TRITON KNOLL

Summer 2019

TRITON KNOLL OFFSHORE WIND FARM COMMUNITY NEWSLETTER

WELCOME

Since our last update, I am pleased to report that the project has made great progress in the construction of the onshore electrical system, and is really beginning to take shape for the future. In support of this, we've maintained frequent and in-depth dialogue with our local communities and been truly encouraged by the level of genuine interest and support we've received, as we continue to strive to be a good neighbour during our activities.

With our contractors we recently hosted a series of Archaeology Open Days, one of our most popular local events ever, where we shared some of the incredible finds made during survey works across the entire 57km cable route and onshore substation site. There was a great attendance from young and old alike, and a great chance for us to give something back to our local neighbours.

We've stepped up our engagement with local schools and education establishments in a bid to help students and careers switchers understand future opportunities within the growing offshore wind sector. We've been hugely encouraged by the amount of interest so far and hope to do more work on skills and opportunities in the future.

Turning to the project, progress has been really encouraging. The first onshore cables have now been installed as our contractor J Murphy & Sons Ltd continues to deliver the horizontal directional drilling campaign. Siemens are making great strides with the onshore substation, together with the connection to the existing national grid, while, the creation of a landfall connection ready to receive the offshore export cable is already complete.

So while such progress is being achieved across the onshore phases of work, inevitably we're increasingly looking towards the offshore phases and preparations for that. We were recently delighted to announce the main contractor and start of construction of our new Operations & Maintenance base at Grimsby, and where we are also beginning a recruitment drive to appoint our first round of long-term, skilled technician roles. The first positions will be confirmed before the end of this year, and we look forward to welcoming a diverse and local workforce to our team, once we've identified the best person for each job. Keep a watch in the local media and our website for more information in future weeks.

There's lots more on each of these stories within this edition, and I hope you enjoy reading our latest newsletter.

Julian Garnsey,
Project Director

innogy

SPOTLIGHT ON LOCAL BUSINESS: LINCOLNSHIRE DRAINAGE Co

Lincolnshire Drainage Co Ltd is the longest established drainage company in Lincolnshire, specialising in both Agricultural and Civils work. They were awarded the full design package for Triton Knoll and half of the installation works.

We caught up with Project Manager George Firth, who explained the company's role on the project.

Q. What is your background?

A: I started working for Lincolnshire Drainage Co in 2011 following in my father's footsteps, who is now the Managing Director of the company. I started out working as a labourer, and over the past eight years have progressed and worked my way up to my current role.

Q. What is your role on the project?

A: I work with the other land drainage specialists to connect-in all working existing drainage, to ensure the land drainage will be in as good (or better) working order than before the project existed. As part of this role, we also ensure no drainage is running into the newly installed cable trenches!

Q. How many people work for the company locally?

A: We employs 20-25 people in and around Lincolnshire, of whom around 8-10 are involved in the Triton Knoll project. Since being awarded the Triton Knoll contract, we have hired more local staff to keep up with the project requirements.

TRITON KNOLL TEAMS UP WITH BUSINESS ORGANISATIONS

After a number of successful conferences as headline sponsor, Triton Knoll has formally signed up with two of the region's leading business and supply chain engagement organisations - Team Humber Marine Alliance and Grimsby Renewables Partnership. The project aims to continue working with them both, and others across the region to help secure opportunities for local businesses and suppliers with Triton Knoll, its lead contractors and innogy's future projects.

INSPIRING WOMEN

To inspire women in Triton Knoll's neighbourhood and beyond, innogy sponsored the 'Women in manufacturing and engineering' category at the Grimsby Telegraph Humber Renewables Awards 2019 on 13 June. As part of the event, Triton Knoll's Fruzsina Kemenes, presented an award to Sophie Marsden, from GEV Group who has risen rapidly to the ranks of project co-ordination manager overseeing the disbursements of the 200 plus field workforce.

'LUCKY 13' SHARE IN LATEST COMMUNITY POT

Thirteen projects at the heart of their communities are the latest to share a bumper windfall of over £126,500, the largest grant awards made by the Triton Knoll Community Fund so far.

The projects represent communities from one end of the 57km Triton Knoll cable route to the other, delivering benefits from Bicker Fen to Anderby through the locally-targeted fund.

