



Barhale *news*

Safety | Communication | Quality | Integrity | TeamSpirit | Caring | Trust | Pride

Spring 2015

Barhale Be Safe goes Global with app launch

We are extremely proud to have recently launched our Barhale Be Safe app for iPhone, iPad, iPod Touch and Android. The app has come about as a result of an initial vision from our Chairman Dennis Curran, who was keen to create a health & safety app which can be downloaded by our People, suppliers, contractors and clients alike, to spread the word about working safely.

Dennis's vision was passed on to Head of HSEQ Andy Dodman, and IS Developer Craig Hadfield-Richards, who worked together to develop the app. The initial focus has been upon service avoidance and the importance of communicating this message as far and wide as possible. The app provides a platform where best practice toolkits such as Best Practice in Avoiding Underground Services (BPAUS) documents can be downloaded and shared. These documents are set against the familiar backdrop of Barhale's Values and Three Pillar Philosophy.

The app has been scoped to grow over time, with further updates and information being added. This is likely to include advisory information which is ideal for people to share on topics which affect everyone, for example, occupational health and health and safety in the home.

When building the app many considerations had to be made, such as ensuring that the most up to date information is always available, and this has been achieved by creating a live link between the app and the Barhale Portal, from which it draws its data – but of course, the presence of the app means that anything published within it is now also available in the public arena. This is a huge step forward in providing information and guidance on health & safety issues that we wish to share.

Sharing is a huge part of the vision, and so the capability to utilise the functionality on your

iPhone to do so has been maximised, with links to Facebook and Twitter embedded within the app. Other considerations included the size of the app, because of a desire to avoid it taking up too much space on the devices of those who download it. With that in mind, its size has been limited to 3MB, which, when compared for example with the Facebook app, at c.120MB, is minimal.

In addition, even the user's comfort has been taken into account, with the app being ergonomically designed for ease of use, and in line with the movement of the user's hand across the screen.

It is early days for the app, but we know it has already been downloaded by people as far afield as Asia and America!

You can download the app by visiting the App Store or the Play-store and searching for 'Barhale' or 'Be

Safe'. It will also shortly be available on Windows phone. We would encourage everyone to download the app, and also to give us feedback – for Barhale people this can be done via the Portal. Your feedback and ideas for future content will be taken into account when the app is reviewed. We will also publicise updates which are made to the app via the HSEQ Cascade.

The launch of the Be Safe app coincides with a series of events being planned to celebrate and reinforce the Three Pillars philosophy – for more on this please turn to the centre pages.



Safe! It will also shortly be available on Windows phone. We would encourage everyone to

In this issue...



2 Investors in People Silver Award



6 Eastern gears up for AMP6



8 Three Pillar Events get underway



12 BCS building bridges with Kier Group

Welcome to the Spring edition of Barhale News.

This Spring issue of Barhale News is packed full of interesting stories from our people across the business, as well as some insight into what's coming next as we continue to go from strength to strength.

In the water sector, we've reached a significant milestone in the end of AMP5 and we're lining up on the runway ready for the next chapter with our AMP6 frameworks. AMP5 Year 5 has been one of the busiest ever – thankfully quite different to previous AMP periods. Our teams have delivered some excellent projects for our water company clients and that, in turn, enables them to deliver a great service to their customers, in addition to meeting their regulatory targets.

We're working close to people's homes and businesses every day and we have an excellent reputation for our care and consideration and the positive and consistent customer experience we deliver. Our customer mantra of 'treating others as we would wish to be treated ourselves' shines through, along with the pride we feel in delivering a job well done.

Delivering for the customer applies equally to our other sectors – so whether it's members of the public who can now cross Network Rail lines far more safely, thanks to our footbridge installation programme..... or the athletes, officials and visitors to the Glasgow Commonwealth Games being efficiently signposted to their destinations..... or the Scottish Power and National Grid customers who enjoy more secure supplies, we can be justifiably proud of the fact that 'we have made a real difference' and a 'positive contribution to the communities in which we operate.'

In looking forward to AMP6, we reflect on the challenges ahead. Our industry, the business and each of us needs to transform to meet the ambitious efficiency targets and service level expectations, which are central to our future success. The good news is that we're not doing this alone. The increased level of collaboration throughout the whole supply chain, and the identification and implementation of innovative technology and ways of working, is already developing in our various frameworks and business relationships. In this edition of Barhale News, we'll also hear from Dennis on how he intends to ensure we get off to a flying start as AMP6 takes off.



Internally, we are focused on further developing the Three Pillars business sustainability model. We're continuing to drive our collective performance through a string of events across the business, following Dennis' 'Football Challenge' at last year's 3 Pillars Awards day. We've already witnessed significant improvements across all 3 Pillars over the last year, which is a great start. We need to continue that trend, as we embark on our journey from good to great!

Our 2014 Health, Safety and Well Being performance has seen a step-change improvement across all types of reportable and non-reportable incidents. The reductions have been between a quarter and almost two thirds less than 2013, an excellent result. We have successfully launched our new Health and Home Safe campaigns in Q1 2015, as well as our novel Barhale Be Safe App, which allows us to more easily share our best practice wide and far!

Our Environmental performance has seen us maintain our Zero incidents in 2014 – and you will read how we have recently signed up to the Green Construction Board. Barhale is committed to joining forces with other leading organisations to significantly reduce carbon in the world of Infrastructure, through sharing best practice.

We have also seen a fantastic improvement to our overall Profitability – which is probably the most significant element of our business sustainability Pillars. The proactive measures taken by many of our people over the last year, have demonstrated how it is possible to dramatically change financial performance, if you put the right focus, with the right people, on the things that matter. This gives us a great platform to drive further efficiencies across our various new framework agreements and business ventures that are underpinning the healthy order book we now have secured with Anglian Water, Yorkshire Water, and Southern Water and are developing with eight20/Thames Water and with Thames Tideway Tunnels – with some significant opportunities stretching to 10 and 15 years!

This month also sees the launch of our new MEICA business, Barhale Response, working in close collaboration with our long-term partner, Response Engineering from Co Cork in Ireland. We have identified significant opportunities in the UK for our complementary skills and service to offer our clients a unique and innovative solution to meet their MEICA business needs. This is further enhanced by the strong industry links to Cork Institute of Technology and the Nimbus Centre – a leading centre for innovation and R&D in the water and energy sectors – that Response enjoys. We welcome Response into the Barhale family.

Finally, all of what you will be reading about is only made possible by the commitment and delivery from our fantastic people, both in our offices and out in the field. We're so proud and fortunate to have you the Barhale fold.

Here's a huge vote of thanks and appreciation for making a difference, day in, day out, to secure our long term futures together.

Andy Jawerday

Investors in People Silver Award

In January we were pleased to welcome Investors in People, who visited us to assess our business for re-accreditation, following the Silver Award we obtained in January 2012. Following a series of interviews with personnel representing different level and areas across the business, we were very proud and pleased to be awarded the Silver accreditation once more. In fact, Derek Bawden, our assessor, also confirmed that we are well on the way towards obtaining a Gold Award in the future!

For the re-accreditation we agreed to plan 30 minute discussions with individuals selected at random by Derek, and the focus of these discussions was to be upon Values, Behaviours, Three Pillars; Leadership; Development of People; Recognition and Teamwork. The process revealed a number of strengths and best practices, which included a culture which is open to new ideas and provides access to people working at all levels without formal hierarchy, plus an atmosphere of team spirit and mutual trust, recognition of talent, skills and hard work.

Indeed, in his assessment, Derek reported that our Values and ethics are "among the strongest seen in a large organisation" and that they are "fully embedded, understood and lived by all", particularly highlighted by the 'family' culture within the business, giving a sense of belonging which results in our people adopting a 'can-do' attitude and describing how everything they do is in line with the 'Barhale way'.

The overriding theme from the assessment is that team spirit is key; individuals feel they are respected for their skills and knowledge and supported and trusted by their managers, with many managers being able to identify and play to peoples' strengths. There was a common theme in that managers and employees alike are keen to keep teams together, and feel that by managing, actively listening to and recognising employees, this is achieved more effectively.

