDDs under the A27, a railway crossing between the A283 and River Adur and a landfall to bring the cables on shore. The works form part of the wider Rampion project which when complete will provide 400mW of generating capacity delivered from 116 wind turbines and one offshore substation located 13km off the Sussex Coast.





Project
Gatwick Airport rehabilitation

Location
Crawley

Client
Gatwick Airport Limited

For over 30 years our expertise in highways infrastructure has improved communities, towns and cities.

VolkerWessels UK offers clients extensive experience in highways and airport infrastructure, combined with innovative working practices.

A specialist service for our clients

VolkerWessels UK is known for developing high-performing highway surfaces and lighting for social and economic wellbeing of local people, motorists and pedestrians. For over 30 years our expertise has improved communities and towns.

VolkerFitzpatrick are experts in delivering integrated civil engineering, design and construction services for major highways infrastructure and airport regeneration, working within extreme levels of precision and time constraints allowing airports to continue to operate throughout works being undertaken.

VolkerHighways delivers a number of highways terms maintenance contracts, including surfacing, LED lighting and traffic management solutions for local authorities across the South East of England. They also work collaboratively with the other disciplines at VolkerWessels UK to support larger complex projects. Resurfacing, developing and maintaining the highways and road networks leading to the airports, buildings and schools being built by our businesses.

VolkerStevin provide design services and earthworks for bridges and carriageways, as well as working on the construction of large scale viaducts and other landmark structures.

2016 was a very successful year, the business secured five new highways term maintenance contracts and maintain a strong order book. This success is testament to our team's efforts, maximising the potential within these new contracts.

Alistair Thompson
Managing director
VolkerHighways



Our highways and airport infrastructure projects were delivered by

- VolkerHighways**
- VolkerFitzpatrick**
- VolkerLaser**
- VolkerStevin**

£202m

Revenue across 4 businesses

Projects featured

- CVU, London
- Medway TSC
- London Borough of Camden HTMC
- Boroughs of Poole and West Berkshire HTMC
- Taxiway and AGL rehabilitation Gatwick Airport
- Waterside Campus infrastructure
- Watford Health Campus
- Ashton Avenue Swing Bridge



Highways and airport infrastructure



Developing boroughs, building communities

As part of its Term Maintenance Contract (TMC) framework, VolkerHighways provides lighting improvements, surfacing and maintenance for a number of UK boroughs and local authorities. Throughout 2016 VolkerHighways has seen continued growth in these areas, developing a wider range of services, including professional design, to improve London Boroughs, like Camden and local authorities across the South including Poole, Medway, Luton and West Berkshire, Windsor and Maidenhead.

London Borough of Camden

The London Borough of Camden awarded VolkerHighways a four year public realm maintenance and improvement contract. The works include the repair and maintenance of roads and footways including public parks, and housing estates.

Surfacing works have recently been carried out in New Oxford Street, on one of the borough's 'priority route network' schemes. To minimise traffic disruption, the central London bus route was reinforced and reconstructed, over three weekends. VolkerHighways is providing a 'one stop shop' approach at Camden by utilising all its divisions and specialist skills enabling greater efficiency and a successful completion.



Q&A with Sohail Hussain Project manager, VolkerHighways

Q Describe your role

A I'm the project manager for the Medway Council term maintenance contract, managing all aspects of the contract while meeting challenging performance targets set by the client.

Q What is the benefit and impact of this contract?

A Bringing regeneration to this community through our work has made a significant contribution to the wider social, economic and environmental priorities within the borough. The work at the Chatham riverside was all about delivering improvements to a very public area and enhancing it for residents and visitors. The whole team are looking forward to delivering further improvements as the service continues.

Q Tell us about collaborating for success?

A From the inception of the contract to this day, our commitment to client satisfaction has been the key to the success of our relationships. We introduced joint workshops with our partners and stakeholders establishing groups at the start of each year to create different work streams. These ongoing collaborative workshops resulted in a joint business plan and a shared vision. We now work as one, problem solving and sharing our skills and knowledge.