This is the second round of awards from the £500,000 Construction Fund, which was set up to operate during the two years of construction of our onshore electrical system. The fund officially opened in August 2018 and supports grassroots groups, delivering vital support to the local community. It is part of the larger Triton Knoll Community Fund, which will deliver a total of £1.5m into communities closest to the project's onshore construction works and infrastructure.

The latest successes include sewage system improvements at Bicker Village Hall, a multi-use games area at Flinders Founders in Donington, a heritage project for children and young people at Sibsey Lancaster Memorial Trust, new disabled toilets and baby changing facilities at Northlands Village Hall, a new car park at Huttoft Village Hall and replacement of old equipment at the National Coastwatch Institute.

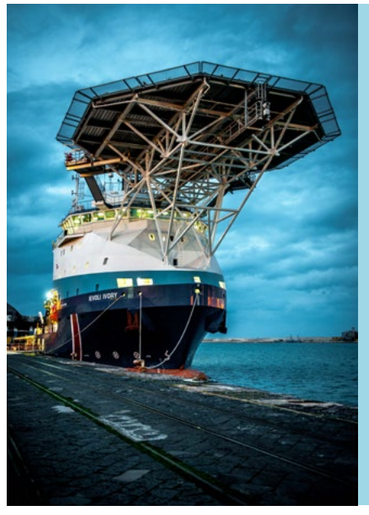
All applications are reviewed and determined by a panel of local people to ensure the best decisions are made for nearby communities.

The successful projects are:

Bicker Parish Council	(£6,869.55)
Bicker Village Hall	(£30,000.00)
Flinders Founders, Donington	(£12,788.40)
Northlands Village Hall	(£9,974.00)
Anderby Parish Council	(£6,876.00)
Sibsey Lancaster Memorial Trust	(£4,071.00)
National Coastwatch Inst	(£3,231.20)
Donington Summer Fest	(£3,443.61)
Helpringham Memorial Hall	(£5,489.58)
St Swithuns PCC, Bicker	(£10,830.00)
Huttoft Village Hall	(£5,000.00)
Swineshead Bowling Club	(£15,000.00)
Swineshead Silver Band	(£10,000.00)
Total amount awarded this round =	**£126,559.32**

The next closing date is on 1 November 2019 with a decision-making panel meeting on 4 December 2019.

For more information about the Triton Knoll Community Fund, visit the Lincolnshire Community Foundation website **www.lincolnshirecf.co.uk** or the Community Fund section of the Triton Knoll website **www.tritonknoll.co.uk**



UXO CAMPAIGN BEGINS

Earlier in July, we mobilised our unexploded ordnance (UXO) investigation and clearance campaign for the wind farm, ahead of the start of offshore construction at the beginning of next year.

The campaign will investigate a number of potential targets that have previously been identified by the extensive surveys undertaken across the Triton Knoll offshore site. As part of the UXO campaign our contractor James Fisher will be undertaking investigations in the nearshore area, visible from the beach at the landfall site, north of Anderby Creek. Should any further intervention be required further information will be provided to local residents, following the initial investigation.

James Fisher's Ievoli Ivory vessel, which is carrying UXO works offshore. Vessels to carry out the nearshore works are awaiting confirmation.

ECOLOGY UPDATE ALONG THE CABLE ROUTE

The Lincolnshire-based Helen Scarborough, (formerly Scarborough Nixon Associates) has been busy providing ecological support on the Triton Knoll project.

NESTING BIRDS

Since March 2019, Helen Scarborough and her team have been carrying out checks for nesting birds, and so far, the team has found nesting chaffinches, reed buntings and skylark. Our photograph shows a skylark nest located near Sibsey Northlands, where the area was left and cordoned off until the birds had fledged. Helen and her team monitored the area regularly and at the end of June were able to confirm that the chicks had fledged successfully and the nests were disused. Following a final check for any further nesting birds, the field was cleared ready for construction. Regular checks are being carried out elsewhere along the cable route of any suitable habitat for nesting birds to ensure we are protecting and mitigating the impact on the local environment as much as possible.