Feedback on people development continued in a positive vein, with individuals showing their keenness to learn, many of them mentioning that they are currently studying various qualifications, as well as informal learning 'on the job'. There is a good balance of 'home grown' managers within the business, in addition to 'new young talent' introduced at appropriate levels. In addition many of those spoken to had recently returned to Barhale and described how they have been welcomed back.



▲ Silver Award proudly displayed in reception at Head Office

Introducing Barhale-Response

Many of you will be aware that we have recently joined forces with Response Group, to form an exciting new joint venture, Barhale-Response. This union means that both Barhale and Response can each benefit from the other's experience and jointly provide whole solutions to a variety of industries, maximising our combined skills and capabilities and using these to the benefit of our clients.

The partnership has been forged between Barhale's Chairman Dennis Curran and Managing Director Andy Flowerday, and Response's Chairman Noel Hanley and Executive Chairman Noel O'Keeffe, but in addition has a dedicated management team which is headed up by David Welch. Barhale-Response will focus upon design, manufacture, delivery, installation and commissioning mechanical, electrical and ICA services throughout the UK. We intend to continue and combine our common approach of focusing on client requirements as we have done throughout our history of contracting to the water and waste-water industry.

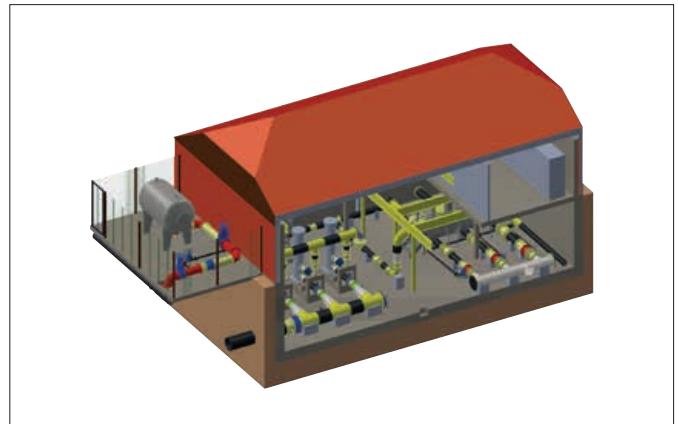
Barhale has always had at its heart a set of Values, as does Response Group. Therefore the Values of both businesses have been implanted into the partnership and as you would expect, safety, well-being and care for the environment are at the forefront of everything, as well as a continued focus upon people development. Barhale-Response's strategy has been formed around the belief in maximising benefits to our customers, therefore its focus will be upon:

- Establishing and promoting TOTEX solutions in all our offerings
- Continued optimisation of Building Information Modelling and 3D modelling
- Extending and developing our offsite fabrication capability
- Continued people development
- Clear plans and practices to achieve carbon reduction

By 2016 all key project participants will be required to have the minimum capability of Level 2 BIM compliance in place to work on all UK Government Procurement projects. Therefore, Barhale-Response's strategy is to combine resources in order to expand our 3D design capabilities to achieve this compliance. This method of delivery has at its core people, process and enabling technologies, with an emphasis on cost, energy, carbon and time savings, resulting from the improved control and flow of relevant project design information to all stakeholders, which in turn creates a positive interaction between ourselves and our clients. One of the first projects that Barhale-Response will be working on will be the delivery of Anglian Water's Integrated Operational Solutions (IOS) AMP6 Framework – see page 6 for more details about IOS. To that end, Response Group hosted representatives from Anglian Water at their offices in Charleville, Ireland, in October.

As we go to press, the new Barhale-Response offices in Liphook, Hampshire, are due to welcome guests for the official opening day and introduce the new business, promoting its capabilities and philosophy. Fresh from fronting

another highly successful joint venture, BTU, David Welch commented that he is "delighted to have been offered the opportunity to be at the helm of another new venture in the name of Barhale-Response... my ambition in the next few years is to build a business that everyone is proud of."



▲ 3D design image of Lower Standen Pumping Station



▲ Pictured L-R from Anglian Water are Cliff Mariner (Head of Maintenance) and David Simson (Head of Operational Capital Delivery), with Response Chairman Noel Hanley and Barhale Managing Director Andy Flowerday.

Getting engaged with eight20 for Thames Water AMP6

As Thames Water's new eight20 Alliance moves into AMP6 delivery phase, Barhale and new partnership Barhale-Response (see above) are responding to a number of opportunities to get engaged as a strategic partner, across parts of the programme which are ideally suited to our core water capabilities.

Committed to helping eight20 meet the challenging efficiency and performance targets that Thames Water need to deliver, we are able to offer a unique mix of knowledge, experience and competent resources, built up over the last 20 years – all underpinned by the Barhale brand and track record of success.

Early works are focused on some of the more difficult water infrastructure projects – with wastewater infrastructure following soon after as the programme develops. Barhale are getting engaged collaboratively during

the ECI (Early Contractor Involvement) stage, to help ensure the right solutions are identified and allowing us to add value from the word go.

We have already started on a series of site investigation and trial hole works, and will be making sure our approach fully aligns with the overall eight20 delivery strategy.





spotlight on

Victoria Embankment - Thames Tideway Tunnel advanced works

Contracts Manager John Prendergast explains all about this project taking place in London.

CLIENT: Thames Water

PROJECT: Victoria Embankment Water Main

LOCATION: Victoria Embankment, London



▲ Pipe installation at Horseguards Avenue

In Brief:

This project involved the installation of two new valves and two Syrinex trunk main monitoring chambers on to a 30" CI main at Victoria Embankment, near Hungerford Bridge, Central London, to facilitate the installation of the new Thames Tideway Tunnel (TTT) Shaft in the area. This also included the design and assembly of 200m of 400mm diameter above ground rider main which would be used as a contingency plan in case of any disruption to the 30" main during main shaft sinking works.

Location details:

The site had two working compounds on Horseguards Avenue and Victoria Embankment. This area is incredibly busy with events throughout the year and the obvious tourist interest. The Victoria Embankment works were mainly located within the central reservation of the road itself, which runs parallel to the River Thames and is one of the busiest roads in Central London.

Technical Features:

- The compiling of the safe systems of work (SSOWs) for two valve isolations on Victorian water mains in a congested city centre environment and the successful completion of same
- Organising resources while taking account of the fatigue involved in working extended hours because of tight deadlines due to lane rental charges
- The SSOW compiling and successful completion of an above ground rider main trial assembly

Due to the location, a permit system had to be undertaken before works could begin, involving street notices and the closure of one lane of traffic at significant cost. Therefore there was no time for error and we altered our programme to work 20 hours a day, 6 days a week, supported by The Westminster Noise team. We worked in the area for 8 months with zero noise complaints.

In early December, we isolated the water main on Victoria Embankment. Previous research proved that water supplies would be lost for two of the boats moored on the Thames, The Yacht Club and life boats. However, we successfully provided a supply of fresh water for them using water bowsers externally hired in, and topped them up every few hours.

We successfully reinstated and demobilised works for the safety of the crowds attending the New Year's Eve Events as promised to the local boroughs before Christmas 2014. Once set up again in January 2015, we liaised with London Underground whilst working in close proximity to their assets.

When installing the rider main we used the innovative idea of bespoke pipe attachments and trolleys. The attachment acted as a cradle to stop the pipe from moving and proved ideal. The installation of pipework was done over three working phases, closing the footpath in sections so we communicated with park keepers from Whitehall Gardens to make them aware that we would be redirecting the flow of foot pedestrians through the park.

Customer benefits/feedback:

The fact that the project was advanced works for the prestigious TTT project meant that it was imperative that the positive impact, image and reputation was established from the very early stages of planning, and right through to completion, helping to set the high standards which will be the hallmark of TTT. Our impact on the local community and stakeholders – both residential and commercial – and upon London's road-users had to be best in class at all times and stages of the project.

We therefore went the extra mile, collaborating with other bodies to ensure the safety of workers, road and foot pedestrians.

The site received numerous positive recognitions, from high scoring audits from Thames Water through to a particular letter of praise from a neighbouring business for whom we helped to maintain access as they staged weddings and corporate events.



▲ Victoria Embankment on the western bank of River Thames

Barhale gets underway with Tideway!