We measure our success by reviewing client satisfaction reports received from Medway Council and have been able to maintain high scores throughout. We also have an equally important obligation to the general public to ensure there is minimal disruption from our works. We therefore developed an online satisfaction survey to gain feedback from those directly affected by our works and respond by improving our processes or methods.

Riverside regeneration

VolkerHighways is working with Medway Council to regenerate an area along the bank of the River Medway in Chatham into a modern and exciting space for people to enjoy. The works to enhance the river walk and improve the streetscape includes 1,800m² of paving and 250m of quayside railings plus the installation of street furniture.

LED upgrades

VolkerHighways has delivered over 40,000 street lighting assets and maintenance in Poole and Bournemouth; upgrading and replacing existing lighting with energy efficient LEDs. As part of the contract, our teams will also be installing central management systems (CMS) to allow the council's highways teams to dim, monitor and even switch off individual street lights.

Alongside the upgrade programme, VolkerHighways will also be responsible for the on-going maintenance of the lighting stock in Bournemouth and Poole for 10 years and Slough for two, with possible extensions at the end of each contract.

The works carried out include routine maintenance and cleaning, fault repairs, electrical testing, structural testing and painting of the public lighting stock.

The LED upgrade works in Bournemouth and Poole were completed in March. VolkerHighways also started the LED upgrades in Reading, Slough and Wokingham in 2016.

Similar works were also completed in West Berkshire and based on the success of the programme, there are further opportunities to expand these works.

Juliet Taxiway rehabilitation, Gatwick Airport

With over 53 aircraft movements every hour, Gatwick Airport is the world's busiest single runway airport.

VolkerFitzpatrick was awarded the contract to resurface vital assets on the Juliet Taxiway as part of an airport investment scheme planned to make improvements over the next 12 years. This will bring significant changes to the alignment of the taxiway to prepare for future demands and the accommodation of larger planes.

The rehabilitation work included the replacement of concrete bays with flexible surfacing, cabling, ducting, drainage and aeronautical ground lighting (AGL). Due to the nature of the project, technology and innovation was very important. Energy efficient low

profile LED lighting was used, requires less maintenance, and which reduces CO₂ consumption. Also, a specialist solution was developed to provide a moisture and skid resistant surface. This featured improved resistance to deformation for slow moving or static wheel loads from aircraft on the taxiway. The surfacing asphalt mix developed will now be used on future taxiway upgrades at London Gatwick.

This project was undertaken adjacent to a live taxiway on the world's busiest single runway airport and the experienced team successfully delivered the works injury and accident free.



Extensive requirements for the rehabilitated taxiway included

1,956m²
PQ concrete broken out

8,434t
new asphalt to runway

81km
new AGL cabling

5,034
tonnes existing asphalt removed

4,871m
new ducts

190m
new slot drain

Highways and airport infrastructure



Waterside Campus infrastructure

VolkerFitzpatrick are working as a main contractor to design and build road networks, a car park, campus roads and two new bridges at the University of Northampton. This includes works connecting highways and utilities infrastructure to enable serviced plots for future academic buildings and public area works.

The construction of a 60m arched road bridge and 110m pedestrian footbridge running across sections of a local river were key features of this project. Both bridges had to be lifted in place using cranes. Building the road bridge uniquely required the use of two 1,000 tonne cranes to separately install the two sections of the bridge over the river. Once complete the road bridge will cross both the River Nene and the new riverside footpath to provide unimpeded access along the river.

This project will improve travel infrastructure within and around the Northampton Waterside Enterprise Zone enabling easy access to the new campus for the local community.

Conserving a city landmark

VolkerLaser successfully delivered essential refurbishment works at Ashton Avenue Swing Bridge in Bristol. The bridge is a Grade II listed structure and was reported as showing clear signs of structural instability.