BROWN HARES

While our team were carrying out checks for ground nesting birds, they also came across some leverets (baby brown hares). The leverets pictured were found near Orby, which has a healthy brown hare population. Although brown hares do not have special protection, it is a Biodiversity Action Plan (BAP) species, and a decision was made to cordon off the works area and stay well away until later in the year so as not to disturb them during their breeding season.

BADGER SETTS

Surveys carried out this year have shown that badger activity has increased since 2018. This is an indication that our measures to avoid setts and reduce the eventual disturbance to badgers has been successful. In the few cases where it has not been possible for the cable route to avoid and reduce disturbance to badger setts, a small number of badger holes have been closed under license, using one-way gates. These were infilled once the badgers had been safely relocated to a nearby sett.

TRITON KNOLL GOES 3D

You can now see Triton Knoll in 3D and online. A computer simulation of our wind farm shows the full scale of the state-of-the-art project which, when fully operational, will be capable of delivering wind powered electricity equivalent to the needs of over 800,000 UK homes – that's equal to all the households in Leeds, Sheffield, Nottingham and Lincoln combined!

Visit our website to find out more: www.tritonknoll.co.uk

LANDFALL PROGRESS

There was positive news to report in the Anderby area recently, as we confirmed the completion of the two Horizontal Directional Drills, duct installations and the demobilisation from site all in respect of the current phase of landfall works.

This latest milestone comes with a "thank you" message from the project to the neighbouring communities, for their support and patience during the 24hrs drilling works.

Work was fully underway in June, with contractor Boskalis carrying out the two horizontal directional drills in order to establish two tunnels beneath the sand dunes and beach, avoiding the sea defences. Both tunnels are lined with ducting, ready to receive the 220kV export cable circuits, being laid as part of the offshore works in 2020.

In advance of the works, we held an open day for local residents to explain the works to come and were delighted with the level of engagement and very supportive comments in response to our efforts to keep the community up to speed with our works.

A few extracts from recent Facebook posts:

- *"… Great Work TK, they have done an amazing job with no interruptions to our wonderful Hamlet, holiday makers haven't stopped coming, day trippers still coming, and us locals. Well done."*
- *"One can only marvel at the complexity of the entire project (£3.6bn) to bring pollution free energy to our shores. … I'm sure 99% of people will have been unaware of the work in progress. … So well done to the Colin and the TK team who updated us last week at the Creek."*

In response to requests from the parish council and members of the public, our contactor Boskalis, also took significant steps to ensure our works had minimal impacts on the use of the beach, and have used new, high-tech sound suppressing techniques and protection to reduce noise impacts.

Here's how our works progressed:

AT THE NORTHERN HDD

- **10 June -** set up and enabling works are complete and the drill gets fully underway
- **26 June -** drill is complete and ready for ducting pull-in
- **28 June -** ducting is pulled offshore ready for installation
- **29 June -** pipe is pulled into the 930m-long HDD bore
- **30 June - 1 July -** pipe is lowered to the seabed and stabilised in the offshore exit pit.

AT THE SOUTHERN HDD

Following completion of the northern HDD, the drill rig was relocated for the Southern installation.

- **3 July -** work begins on the Southern drill
- **10 July -** drill completed and ready for pipe pull-in
- **11 July -** ducting is pulled offshore ready for installation
- **12 July -** pipe is pulled into the 960m-long HDD bore
- **16 July -** pipe is lowered to the seabed and stabilised in the offshore exit pit.

Demobilisation of the HDD equipment and personnel from the onshore temporary site is now ongoing and we expect the site to have been cleared by 1 August. The site will be handed back to J Murphy & Sons who will continue with the onshore cable works starting in early September.

Piece of a musical instrument on display at Boston.

ARCHAEOLOGY

LINCOLNSHIRE'S HIDDEN HISTORY UNCOVERED BY TRITON KNOLL

Over 300 local people, ranging from two to 92 years, have welcomed a unique insight into the lives of Lincolnshire's ancient communities, thanks to a series of archaeological open days, set up for Triton Knoll by its construction contractors Siemens and J Murphy & Sons Ltd.