It was recently announced that the Ferrovial/Laing O'Rourke (FLO) joint venture is the preferred bidder to deliver the Central section of the Thames Tideway Tunnel project. This is great news for Barhale as we have been working alongside FLO for the last 12 months to provide methodology, pricing and bid support and we are now tied in to deliver three sites at Albert Bridge, Falconbrook Pumping Station and Victoria Embankment.

The purpose of this project is to build a major new sewer, which is needed to protect the tidal River Thames from increasing pollution. This pollution has been caused because London's Victorian sewerage system is no longer fit for purpose, and therefore millions of tonnes of sewage are entering the tidal section of the Thames every year. The Thames Tideway Tunnel will tackle this problem for at least the next 100 years, enabling the UK to meet European environmental standards.

The Central section is the largest and the most complicated region with an estimated value of between £600m and £900m. Barhale will now enter into the Early Contractor involvement phase, leading to construction, which is presently for three of the six Combined Storm Overflow (CSO) sites in the Central Section – Albert, Victoria and Falconbrook. The Victoria Embankment case study (see left) gives more detail on our current works which are in preparation for Tideway.

The CSO sites are massively challenging and right in the public eye with the shaft at Albert, for example, being constructed in the river, right outside the MI6 building.

The team will be kept busy with design work being undertaken during 2015, with service diversions and asset protection commencing in 2016, leading to construction right through to 2020.

Managing Director Andy Flowerday commented: "this is fantastic news for Barhale and is the result of several years of planning and many months of dedicated tendering by many people. I'd like to offer my thanks to Phil Cull and the whole bid team who have helped secure our role in what is going to be a fantastic project that is 'right up our river!'"

BTU in Southern Water Success!

Last month we were pleased to announce that BTU has been awarded a long-term contract with Southern Water, having been successful in the tendering process to be a React and Maintain (R&M) Operational partner in the new five-year £3 billion plan.

BTU has been chosen as the sole partner to provide mechanical, electrical, instrumentation, controls and automation (MEICA) across the whole of Southern Water's area and will undertake reactive, planned and capital maintenance and improvements of Southern Water's assets. These include MEICA, process, water supply and wastewater treatment works and pumping stations.

With an option to extend for a further five years, the new contract starts in April and runs to March 2020. BTU will cover Hampshire, the Isle of Wight, Sussex and Kent.

Sean Jordan is the new Framework Director at BTU, having previously taken on the role of Operations Director since BTU's inception. As per previous announcements, David Welch, Sean's predecessor in the role, is now our South East Regional Director.

In a joint statement, Patrick Trant and Dennis Curran, Chairmen of Trant Engineering and Barhale respectively, said: "BTU staff have worked

incredibly hard to deliver operational excellence to Southern Water, often in challenging conditions due to weather-related flooding.

The vast array of experience garnered since our inception puts us in good stead for the next six years and follows a rigorous tendering process in which every aspect of our business had to surpass our client's exacting standards.

We look forward to working again as a top-tier partner to Southern Water, enhancing the operational efficiency of assets and ensuring that customers are at the heart of what we do."



spotlight on

Taunton Avenue Flood Alleviation, Eastern region

Project Manager Greg Reddy spills the beans on this scheme in Northampton.

CLIENT: Anglian Water

PROJECT: Taunton Avenue Flood Alleviation

LOCATION: Northampton

In Brief:

There has been a history of internal and external foul flooding to two properties situated on Taunton Avenue, Northampton, which has been caused by hydraulic incapacity in the sewer system during storm events. A number of call-outs have been made to the properties following flooding events occurring since 2000.

To resolve this we created extra storage under the nearby school field, a gravity link to a downstream sewer and to fit a non-return valve to the outlet sewer.

Technical Features:

This project had to be delivered over eight weekends and during the March school holiday to avoid disruption to the education of the local children attending the adjacent Bridge Water Primary School – which was much appreciated by the school and parents – and hopefully the children themselves!

The haul road to the site passed through some Northampton Borough Council allotments and the team therefore had to accommodate the allotment holders' needs in planning the works. This included moving plants, bulbs and gardening equipment so that the route could be accessed through the school fields.

In addition, because of the close proximity of the works to the school, there was a requirement for DBS checks to be made on all personnel working on the site.

The team successfully laid the 4.5m deep Aquaspira pipe and shallow smaller diameter connections, utilising a conventional drag box, through a private garden.



▲ Pictured L-R: Stefan Coldea, Alex Coldea, Mickey Roche.

The proposed 178m³ off-line storage is provided by using 158m of 1200mm diameter Aquaspira pipe as follows:

- Weir manholes built on the existing sewer system to divert storm flows
- Stored flows are to be returned to an 800mm diameter sewer in a different part of the sewer network by gravity
- A non-return valve installed at the outlet to prevent backflow into the tank. A sensor, with a wireless connection to telemetry, was installed in the tank to monitor its usage
- The new off-line storage will alleviate flooding by providing storm attenuation for the main sewer network during storm conditions
- Flows from the proposed Bridgewater Housing Development scheme will have no adverse impact on the solution and vice versa

Customer benefits:

Because this project took place not only in close proximity to a residential area, but also to the school and the allotments, there were a huge number of considerations for the team to make when planning and carrying out the works, involving the sensitive handling of access issues, and working within private gardens, as well as liaising with representatives from the school and the Allotment Association. Now that the project has been completed, the periodic flooding problem that some residents in the area have been experiencing for the last 15 years has been alleviated – much to their delight no doubt. The hydraulic model used has allowed for climate change predictions, and the solution built by the team is set to provide protection for a 1 in 30 year storm event.

Eastern region gears up for AMP6

The Eastern team are working hard to finish projects and close out AMP5 as part of Anglian Water's @one Alliance, and are also gearing up for AMP6, which started in April.

In AMP6, Barhale will continue to be involved in the main capital programme, which is set to get bigger by 20%, and will also embark on a second framework to provide capital, planned and reactive maintenance programmes working closely with Anglian Water Operations and standalone capital projects including the Private Pumping Stations programme, and semi-emergency works for Anglian Water's Operations teams. These are known as the Integrated Main Works (IMW) Alliance and Integrated Operational Services (IOS) respectively.

Both frameworks build on the Alliances model and encourage all the members to participate in all stages of project development and delivery where they have a contribution to make. It is a long way from the traditional role of the civil engineering contractor and gives our people access to a whole new set of career opportunities. Winning both frameworks has been a tremendous achievement and means a huge increase in regional revenues to £50m per year, for potentially the next 15 years! Not only does the team expect to grow their overall business, but these successes also help them to build up their experience in the key sectors of Capital Maintenance and Mechanical/Electrical Engineering which will become increasingly important in years to come. Whilst the future certainly looks bright for the Eastern region, there will be some short term challenges as they navigate through the traditional lull in workload between the end of one AMP and the start of the next. They are involved in developing the project pipeline and are applying themselves to get year 1 projects moving. Having two frameworks is fantastic because it gives more options to keep everyone fully utilised and opens up

wider career path opportunities, as does the wider membership of both Alliances, enabling the sharing of work and people amongst the partners.

Chris Smith, who started the Eastern region back in 1997 and who built the team of nearly 300 people up to now, is moving up to the role of Construction Director for Barhale and will be able to apply his knowledge and experience across the whole of our company. He is replaced by James Haddon, the new Eastern Region Director. James re-joins Barhale after nine years away but those of you with several years' service will remember that he previously worked for 18 years in Barhale's Southern Region, eventually becoming Regional Manager. Most recently he has worked for AECOM on water and oil & gas projects in the UK and overseas. Chris and James are working through a phased handover together, fully supported by the talented and capable team in the East.



▲ James Haddon
Eastern Region Director

Following the success of the IOS contract award, we are pleased to welcome 10 colleagues to Barhale, who have transferred from Bloom & Wake and North Midlands Construction.



Ivor Goodsite visits Sussex Gardens

The Southern team working on the Sussex Gardens project recently welcomed Considerate Constructor Scheme's Ivor Goodsite, and 20 children from the local St James' and St Michael's CE Primary School.