The work to restore the bridge was complicated and detailed. Ironwork had to be repaired and concrete slabs were removed to expose the bridge's structural beams that had corroded after years of decay. A new steel deck was installed to accommodate a guided busway and for greater structural stability. Due to the high lead content of blasting and painting works, the bridge was fully encapsulated in an innovative scaffolding solution. This provided a safe area of work for all operatives on-site, away from possible flooding at high tide from the River Avon. This complex and sensitive refurbishment was a significant success story for VolkerLaser's portfolio of bridge projects.



Watford Health Campus

VolkerFitzpatrick successfully completed the first phase of the Watford Health Campus regeneration scheme involving the construction of a new road for improved access to the local hospital.

Regeneration for Watford

VolkerFitzpatrick successfully completed the first phase of the Watford Health Campus regeneration scheme involving the construction of a new road for improved access to the local hospital. The work also created the infrastructure needed for future stages of the scheme which will deliver industrial space, over 750 new homes, community facilities and retail space.

The new road is a single lane carriageway running in both directions which is partly covered by Hertfordshire County Council. A section of this road is for emergency access for ambulances and the work included two new junctions, a tie in to an existing road, two new roundabouts, and access points to other parts of the development, street lighting and drainage.

It was important that VolkerFitzpatrick completed the project on time while ensuring that disruption to the local road network was kept to a minimum. This was achieved and the project also had a big impact on training and employment in the borough. 121 local people were employed and 11 young people aged 16 – 24 were given on work experience placements with the business during the road's construction.

Creating communities
The scheme will deliver industrial space, over 750 new homes, community facilities and retail space.



Continued work within CVU

VolkerHighways had another busy year within CVU (joint venture with Colas and AECOM) progressing works on the London Highways Alliance Contract (LoHAC) for Transport for London (TfL) and London boroughs. Works include traditional highways maintenance services, emergency response, inspections, design services and the delivery of capital infrastructure investment and existing asset renewal schemes.



CVU Colas
VolkerHighways
AECOM
Working together to transform London's streets

Commercial, industrial and educational construction



Project
Blade Factory

Location
Hull

Client
Siemens

We provide expertise and experience to deliver major building projects in some of the busiest and most restrictive urban environments in London and across the UK.

In the commercial, industrial and educational construction sector, VolkerWessels UK is using its expertise and experience to provide a wide range of specialist skills to its clients.

By integrating the specialisms of each of our individual business units, VolkerFitzpatrick is able to deliver multi-modal logistics centres and industrial and commercial buildings for a wide range of clients. Our specialist design and build services are centred on their ability to deliver complex high-quality projects, including large scale commercial office developments and educational facilities. We also provide market leading construction services for the development of modern warehousing facilities for a diverse set of clients. Our other business units are also actively involved in the commercial and industrial sector.

VolkerHighways provide hard and soft landscaping of commercial areas and public realm enhancements including works for footways and carriageways.

VolkerLaser offers solutions to all types of structural repairs, specialising in construction, energy saving and civil engineering challenges; covering concrete repairs to external wall insulation, waterproofing to cathodic protection, and providing technical advice to the management of complex structural repairs or major civil engineering projects.

Despite a challenging year – we have had a successful one due to our people’s talents and commitment.

Richard Offord
Managing director
VolkerFitzpatrick



Our commercial, industrial and educational construction projects were delivered by

VolkerFitzpatrick

VolkerHighways

VolkerLaser

£172m

Revenue across 3 businesses

Projects featured

- Costa Basildon BRUT
- Royal Mail, Nine Elms
- Siemens Project Blade, Hull
- Stratford Retaining Wall
- King William Street
- Priority Schools Building Programme
- Wolverhampton Civic Centre



Commercial, industrial and community construction

Blade Factory, Hull
Construction of Siemens' new offshore wind turbine blade factory in Hull was awarded to VolkerFitzpatrick highlighting their specialist skills in constructing industry facilities for manufacturing. The world class facility will be used for manufacturing and servicing 75m long turbine blades and the build will include new offices and welfare facilities.

The substructure uses 4,650 driven precast concrete piles and in-situ pile caps. The superstructure is steel frame with steel roof trusses to accommodate the large postal spans. The envelope is a combination of precast concrete panels up to 2.4m for low level protection and Eurobond composite cladding to roof level.