Ancient finds from Roman skeletons, Bronze Age axe heads and fine Roman pottery were discovered across the region, as a result of painstaking, detailed surveys undertaken by local experts at Allen Archaeology and Headland Archaeology. It was one of the most extensive surveys undertaken, covering both the onshore substation site and infrastructure at Bicker Fen, plus multiple sites along the huge 57km cable route, stretching from near Anderby Creek to Bicker Fen.

Three public events took place, at Boston, Frithville and Burgh le Marsh, presenting a treasure trove of finds, information and hands-on opportunities for visitors as the region's ancient history came to life in all its glory.

Siemens' interactive 3D model of how the Bicker Fen substation site looked when it was a Roman settlement, was popular with school children.

DISCOVERY SPOTLIGHT - BICKER FEN

An area of six hectares is being investigated, with exciting evidence of the late Iron Age through to mid-late Roman farming landscape.

Multiple enclosures, known as ladder settlements were found, which were attached to a double ditched trackway. Storage structures and several ring gullies as well as evidence of round houses were located.

An area of industrial activity, possibly related to saltmaking, once a major industry in the Fens, was also unearthed. And, a large, multiple layered deposit of burnt material, probably rubbish being dumped from the nearby settlement was also evident.

In addition, large quantities of Roman pottery were unearthed. Some of the finds were decorated and stamped red pottery, known as Samian Ware, indicating the local people were of a relatively high status. Amongst the finds are a piece from a musical instrument and a bone awl - a long, pointed spike generally used for piercing or marking materials such as leather.

Surveying a post-medieval brick lined pit.

Roman grey-ware jug.

Roman skeleton uncovered during survey works

UNCOVERING THE PAST

Triton Knoll Offshore Wind Farm, through our contractors Murphy and Siemens, commissioned a comprehensive programme of surveying and detailed archaeological excavations, beginning in early 2018, and in preparation for the start of onshore construction. Fieldworks and studies of the finds are continuing over the summer, while archaeologists will also continue to work with the construction teams, offering ongoing guidance on preserving the region's heritage.

Once uncovered, all the finds were removed to the Allen Archaeology or Headland Archaeology offices, and carefully cleaned ready for study by specialists to help tell the story of the sites that have been found. The story will be told through a series of reports which will be deposited, along with a complete archive for the Triton Knoll Onshore Electrical System, at The Collection in Lincoln where all archaeological works undertaken in the county are stored.

Natasha Powers, Senior Manager at Allen Archaeology Ltd, said: "We have been investigating the archaeology of Lincolnshire for many years, and the opportunity to work with Triton Knoll, J Murphy & Sons and Siemens has enabled us to uncover a wealth of new information on how the Romans in particular used this landscape, and we have uncovered some exciting archaeological finds from a Bronze Age axe head to Roman pottery used to prepare and store food."

The Triton Knoll 'discovery' sand pit proved a hit with junior archaeologists, who were able to dig out their own ancient discoveries.

Archaeologists at Allen Archaeology and Headland Archaeology presented over 50 separate finds, bringing the region's ancient history to life thanks to their in-depth knowledge of the area and the finds uncovered.

Various finds on display.

Education archaeologists DigVentures brought an interactive medieval medicines game, challenging children and adults alike to use their skills to uncover the herbs and medicines used to treat ancient maladies.

One of the finds on display at Boston.

FOCUS ON SKILLS AND CAREERS

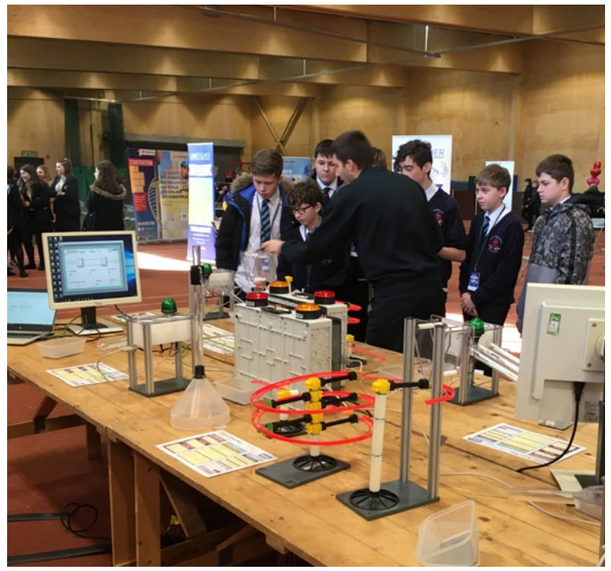
Triton Knoll and our contractors have been catching up with pupils and careers switchers around the region, to highlight opportunities, skills and qualifications needed to break into our exciting and expanding industry.