Contracts Manager John Prendergast and Site Engineer James Peden planned a morning of activities which included a talk on site health & safety, the role of the different trades on site, and the lowdown on what tools and equipment are used, as well as giving an overview of the project and a history lesson on how London looked in the 19th Century, explaining pipe-laying methods through the years. The children also learnt about making mortar from sand, cement and water, and were allowed to make hand imprints in the concrete. They also got to view the water main and the equipment the team use to work on it.

Finally, they were invited to enter a poster competition, where they could design a poster around anything they had learnt or enjoyed whilst visiting the site. The winning poster was enlarged to A1 size and displayed on the site hoardings. In addition, the child who drew the winning poster won a prize of £20.

AMP6 onboarding

Anglian Water and the @one Alliance believe that a comprehensive induction process is key to preparing our people for the significantly different AMP6 approach to delivering projects. As such, a one-day AMP6 Onboarding event, repeated over five days in January at the Kingsgate Centre in Peterborough, saw more than 500 @one Alliance employees, colleagues from Anglian Water and Supply Chain partners brought together to discover the @one Alliance and Anglian Water's plans for AMP6 and the exciting challenges that lie ahead. The morning involved interesting and informative presentations on Anglian Water's Love Every Drop strategy; the Totex (total expenditure) approach to the money spent on an asset throughout its lifetime; the new AMP6 delivery process and governance, and the introduction of the Outcome Delivery Incentives (OIDs) which are now critical in achieving a successful performance outcome going forward. There were also a number of lively activities that engaged people with the key messages underpinning the new AMP period, including a Lego challenge and a task relating to Anglian Water's customer outcomes. David Newsome, Business Development Manager, who assisted with the event, said: "Feedback received from delegates showed they enjoyed the day and found it informative. We had a clear aim, which was to ensure that the event was interactive, engaging and fun. People with different types of professions and backgrounds attended the event and enjoyed the participation aspect of the day."

This sentiment was echoed by Andy Flowerday, who said: "Look forward and enjoy it – AMP6 is a challenge to revel in."



spotlight on

Sussex Gardens Water Mains re-lay project

Contracts Manager John Prendergast explains all about this project taking place in London.

CLIENT: Thames Water Utilities, for Crossrail

PROJECT: Sussex Gardens Trunk Water Mains Re-laying

LOCATION: Sussex Gardens, London

In brief:

Thames Water (TW) is re-laying trunk water mains at Sussex Gardens as a result of the Crossrail TBM passing under the area in 2013. In the agreement to allow the tunnel boring machine to drill under the six trunk mains in 2012, Crossrail's contractor Bam Ferrovial Kier (BFK) employed Barhale to install Syrinex monitoring devices and to install a new pipe in Stanhope Terrace which allowed TW to throttle the mains in Sussex Gardens while the tunnel machine drilled beneath without any incident.

A commitment was given by Crossrail that they would reline any water mains that fell within the maximum allowable settlement zone which meant that five mains needed to be re-laid. TW employed us because of our experience of large diameter trunk main works and because of our local knowledge.

Technical details:

The Scheme was split into 2 phases; phase 1 being a test model for phase 2. Phase 1, which is near completion, consisted of the following:

- The PE slip-lining of 50m of 36" Cast Iron water main - laid in 1867 - 147 years old!
- The PE slip-lining of 50m of 15" Cast Iron water main - laid in 1942 - 72 years old!
- The PE slip-lining of 50m of 21" Cast Iron water main - laid in 1825 - 189 years old!

There were many considerations with this project, including:

- digging around fragile Victorian Water mains
- public relations issues while making noise breaking a 400mm deep road slab
- working in busy pedestrian areas and traffic management
- maintaining the Crossrail commitments on cyclist safety/noise/dust & visual impact

Customer benefits:

Sussex Gardens is a very busy pedestrian traffic route between Paddington and Lancaster Gate Tube Station. This proved to be a big challenge but the main priority was public safety and the safety of operatives on site.

As the main bulk of the works took place on Oxford Street there were restrictions to footpath space. In order to protect members of the public and minimise disruption, careful planning was required especially with regard to the pedestrian crossing as it was very close. The management of the space and the number of on-site was vital to ensure that the programme could be met in a safe way. It was decided to move the pedestrian crossing by 15m, which was done at the start of the contract, to minimise interaction. This proved a really good idea because it gave more site space while not increasing the risk to pedestrians and traffic.

The traffic management plan for phase 1 meant a road lane closure and a diversionary route. One of the problems with this was the buses that went on diversion did not have a toilet at the changeover point anymore. The project team agreed to install a Bus Driver Toilet as part of our works which has received positive feedback.

The diversion became a little unpopular when a "traffic rat run" developed through a narrow street and this was highlighted by concerned members of the public to the Crossrail Helpdesk. The team decided that if the east end of the route could be made two-way this would alleviate the issue. This was publicly communicated by the Crossrail project update sheet and the change has proven very popular. All of this involved close collaboration between the team and external



▲ Looking west onto Sussex Gardens with noise mitigation

groups such as Westminster Council (WCC) and The Paddington Business Group. It proved that the team made the correct decision at the start of the job to entrust Crossrail and Atkins Consultants to agree traffic management with the local boroughs. This team is hugely experienced with traffic management solutions so it made sense to keep them in place. The Barhale team that monitor the traffic management have also received praise from WCC about our good work.

As the project has progressed and increased programme demands have been identified the noise levels have increased. This has presented a number of challenges, especially the inconvenience to local residents. In order to mitigate this, works have been planned in order to ensure, where possible, that heavy noise-making activities have been restricted to mid-morning as well as other measures such as adequate site briefings on the importance of noise mitigation, the use of acoustics tents and curtains and the use of silent running plant. Noise monitors have also been installed. Any complaints received were dealt with effectively by the Crossrail helpdesk and the Barhale/Crossrail public relations team, and those concerned now also receive weekly updates on upcoming works.

As part of this project we receive regular HSE inspections from senior TW staff, monthly inspections from Barhale Senior Managers and regular visits from Thames Tideway staff. We scored 100% in an HSE 7 audit from Bob Collington of TW. The average inspections score to date on site is 94.5 % which proves that collaboration to a common goal "delivering a project safely and being conscious of your surroundings" can be achieved even in the most demanding of situations.

Collaboration on Safe Method of Digging

One of the key features of the project to date has been the successful excavation of pits in a highly congested utilities environment. Excavation of soil using traditional methods such as with an excavator was not an option because the risk to the buried water mains was considered too great. The project team were left with the problem: how to excavate large volumes in a safe and efficient way? Barhale did this by digging all the pits by hand and filling skips which were lowered into the pit to fill but this methodology leads to high levels of fatigue. Site operatives were finding that using insulated hand digging tools was heavy work, so Site Engineer James Peden found an innovative solution to this problem. We approached the TW project team and agreed that a trial should be carried out on lighter tools, which James organised. During the trial operatives gave continual feedback and eliminated the tools until all parties were satisfied that the most practical tool was being used. This is a prime example of how collaboration can result in a safe solution to a problem.

Three Pillar Event planning gets underway



▲ Dennis Curran speaking at the HS&E Conference and Annual Awards November 2014

At the HSEQ Conference last November, Dennis Curran announced an initiative which would involve all regions and Head Office taking part in events throughout 2015 to celebrate and reinforce the original Barhale Three Pillar Model.

To get everyone into the spirit of the project, footballs were kicked out to the audience at the conference, and those people who caught them were tasked with co-ordinating the events.

Since the conference, event teams have been formulated and ideas discussed around the initial ground rules which were put together by BCS Regional Manager James Mulchinock, and have at their centre Dennis's vision, which is that each event will connect to the original three Pillars of Profit, Safety and Environment.

We are now pleased to announce the running order of events:

April: An Environment-themed event will be co-ordinated by the Walsall team, led by Environmental Advisor Anna Price.

May: BCS will co-ordinate a series of three pillar events led by James Mulchinock.

June: A Safety-focused event will be co-ordinated in the South, led by Customer and Communications Manager Erica Fairhurst.

September: The Eastern region will take on a Profit-focused event, led by Performance Manager Karl Simkins.

October: A Profit-focused event will be co-ordinated by the Northern and Yorkshire regions, led by Yorkshire Regional Manager Mark Mulchinock.