Our construction strategy enabled us to complete the job on time, while the facility was operational.

Specialist skills
VolkerFitzpatrick constructed a world class facility used for manufacturing and servicing turbine blades.



75m
the facility will enable Siemens to service 75m long wind turbine blades

4,650
driven precast concrete piles and in-situ pile caps

King William Street, City of London

VolkerFitzpatrick's specialist building division is conducting works to renovate, strengthen, extend and update this city landmark.

Redeveloping a city landmark
Built in the 1990s, 24 King William Street is located in the heart of the City of London opposite Monument underground station. The building features seven storeys of office space with retail space at ground level.

VolkerFitzpatrick's specialist building division is conducting works to strip the existing building back to frame for structural strengthening works, before extending the floor space, adding two new floors, upgrading building services and fitting out to CAT A standards. The façade will be replaced with a bespoke unitised curtain walling system, featuring natural stone cladding. The project started in January 2016 and will be completed in autumn 2017.

VolkerFitzpatrick has a long history of working in the capital, which requires a comprehensive approach to planning in order to manage the logistical challenges of working in the city. Engagement with

local stakeholders was critical to ensure that the impact of these works, were clearly communicated. This enabled our team to manage the complex construction involved with minimal disruption to surrounding businesses.

On this project, we also collaborated with London Underground, regarding the Bank station enhancement programme, taking place directly adjacent to the King William Street project. This required a high level of detailed coordination around access, deliveries and working hours. We also worked with Transport for London to plan our traffic management alongside another major office developments in the area, ensuring traffic flows were maintained on the main thoroughfare from London Bridge. This building will achieve BREEAM Excellent.



Prologis BRUT, Basildon
VolkerFitzpatrick constructed the 86,000ft² facility at the Prologis Park, Basildon, a global state of the art roastery facility for Costa. This is a continuation of a long standing partnership with Prologis UK, with whom we deliver large scale warehouse developments like Sainsburys DIRFT II.

The design and build development included the construction of a single storey production unit which will house the company's coffee bean roasting ovens. A green bean silo area and three storey office accommodation was also constructed inside the building. Additionally specialist works were conducted to ensure the facility was compliant with strict food safety and hygiene regulations.



Sustainability was a key driver – the building project achieved BREEAM Outstanding. The main features included PV arrays, air source heat pumps, LED lighting and a biomass boiler fired by bean husks, a waste product of the roasting process.

Building a state of the art production facility
The new Basildon roastery will be capable of producing 45,000 tonnes of coffee beans every year once operations begin in 2017.

45,000t
coffee beans produced per year



Q&A with Ian Simmons, Operations manager, VolkerFitzpatrick

Q Describe your role

A As operations manager for the east and central region I monitor our live projects, developing client relationships and recruiting the right people to build a strong team. I also support project managers to enable them to work to the highest possible quality and safety standards.

Q What is the impact or benefit of your work to the sector and industry?

A VolkerFitzpatrick's successful delivery of the Siemens Blade factory has provided great benefits, not only to Siemens but also to the City of Hull and its surrounding areas. The built factory will create over 1000 new jobs, and the project forms part of a much larger investment into the Port of Hull. Large scale marine remodelling, supporting buildings and infrastructure will make Hull the new 'centre of attention' for the wind power generation sector.

Q How have you enhanced collaboration?

A Collaboration was absolutely vital due to the nature and complexity of the project. The building had so many junctions where structure, M&E and specialist equipment all had to integrate seamlessly and work first time. Our blade team organised a series of workshops to liaise with Siemens and their specialist suppliers to ensure all components and materials were compatible. When issues were apparent, all parties worked together to identify the best solution.

The blade team visited Aalborg, Denmark, where the same blades are made, to present the project to specialist fit out contractors. This ensured that when they came to the UK to work on the project, they understood what was required to carry out their works effectively. With this level of focus on delivery we achieved success.