The UK Government foresees £40billion of investment and 27,000 skilled jobs in offshore wind by 2030[1]. At the same time 36% of all vacancies within the wider energy and utilities are already reported as skills shortage vacancies compared to a national average of 23% in other sectors[2] - so attracting new talent and careers switchers is essential. Triton Knoll's student engagement promotes studying Science, Technology, Engineering and Maths – so called STEM subjects as they can be the best foundations for starting a career in renewable energy.

In February, we took part in the Lincolnshire World of Work Festival 2019, arranged by LincHigher, a body that leads on access to higher education in the region. Triton Knoll, JMS and Siemens Transmission & Distribution met with over 1000 children from across the area in Boston's Princess Royal Sports Arena to introduce them to a myriad of jobs involved in building their local renewable energy project.

In May, a team from JMS attended Sibsey Primary School, leading a science experiment that demonstrated the importance of protecting the environment, and especially local rivers, during construction work. As well as explaining more about the project, the visit saw groups of children tasked with creating their own wind turbines.

Following the JMS visit, Sibsey Head teacher, Mr Graeme Wright, and Science Coordinator, Ms Mary Ennis wrote: "Working with Sam Wickins and other experts from the Triton Knoll site has been a great experience for the children at Sibsey Primary School, and we are very much looking forward to continuing the partnership into the next academic year."



At Haven High Academy Community careers and enterprise event, Siemens joined 80 other local organisations to promote Careers, Enterprise and Community/Volunteering in the local area, along with 80 other organisations. Around 1000 pupils got the opportunity to discuss renewable energy, STEM activities, engineering as a career as well a look back in time by walking around our interactive game station.

The JMS team has also worked with first and second year electrical engineers at Boston College, to provide an insight into the technical side of the project. Following their visit, two aspiring engineers joined us for a few days on work experience to see first-hand the work our technical team carry out day to day.

Our two latest engagements took us to Teesside and Grimsby, where we engaged in the largest skills and careers events in the regions. Triton Knoll staff offered careers advice to over 2,500 teenagers – highlighting how knuckling down with STEM subjects can open doors to some exciting, rewarding careers.

We teamed up with Contractors MHI Vestas, Siemens Transmission & Distribution and Able UK to share how individuals now delivering the Triton Knoll project entered the industry. We shed light on qualifications and skills in demand, and explained how the offshore sector expects to grow in the future. Students also enjoyed taking an interactive virtual reality tour climbing to the top of a wind turbine, thereby gaining an insight into the work of a maintenance technician.

We are currently refreshing the skills and jobs section of our website, so keep a watch in future for more information on skills and job opportunities with our exciting project.

1 Offshore Wind Sector Deal (2019)
2 UK Employer Skills Survey (2015), UKCES

ONSHORE SUBSTATION **UPDATE**

The onshore substation is progressing very well and we're pleased to report that all enabling works are now complete. This includes the four-hectare substation platform, the very important main access road from A17 to the substation, and further access to the existing National Grid substation which involved importing in the region of 120,000 tonnes of stone.

The substation platform piling took place as planned and was completed four weeks ahead of schedule. In all a total of 1650 concrete piles were installed, providing a solid base on which all of the main substation buildings and infrastructure will be constructed. We anticipated that this work had potential to generate the most noise during construction and so, by completing the works earlier than planned, we have been able to minimise noise impacts on our local residents, plus giving further confidence to all stakeholders in respect of the continued good progress of the substation.

In May, we announced the appointment of civils contractor, BAM Nuttall. It is the latest in a number of UK subcontractors to be appointed by Siemens, which is leading the work to design, supply and build the onshore substation and connection into the nearby National Grid substation for Triton Knoll. They include several firms local to the Lincolnshire site. Companies completing minor civils work, piling and electrical work have also been appointed from Lincoln, Boston and Newark. In addition, Lincolnshire firms are already on-site completing drainage works, while all the archaeology supervision and necessary works are also being completed by companies local to Lincoln. And with work at Bicker Fen, the site which will house the onshore substation ongoing, there are around 100 people on site, expected to rise to around 150 later this year.