We would like to thank everyone who has been busy co-ordinating these events for their time and great ideas so far – and we look forward to reporting on the events as they take place throughout the year.



Pillar Watch

Profit

We are now nine months into our financial year and we are pleased to report that the Company is performing ahead of expectations. We are now benefitting in full from the cost reduction programme implemented in 2014. The AMP5 programmes have for the most part been closed out efficiently with volumes maintained and we will continue to close out these projects well into 2015. There is a lot of work currently going into ensuring a smooth transition into AMP6. There will inevitably be some inefficiencies during this period but we do not anticipate these to be at the levels experienced previously.

Increased profits have enabled us to improve our cash position. This will in turn improve relationships with our supply chain and ensure there is a healthy appetite to work with Barhale in the future. This will make sure that we are able to buy at the best possible prices and reduce costs.

Efficiency is however not just an initiative but something we must constantly strive to achieve. This may be in our day to day work or through continuous improvement. Please use the Near Miss Reporting process wherever possible to suggest areas for improvement. Alternatively please speak to your line manager and he/she will pass on any suggestions.

We expect the next few months of the financial year to be more challenging as we enter AMP6. It is particularly important that we challenge what we have done in the past and don't carry any inefficiencies into AMP6. Be prepared to investigate unexpected results; don't just accept them.

Having been through a period of consolidation, we must now concentrate on maintaining our order book. To achieve this the Board have taken a number of steps to strengthen our work winning capability, however our growing financial strength and reputation will go a long way in helping with this.

Safety

We are pleased to confirm that 2014 represented a very positive year for HSEQ in many ways. Our performance shows we are heading in the right direction to achieving zero accidents and incidents.

Notable achievements last year included the achievement of FORS bronze status and CE marking accreditations, and the 14% reduction in non-conformances identified by internal audit.

There is still plenty of work to be done to reach our ultimate goal but we should recognise our efforts during 2014 to reduce accidents and incidents. The table below confirms some of the highlights.

As Quarter 1 of 2015 comes to a close, we are also pleased to have promoted three specific occupational health campaigns. We feel that these campaigns are useful and important to communicate across the business, as we are keen to raise awareness of health issues and encourage you all to take care of yourselves! The themes covered so far included:

- January – we kick started 2015 with a theme on your health, knowing the important numbers and information on diabetes
- February – was all about having a healthy heart and providing top tips to keep your ticker ticking
- March – the theme was focused on raising awareness of both prostate and ovarian cancer

We have also begun our 2015 Home Safety Campaign, with the first quarter devoted to domestic hazards which can affect the safety of our children. We want to encourage a safety culture not only at work but also at home and our campaign is focused around achieving a positive safety culture and helping reduce accidents in the home environment.

Environment

We have recently signed up to be part of the Green Construction Board's (GCB) initiative to reduce carbon in infrastructure.

The Infrastructure Carbon Review was launched in 2014, making the business case for low carbon solutions. It is now gaining momentum, helping to address the low-carbon aspirations set out in the Government's Construction Industry Strategy and climate change commitments. Written for industry leaders, who hold the power to effect real change, it has a dual aim of making carbon reduction part of the DNA of infrastructure in the UK and releasing the value of lower carbon business solutions.

The resulting Statement of Endorsement, signed by Andy Flowerday on behalf of Barhale, is supported by many leading businesses within construction, and is available to view on the GCB's website.

We have chosen four specific commitments, which help deliver the high-level ambition laid down. These are:

- Achieving ISO50001 by the end of 2015 to drive and reduce our energy usage
- Increasing the volume of "no-dig" solutions we deliver for our clients, thereby reducing carbon and disruption as well as maximising the use of existing assets
- Nominating a main board member who will have express responsibility to drive the carbon reduction agenda
- Working with our clients to explore how we collectively drive lower carbon solutions and stimulate innovation by effectively connecting to R&D organisations

ISO50001 will enable Barhale to use energy more efficiently, through the development of an energy management system. ISO50001 is based on the management system model of continual improvement also used for other well-known standards such as ISO9001 or ISO14001. This makes it easier for organisations to integrate energy management into their overall efforts to improve quality and environmental management.

HS&E Statistics	2013 Performance	2014 Performance	Reduction %
Rolling AFR	0.23	0.09	61
All Accident AFR	3.14	1.71	46
Lost Days Frequency Rate	1.84	1.39	24
Minor Injuries Reported	88	41	53
Environmental CAT1&2 Incidents	0	0	=
3 Pillar near misses closed immediately	65%	78%	13%



spotlight on

BCS support for 2014 Commonwealth Games

BCS Business Development Manager John Lawson gives us the lowdown on the support for this prestigious event.

CLIENT: Ashtead Plant Hire Co Ltd

PROJECT: Road signage and traffic management equipment

LOCATION: Commonwealth Games, Glasgow

In brief:

The 2014 Commonwealth Games (officially the XX Commonwealth Games) were held in Glasgow, Scotland, from 23 July to 3 August 2014. It was the largest multi-sport event ever held in Scotland with around 4,950 athletes from 71 different nations and territories competing in 18 different sports.

Temporary traffic management measures had to be supplied for the Games to protect residents and businesses around the competition venues from informal spectator parking.

What was involved?

During the course of the planning and implementation of the project, BCS entered into in depth liaison with the client, A-Plant, to agree all stages of the project and all matters which had to be taken into consideration. This consisted of arranging the delivery of all traffic signage for the event, including road safety cones throughout Glasgow and the surrounding areas. This was a big task because everything from road closures and diversions, stop and go traffic control and mobile lane closures had to be catered for.

Customer benefits:

The provision of adequate signage was vital to ensure that Games-related transport, including that provided for athletes and officials, was able to get to venues on time and without interruption.

Managing the flow of spectators to and from venues was equally important, ensuring that they arrived and exited events as quickly and as safely as possible.

All of this ensured that the logistics of the Games ran smoothly and contributed to an event which was widely deemed a great success.

Indeed, Scott Graham, Service Centre Manager at A-Plant, said: "I'd like to say a big thank you to you and your staff for the excellent work during Glasgow 2014. It went so smoothly and quickly. We had several positive comments from the organisers saying that we performed exceptionally and we couldn't have done this without the service we received from BCS. Thanks again for your professional and efficient support."



▲ Site visit by the European Regional Development Fund (ERDF).



▲ Site visit by Institute of Civil Engineers (ICE).



▲ Tunnel Boring Machine in shaft.

Shawfield Culvert Diversion heralded a great success

The Scotland team is on target to complete this prestigious £4.9m environmental improvement scheme for their Client, Clyde Gateway Developments Ltd. When completed the works will help the client to meet their aim of preventing heavily polluted ground water from entering the River Clyde via a number of existing culverts.

The scheme comprises five 7.5m diameter shafts 11m deep with a 320m long, 1800mm diameter driven tunnel finishing at a new outfall on the River Clyde. In addition the team is concrete-lining sections of the existing culverts and applying Cured In Place Lining (CIPL) to 400m of the twin 1500mm diameter Polmadie Burn.

There has been considerable stakeholder interest in the project with visits from the directors and CEOs of the Client and the two local councils (South Lanarkshire and Glasgow). In addition, the team have played host to delegations from the Institution of Civil Engineers (ICE), the European Regional Development Fund (ERDF) and the Scottish Environment Protection Agency. During the visits our people described the construction methodology and the extensive steps they were taking to ensure the Health, Safety and Welfare of all our people whilst working in difficult and potentially hazardous conditions. After some difficult contracts in Scotland, Regional Manager Stuart Cameron commented that it is great to see a project that showcases Barhale's values – excellent delivery in technically demanding conditions, high levels of client and stakeholder satisfaction and a good commercial return.

He said: "Considerable credit must go to the site team who have worked hard to deliver the sort of outcome we would like to see on all our jobs. Phil Suttie, Gordon Benson, Allan McCann, Luke McDermott, Paul Stelmaszuk, John McDonald, Kenny McCormack, our operatives and suppliers have all played their part."



Yorkshire facilitates new retail therapy in Leeds!

Our Yorkshire team is busy working on a sewer diversion scheme for the Victoria Gate project in Leeds.