Commercial, industrial and community construction

Wolverhampton Civic Centre

An industry leader in car park refurbishment, VolkerLaser delivered an innovative cathodic protection system to Wolverhampton Civic Centre's multi-storey car park.

Forming part of Speller Metcalfe's £18million refurbishment of the popular mixed-use venue, the renovation will see

the civic centre's capacity increase to a combined total of 5,000 people, including upgraded access for disabled visitors. The improved facilities will attract even more visitors to Wolverhampton city centre and the wider sub-region, resulting in the creation of more jobs in the local economy.



229,223m²

waterproofing completed by VolkerLaser throughout 2016

Priority improvements for schools

VolkerLaser was appointed specialist supply chain partner for the Education Funding Agency (EFA)'s Priority Schools Building Programme. This nationwide government initiative will improve and rebuild 260 schools that are in urgent need of repair, in a programme to be completed by December 2017.

The programme of work has been grouped geographically and prioritised by the schools requiring the most repairs. VolkerLaser provided protection works for twelve schools based in the North West region. Despite adverse weather and a tight timetable, the team applied 8,500m² of roof waterproofing, laid over 1,000 paving slabs and installed more than 8,000m² of horizontal insulation during the first construction phase.

Investing in education

As part of the Education Funding Agency (EFA)'s Priority Schools Building Programme, VolkerLaser provided protection works for twelve schools based in the North West region.



Royal Mail, Nine Elms

VolkerFitzpatrick has had a long standing relationship with Royal Mail and their latest project will see the build of a new delivery office and vehicle services workshop at Nine Elms in London.

VolkerFitzpatrick will demolish existing buildings before constructing a new 55,000ft² delivery office and 67,000ft² multi-storey car park. Construction of the two storey delivery office will use a series of steel portal frames clad with a mixture of grey brickwork and Trespa panels to the top levels. The three storey car park will be built of structural steel frames with high pressure laminate panels and features a removable top deck.

The work with Royal Mail is part of a programme to modernise its operations over 18 sites across the south of England to align with its overall goal to improve operational efficiency and sustainability.

The project will achieve BREEAM Excellent and the VolkerFitzpatrick team will be working together with the specialist supply chain to maintain consistent high level standards of delivery throughout the various stages to meet Royal Mail's requirements.

55,000ft²

delivery office

67,000ft²

multi-storey car park



Stratford Retaining Wall

VolkerFitzpatrick is constructing the Stratford retaining wall which forms part of Lend Lease's International Quarter London development based in East London.

The project involves the construction of a 305m long up to 12m high, reinforced concrete retaining wall. The wall will provide 5,000m² of additional commercial space for the client. When complete it will become London's largest living wall; creating a habitat for a diverse range of flora and fauna.

The biodiverse 'living wall' will be created through the use of a specialist concrete formliner specifically manufactured in Germany for the project. Works include extensive excavation, reinforced concrete pile cap and wall stem and earthworks backfill. The work is taking place immediately adjacent to the Docklands Light Railway and Network Rail lines and ties in to the Woolwich line enclosure abutment. The abutment design uses Expanded Polystyrene Blocks (EPS) to be installed behind the existing gabion wall, at the same time as the construction of the external facing section and as the wall height increases.

Our business at a glance

For more information about our offices visit: volkerwessels.co.uk/locations

-  Rail infrastructure
-  Marine, energy, water and environmental infrastructure
-  Highways and airport infrastructure
-  Commercial, industrial and educational construction

Each business within VolkerWessels UK has a specialist set of skills enabling us to provide unrivalled resources and expertise to our clients. Our collaborative approach allows us to provide a truly integrated quality service.

VolkerWessels UK

UK construction and engineering group and shared services.

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For more about
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VolkerWessels UK brings together five separate operating businesses in collaboration across multi-disciplinary projects, whilst also providing commercial and back office support. All of our UK businesses; VolkerFitzpatrick, VolkerRail, VolkerStevin, VolkerHighways and VolkerLaser have a long and successful heritage, each founded by entrepreneurs. They have gone on to achieve a long history of success through hard work, innovation and excellence.

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