The main substation civils works began immediately after BAM Nuttall's appointment, and included work in all the substation areas.

The 400kV onshore cable works, to establish a link between the Triton Knoll Onshore Substation and the existing National Grid substation, is progressing very well and remains ahead of schedule. All the Horizontal Direction Drilling works have been completed including the ducting works, and the next phase will start in September with the start of joint bays as per schedule.

CABLE ROUTE **UPDATE**

J Murphy & Sons Ltd (JMS) is the principle contractor appointed to install the 57km underground onshore cable route and has seen plenty of construction activity since the last newsletter.

CABLE DELIVERIES AND INSTALLATION

Installation of the 57km long underground cable route has achieved various important milestones so far this year and is progressing on schedule.

In March 2019, we delivered the first major electrical components – the High Voltage Alternating Current (HVAC) cables that will make up the onshore cable network – to site via the Port of Boston. Each of the cable drums were then transported to a secure compound for storage ready for installation.

In preparation, the first lengths of the protective plastic cable ducts have now been installed, ready to receive the onshore HVAC cables. Installation of this ducting is already more than around a third complete.

Weather permitting, cable duct installation along the full cable route is scheduled to be completed by the end of September 2019.

In July, we were delighted to install into the ducting the first lengths of HVAC cable that will transport the power from the offshore turbines into the national grid network and ultimately UK homes and businesses. The electrical cable installation also takes place across two work fronts, with one starting at the A52 and working south, and the second working south from the A16.

Installation is expected to be completed by mid-2020.

JOINT BAYS

The onshore electrical cables are delivered on cable drums which carry between 1,023m and 1,690m of HVAC cable. Once each length of cable from a drum has been successfully installed, they are joined together underground at joint bays. The joint bays are essential to ensure the electricity can flow between each section of cable and successfully deliver power to the substation, once the project is operational. This work is now underway and will continue as JMS installs a total of 360km of cable across required to deliver Triton Knoll.

REINSTATEMENT

Once our cables have been successfully installed into the cable ducts, JMS will begin reinstating land along the cable route where we will not need to access again. The team will endeavour to carry out as much of this work as possible this year, consulting with land owners throughout the process to ensure they remain fully informed of planned activities.

HORIZONTAL DIRECTIONAL DRILLING UPDATE

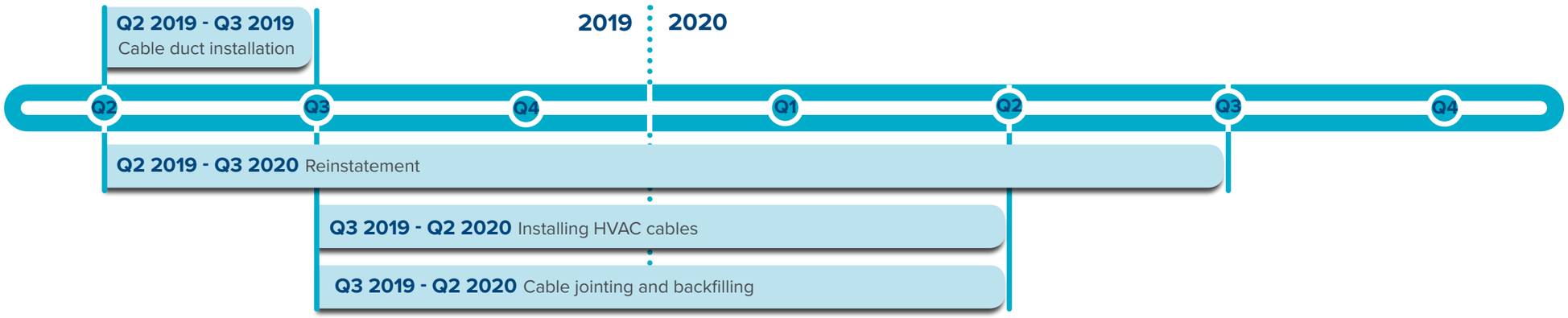
Horizontal Directional Drilling (HDD) is a process whereby a tunnel is drilled under an obstacle and a cable duct pulled through the drilled underground tunnel. This avoids the need for trenches, and means we can avoid rivers, roads, drains and other obstacles across the entire 57km of cable route.