▲ Artist's impression of the new £150m Victoria Gate development in Leeds.

This new addition to Leeds' shopping scene will include John Lewis's first store in the city, and the first phase of the development will capture the heritage of the Victoria Quarter and offer a range of high quality and designer brands. The project will involve the diversion of an existing 1150mm x 900mm egg shaped sewer running in Millgarth Street, between Union Street and Dyer Street in Leeds. It is proposed to divert the sewer in advance of the construction of the multi-storey car park, which will be located in the area previously occupied by the Police Station. The sewer diversion works have now commenced following the demolition of the Police Station.

It is proposed that the existing 68m sewer located in Millgarth Street is diverted to enable construction of a multi storey car park and adjacent shopping centre. The sewer serves a 12ha catchment to the north of Leeds City centre and eventually discharges to Knostrop Sewage Treatment Works. It has capacity estimated to be 1.29 m³/s based on the levels from a recent survey. The proposed route runs adjacent to the existing Ladybeck culvert. Ladybeck has been culverted over a 1070m length, and is of various constructions, which were built in stages in the early part of the 20th Century to allow development of the eastern side of the city centre. Running from Bell Street to the River Aire,

just downstream of Crown Point Bridge, the structure passes under numerous roads and properties. The culvert in the area previously occupied by the Police Station is approx. 6.1m wide by 2.5m deep.

The diversion works will involve approx. 114m of 1200mm diameter concrete sewer and five 2100mm diameter manholes at a depth of 4.25m to 5.4m. The excavation for the combined sewer diversion may expose or impair the adjacent Ladybeck Culvert abutment (anticipated minimum distance is 3m). Therefore, a suitable trench protection, taking into account the thrust force from the culvert arch will be required. At this stage it is assumed that sheet piling will be utilised. Both the proposed sewer diversion and Ladybeck culvert will be built over by the proposed multi-storey car park, which is subject to a legal agreement between Yorkshire Water and the developer. Alongside regenerating the physical space, the first phase of the development will also deliver up to 1,000 retail and hospitality jobs and additional construction employment opportunities.

Victoria Gate will in total accommodate around 110,000m² of retail and leisure space. The second phase will include additional retail for major high street brands, leisure space, restaurants and a food court, additional parking spaces and a Low Carbon Energy Centre. The detailed designs for phase one include three main buildings:

- A John Lewis store, with facade designed to draw on Leeds' textile heritage
- The Victoria Gate arcade, with stores, restaurants, cafes and leisure space in an elegantly designed two street arcade linking the Victoria Quarter to the John Lewis store
- The multi-storey car park which will accommodate 800 cars

Due to the relatively recent commencement of the works, there are certain factors which may arise during the project. For example, the environmental reports suggest that contaminated land may be encountered, and also, consultation with the West Yorkshire Archaeological Services has confirmed that the site has a significant potential for archaeological remains. The works will therefore be subject to an evaluation, which may be followed by either a more detailed open area excavation or watching brief.

Collaborative Procurement

The Procurement Team are working on several initiatives aimed at streamlining and ensuring greater efficiencies within our supply chain.

These include regular attendance at 'Meet the Buyer' events, one of which took place in Wakefield on March 12th. The day was attended by Assistant Buyer, Josh Bartimus and Trainee Buyer, Raja Clair. Josh declared the event to be a great success, with plenty of suppliers and subcontractors attending the day, including both national companies and businesses local to the Wakefield area.

The next scheduled event will be taking place on the June 3rd in Central London and is being hosted by Constructionline. Senior Buyer Paula Gray commented: "we are excited to be a part of the day and are looking forward to creating opportunities with existing and potential new suppliers who can bring additional quality, innovation and value to our supply chain".

Paula recently attended the EU Procurement Legislation training day run by Achilles. This event was a detailed and informative platform to ensure that Barhale is fully compliant and up-to-date with recent changes to legislation. This is especially important in ensuring that we are able to operate within existing legislation and provide our clients with a professional, comprehensive service. The event offered the opportunity to liaise with legal professionals who have extensive experience in procurement law and to discuss issues which affect the construction industry as a whole.

In addition, over the last three months, the team have undertaken a supplier training programme. They are now halfway through this,

having met with 30 suppliers so far, and it is proving a great success in strengthening supply chain relationships and ensuring the team are fully trained on all new product and plant innovations. The aim is to ensure they are best placed to offer clients the most efficient and value for money solution to their challenges whilst ensuring full compliance with legislation.

The Procurement Team are also proud to play a central role in Barhale's relationship with the Contractors Health & Safety Scheme (CHAS). As a result, when CHAS recently asked if Barhale would like to feature in their latest newsletter, they were only too happy to oblige; providing information on how our valuable customers use the system and the benefits that this brings to us. Procurement Director Karl Woodward stated that "we appreciate the work that CHAS has done and the benefit that this brings to the many thousands of suppliers, using a recognised safety scheme that we have engaged with from the early beginnings. Therefore, we were more than happy to endorse the work of CHAS by providing our feedback for their newsletter".

Committed to providing the most efficient and effective solutions to our supply chain, the team encourage the use of CHAS's existing schemes to provide evidence of their approach to safety. CHAS has been doing this for many years, supported by Merton District Council, to provide a recognised standard - not only within our industry - but across many sectors within construction.



▲ Josh Bartimus answering questions at a recent 'Meet the Buyer' event.

Building bridges with Kier

In 2014 BCS Fabrications were awarded a Tier 2 contract by Network Rail working alongside Kier (who are principal contractor) to design, fabricate, and erect a series of steel footbridges across the UK, as part of the National Level Crossing Risk Reduction Programme (NLRRP).

This project is designed to reduce the number of fatalities and injuries caused by members of the public crossing railway lines via dangerous unmanned foot crossings. By closing and re-routing these rural footpaths via new footbridges risk of injury or worse will be minimised and important community thoroughfares remain open.

More than 100 new bridge structures are programmed for delivery and installation over a four year period with around a third allocated to Barhale. This is a high profile scheme for Network Rail and a hugely important one for Kier and Barhale, as it is anticipated that this will also become the delivery model for all steel footbridges across the regional rail networks.

A number of bridges on the NLRRP programme have been installed throughout 2014:

- February - Dobroyd (Todmorden, West Yorkshire)
- March - Great Dalby (Melton Mowbray, Leicestershire)
- August - Golf Links (Chelmsford, Essex)
- September - Websters (Great Shelford, Cambridgeshire)
- November - Kemps (Balcombe, West Sussex)

Although not the site of a dangerous crossing, scheduled for delivery in April by the NLRRP team is a project at Barnt Green Station in Bromsgrove. The project is to replace the existing time-expired and obsolete footbridge with a new, higher structure. This will also future proof the line for the planned introduction of electric trains by giving headroom for the installation of overhead line equipment beneath the bridge span. The existing footbridge will remain in place while the new structure is erected and will be demolished following installation.

In addition to the programmed works, the team is developing an improved footbridge to be compliant with Structural Eurocodes and optimised to suit the majority of spans required for the program. The new design is being developed in conjunction with Kier, Network Rail and their designers. Each structure is drawn or "modelled" in 3D prior to commencement of manufacture and is in effect "virtually built" on screen by the BCS draughtsman. Any pre-production irregularities arising from the design can be easily identified and remedied without costly delays to manufacture and abortive rework. By using BIM (Building Information Management) technologies such as this, it allows the fabrication team to manufacture off site modular footbridge structures which are transported to and assembled at the installation site with confidence and precision - an approach that is essential when the clock is ticking during a possession or a weekend closure of the railway.

The team have been busy writing case studies on these projects, and recently published one on Kemps Footbridge, in Balcombe, West Sussex. The bridge built here removed the need for the original foot crossing, making it much safer for the public to cross the railway line.

Despite their programme being brought forward, putting pressure on all aspects of the works including fabrication, painting and installation, Network Rail commented: "It is commendable that a good quality structure was installed on time!"



Websters footbridge span being lowered into place.

spotlight on



Elsworthy Road, Optimise

Site Agent Manoj Halai gives us the lowdown on this project which was undertaken in Camden, London.

In brief:

This project involved the construction of a 112m long online box culvert sewer to prevent flooding to ten residential properties. This was achieved by diverting flows to a wet well pumping station.

In the event of very heavy rainfall the sewer would surcharge and cause the basement properties situated on Elsworthy Road to flood. The old 1200x800mm brick sewer could not cope during these events. We were tasked with the challenge of preventing 10 of the most at risk properties from future flooding, and also to provide larger storage capacity to benefit the surrounding area.

Technical details:

It was decided that the best option was to lay a specially built culvert (2.7mx2.2m) which had two separated sewers within. The North side of the sewer would take the flows from the original brick sewer while the South side of the culvert would carry the flow which only came from the at risk basement properties. In the latter case, the sewer ran to a 7.5m deep wet well which would then pump the sewage back to the main sewer.

Health & Safety: Careful planning and execution was required to offload the large culverts on such a narrow residential road. The depth of the excavations (ranging from 4-7m) created approximately 6000ton of muck away.

Environment: Works carried out were in close proximity with London Plane trees which were protected. Hoarding was erected around the trees to prevent any damage.

Customer benefits:

This segregation of sewers meant a surcharge in the main sewer would no longer have an effect on the basement properties situated in Elsworthy Road.

The work was potentially very disruptive to local residents in a road of multi million pound properties, however, proactive communication from the whole site team and close liaison with those affected resulted in a successful project which has significantly reduced the risk of flooding.





Paintbrushes at the ready for Team Optimise

The Optimise team at Tiverton Green, Brent, has been carrying out a £6.1m scheme to reduce the risk of sewer flooding at 35 properties in the Chamberlayne Road area.

The work included excavating a 28m deep, 15m diameter shaft beneath the area to accommodate an underground tank to take excess flows in times of heavy rain. It was agreed at the start of the project to refurbish the local playground but the team went the extra mile, donating almost £15,000 to the Council to spend on new equipment and railings to make the Green a fun and safe place for children to play. Members of both Optimise and Thames Water got their hands and overalls dirty but had great fun painting the railings to spruce up the playground.

Project Manager Mark McGeady (pictured front, centre) said: "We know our work has caused some disruption but we've found people to be very understanding of the importance of what we're doing and this is our way of saying thank you. We hope visitors to the Green will enjoy the new play equipment and have lots of fun."

Councillor George Crane, Lead Member for the Environment at Brent Council, said "At a time when the Council faces savage budget cuts, this generous donation from Optimise is very welcome news. I would like to thank them for their donation and I'm sure the local children will enjoy using the new equipment."

Good luck to Optimise

This year Optimise has submitted no less than seven separate entries in the Thames Water Health and Safety Awards.

The Tunnel Inspections Programme, which is a Barhale project, has been entered in the Best Practice in H&S Collaboration category. To date, approximately 30km and over 28 tunnels across the Lee and Thames Valley areas have been inspected over this three year programme, with over 90,000 incident-free hours worked to date. The team also entered their Onsite (Real Time) Service Avoidance Awareness programme as a submission in the Innovation category. The programme, which is run by HSE Advisor Randolph Lavelle, brings service avoidance training to the streets, allowing people to work with the trainer during a real-time excavation, rather than traditional classroom-based training.

In addition, the Sussex Gardens scheme in London (see feature, page 7) has been entered into the Best Practice in Health & Safety Collaboration category, and Site Engineer James Peden, who works on this project, has also been nominated for the Young Person of the Year award. We'd like to wish all nominees the best of luck for the Awards, which will take place in June following shortlisting which is currently being completed.

Optimise ends Year 5 on a high - and with a big Year 6!

The Optimise joint venture, comprising Barhale, Murphys, Clancy Docwra and MWH completed their busiest year yet on 31 March, delivering £122m VoWD (Value of Work Done). Year one delivered £80m and Years 2 to 4 hit the £100m mark. This 20% hike for Year 5 is unprecedented in a water company AMP cycle and there's further work for AMP6 Year 1, currently just over £45m, which means Optimise will still be busy right through 2015.

All of the Thames Water Regulatory outputs, required under our Capital Programme Contracts, have been achieved. In the clean water programme, the team replaced over 30,000 lead pipes and the Victorian Mains Replacement delivered 18.19 MLD of leakage savings in AMP5.

On the waste water side, Optimise delivered 18 Combined Sewer Outflow (CSO) water quality projects and, finally, the team delivered internal flooding prevention schemes that now protect 586 properties across London and the Thames Valley. The overall programme included many other, often challenging, clean and waste projects and the total value of Capital work delivered was £495million.

BCS goes live with Syrinx

The first quarter of 2015 has seen BCS testing out and implementing Syrinx, a new hire management system which will help the team co-ordinate their hire, sales and asset management. Syrinx is an award-winning system which, following testing which began in January, has now replaced Hiremate.

BCS Administration and Systems Manager Jennifer Rushton gave us the lowdown on how the implementation was carried out:

The process began with data extraction in January. Data from Hiremate was given to Syrinx, who processed it and then sent it back to BCS in the form of Syrinx tables. This then needed to go through a validation process, which took many hours of preparation,

because the Syrinx tables were found to be much more complex than the Hiremate ones.

This was followed by a visit from Syrinx who completed the installation of the software later in January. User acceptance testing then commenced, which included updates to data, testing of imports and process mapping. Next, Syrinx provided on-site training to the team which took place in February. Once all of this was complete, the 'go live' button was pressed and the final invoice run completed in Hiremate. It was then a full team effort to enter all existing hires and outstanding sales and purchase orders into Syrinx, but Jennifer is pleased to report that this presented minimal disruption and there was a smooth transition between the two systems.





Getting in sync with Microsoft Lync

Communication and collaboration has always been a high priority within our business. Our nationwide coverage does present challenges here though, often involving lengthy journeys to attend meetings or long-winded email exchanges, sending documents back and forth multiple times. All of these have disadvantages we can now avoid:

- Wasted time and money travelling and increased road safety risk
- Environmental carbon impact with CO2 emissions
- Document management – it is difficult to keep track of the latest version of documents as they are emailed around to multiple people. Often the same data is keyed in multiple times

However, we now have access to a smart piece of software, Microsoft Lync. Lync is an instant messaging (IM) client included with the Microsoft Office suite already purchased for Barhale computers. Lync not only provides IM, but also screen-sharing and video conferencing capabilities, which makes it an exciting and very useful addition to our business. Its advantages include:

- Any computer document can be shared with multiple people in real time
- Video calling (if you have a webcam)
- Realtime IM – can reduce lengthy email exchanges
- Presence – you can see if people are online and available before you call
- Future Skype integration – Microsoft are working to integrate Lync and Skype so you can communicate with any Skype user

In order for the system to work effectively the IT team had to install a central Lync server, which enables all of the clients to communicate. This means that as long as you have an internet connection you can message, video call and share your screen with other Barhale employees.

You need to bear in mind that quality will be dependent on internet connectivity, as 3G is not recommended for video calls, but we think you will agree that Lync will be a great communication tool that many of us will use on a regular basis.

All the stops pulled out at Christmas!

During the Christmas break, whilst many of us enjoyed some quality time with family and friends, the Eastern team were called upon to work day and night in freezing conditions to repair a critical burst water main at Caister St Edmunds, near Norwich.

The repair was extremely complex and involved liaising with KierMG and key members of our supply chain including GB Digger Hire, Groundforce and Force One, who all went beyond their normal call of duty.

The repair was followed live on the local BBC News channel over a three day period, just adding to the pressure on the team! We received a note from Peter Simpson, CEO of Anglian Water, who had been on site for much of the event, thanking our team for pulling out all the stops to restore the water supply to several thousand customers, which was endorsed with a flurry of positive Twitter feedback from many AW customers showing appreciation for the great work done by our guys and the AW team.



▲ Councillor Phillip King helps to unveil Diglet.



▲ The children learn about Diglet.



▲ Diglet being lowered into the ground.

Eastern region educational visit

The team working for Anglian Water on a flood alleviation scheme in Market Harborough recently welcomed a group of school children to the site, and introduced them to their tunnel boring machine.