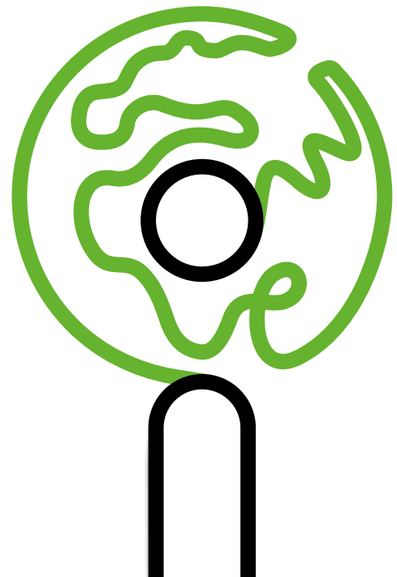
At the time of writing, JMS has carried out over two thirds of the circa 700 individual HDDs required, which we believe could be the most ever recorded for an infrastructure project of this type in the UK.

Throughout our construction work, we aim to minimise disruption to the local community as much as possible. If you have any questions or concerns about any of the work taking place in your area, please contact our dedicated community relations team will be able to help:

Tel: 0800 2545 270
Email: info@tritonknoll.co.uk

TIMELINE OF KEY CONSTRUCTION WORKS 2019 - 2020





TRITON KNOLL

RECRUITMENT DRIVE AS WORK BEGINS ON GRIMSBY BASE

Triton Knoll will carry out its long-term operations and maintenance of the 90-turbine wind farm from a new multi-million-pound base in Grimsby, where construction is now underway. The site expects to directly employ a team of over 70, while helping support additional jobs through its use of local services during the 25-year operation of the project.

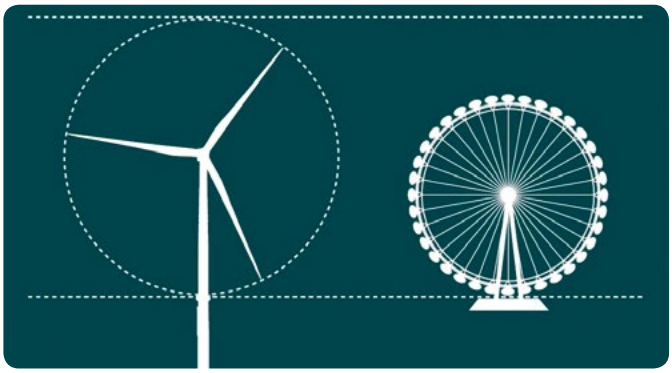
innogy will operate and maintain the project long term, and recruitment of the project's first 20 technicians will begin soon, aiming to have all posts in place by the end of the year. Watch out for more information in local press, LinkedIn, and through our project website.

If you are interested in working with Triton Knoll, you can find out about the latest opportunities from Lisa Philips, E-Mail Lisa.Phillips@innogy.com or call: 07867 370980.

Project director Julian Garnsey marks the start of construction with Tolent's Nick Hazelgrave.

DID YOU KNOW

Triton Knoll is an 857MW offshore wind farm being constructed more than 30 miles off the Lincolnshire coast, and consisting of 90 of the world's most powerful turbines - each one is capable of powering a typical home for 29 hours with just one turn.



V164-9.5MW
Ø 164M

LONDON EYE
Ø 120M

HOW TO KEEP UP TO DATE

Our project website is kept up to date with all our latest news and information, while we will also keep communities informed using newsletters and community drop-in events. In the meantime, please feel free to contact the team using the details below.

Please note our change of address

E. info@tritonknoll.co.uk

T. 0800 2545 270

A. Triton Knoll Offshore Wind Farm Ltd
Windmill Hill Business Park, Whitehill Way,
Swindon, Wiltshire, SN5 6PB.

W. www.tritonknoll.co.uk

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