The machine, which is now affectionately known as Diglet, has been boring a second tunnel beneath the streets of Market Harborough as part of a £1.5 million project to reduce the risk of surface water flooding in Coventry Road.

The name of the 600mm diameter machine was chosen by ten year-old Frazer, a pupil from the nearby Market Harborough Church of England School, as part of a competition. He and his class were invited to the site on 6 February to see Diglet unveiled, as well as learning about engineering and the project itself.

The children, together with representatives from the local council and members of the public also watched as Diglet was lowered into position to start its 100m, laser-guided journey to the junction of The Square. Nick Randall, Project Manager, said: "The children seemed to really enjoy seeing Diglet and learning about the work we're doing and why.

"Giving the micro-tunnelling machine a name has proved really popular with the team. All of us just call him Diglet rather than the machine as we would on most similar projects. The name is incredibly catchy.

"Hopefully we've inspired the children and who knows maybe some will go on to be engineers of the future." He added that hopefully, visits such as this help people to understand the importance of such works and helping generate interest in the project to outweigh any inconvenience caused.

Cllr Phil King, Deputy Leader of Harborough District Council, said: "I am pleased that Anglian Water has engaged with schools and the local community to explain more about the important work it is carrying out. It was good to hear that the scheme is progressing well and that the local community will soon benefit from these flood prevention measures."



barhale people

Pillars of our Community

The BTU team provided some community support by donating two weeks' labour to a project in Portsmouth, where new changing room facilities for an indoor swimming pool were being built at Redwood Park, a special needs school. The project was driven by the Checkatrade Foundation and was also supported by Southern Water and local trades and suppliers. The new facilities were opened on 12 December by Big Brother celebrity Craig Phillips, who is pictured here with some of the BTU team, Pierce Moad, Phil Jolley, Alun Smith and Billy McDonald. Regional Director David Welch said that this was another great example

of BTU's work with the local community, for a very worthy cause, being combined with everyday business.



Pictured L-R: Ashley Blackman, James Peden, Mark Teevan, John Prendergast, Paul Smulders, Robin Hilsden, Liam O'Donovan.

Festive fun!

In December, the Southern team got into the festive spirit by wearing their Christmas jumpers on-site; of course, they made sure they were also wearing appropriate PPE!



Painting the town Green

Barhale was delighted to support the Manchester Irish festival alongside Flannery Plant on Sunday 15th March 2015. Manchester has a long standing tradition of holding a carnival procession during the weekend prior to St. Patrick's Day. More than 40,000 people lined the streets of Manchester for the 25th Annual Irish Festival parade. The streets are closed to traffic as the parade of floats and walking entries wind their way through the city.

Congratulations to these new Barhale parents

1. Marketing and Proposals Manager Chantel Dennis and husband Chris, who welcomed their daughter Edith Elizabeth, who arrived on 7 December 2014 weighing in at 8lb 5oz.
2. Financial Accountant Ben Howard and partner Jess, whose daughter Eva Rose was born on 14 January, weighing 8lb 9oz.
3. Assistant Accountant Elizabeth Geddes and husband Matt, whose daughter Beatrice Louise arrived on 3 December 2014, weighing 7lb 10oz.



Birthday Girl

A very Happy Birthday to Payroll Administrator Jane Schnabel who turned 60 in March.

Graduations

Congratulations and well done to:
Environmental Advisor Anna Price, who has achieved Chartered Environmentalist status through the Society for the Environment

Technical Delivery Manager Emmanuel Iwuamadi, who has completed his ICE Professional Review and is now a Chartered Civil Engineer MICE CEng.

Latest clothing bank update

We have been notified that the funds raised in the final quarter of 2014 has resulted in a donation to WaterAid of £28.23 – keep those clothes rolling in guys!



Mulchinock Brothers in 570 mile charity cycle

Congratulations to BCS Regional Manager James Mulchinock and Yorkshire Regional Manager Mark Mulchinock who recently completed a 500+ miles charity cycle ride from Versailles to Lourdes. Over 50 cyclists took part in the 7 day ride for the HCPT Pilgrimage Trust. The successful event was arranged to raise money for the Lourdes pilgrimage holidays for disabled and disadvantaged children and adults.



all in a day's work...

Stevie Stocks Project Manager, Optimise



What do you like to do to unwind?

I unwind by spending time with my Dalmatian dogs, either showing them at dog shows around the country or out walking with them. We recently attended Crufts and were rewarded by my dog getting reserve Best Bitch in the Breed.

What is your favourite quote or motto?

Having an outgoing bubbly personality, my favourite saying and the one I always use the most in my working life is "Job's a good'un"

What is your favourite gadget?

Not a gadget techie really, but I like my mobile phone, always upgrading to improve on the camera aspect of it.

What's the worst piece of advice you've ever been given?

It came from the head of engineering when I was a shift worker on the steel works, "don't give up a secure job to go contracting". I ignored it and had seven excellent years working abroad and have not looked back since.

What CD do you have playing in your car?

Doing a lot of driving on the motorways, the one I play the most is "The Who - Live at Leeds", guaranteed to keep you awake!

What's your greatest extravagance?

My greatest extravagance is also my most memorable moment and that was two weeks in Sri Lanka and the Maldives when I married my lovely wife Toni.

What is your most treasured possession?

That has to be my record collection of albums in their original covers.

What talent would you most like to have apart from those you already have?

I would love to be able to dance as I am a big fan of *Strictly*.

What is the worst job you have ever done?

Working on a Building site. During one part of my career a company I was working for went into receivership two weeks before Christmas, they owed me a lot of money so I went labouring to ease the cash flow.

Where do you hail from?

My home town where I spent the first 30 years of my life is Scunthorpe.

Name one person you'd like to have dinner with – and why

Jools Holland; his tales about the music industry would be fascinating as he has so much knowledge.

Give us a brief history of your career

Like the majority of people in Scunthorpe, I left school and started work on the steelworks where I served my Electrical apprenticeship and was then employed as an Electrical Engineer on Shifts at the BOS Plant. Following a large streamlining of the steelworks nationally by British Steel I decided to leave and work in South Africa for ABB as a Project Engineer. I had seven good years with ABB traveling around South Africa, Botswana, South West Africa, and Mozambique before returning to the UK to work on Power Station and Water projects. Having settled in Sandhurst in the South of England I worked for Thames Water before returning to contracting working for Barhale Process, involved with all the Water Utility companies. At present I am involved with the Optimise JV projects that have M&E bias.

What do you do on a daily basis?

As a Delivery Manager with in Optimise, my role covers the management of projects from concept to handover. A large proportion of my work is involved in the SCADA Upgrade that Thames Water have scheduled for completion in AMP5.

Congratulations to BTU who have achieved their sixth consecutive ROSPA Gold Medal Award for Occupational Health & Safety!

Up, up and away!

Thanks to successful recent trading and a need to promote Barhale to a wider clientele, the decision was taken recently by Dennis Curran to purchase a helicopter.

Those of you who are long-serving will remember that Barhale owned a helicopter around 10 years ago which was successfully piloted by Dennis and used for corporate hospitality and PR purposes.

The new helicopter, pictured below, was built in 2007 so it is eight years old, but has had only one previous owner, who is an airline pilot. It is the same make and model of helicopter that was previously owned: a Robinson R44 single-engine, 4-seater machine, designed and made in California. It has an enclosed cabin with two rows of seating, so it can accommodate the pilot and up to three passengers.



▲ Robinson Raven R44 II four-seat piston helicopter

As the helicopter is a new purchase, it is as yet undecided if its paintwork may be changed to the corporate colours. There will also be the opportunity to change the registration, which at the moment is G-TCAL. The G stands for GB so this cannot be changed but the last four letters can, to any combination that has not been used by an aircraft before. The previous helicopter was G-HALE (ie. short for BarHALE).

Dennis has been away from the pilot's seat for a while but following some refresher lessons and a test he has successfully reinstated his licence. Sean and Patrick Curran are also looking to reinstate their licenses, and are taking refresher lessons currently.

The helicopter is currently kept at Denham Aerodrome, which is 13 miles north-west of London. Denham is a great location for the London Heliroutes, which have special clearance through the London Heathrow Control Zone which allows pilots to follow the Thames through central London for both sightseeing and transiting purposes.