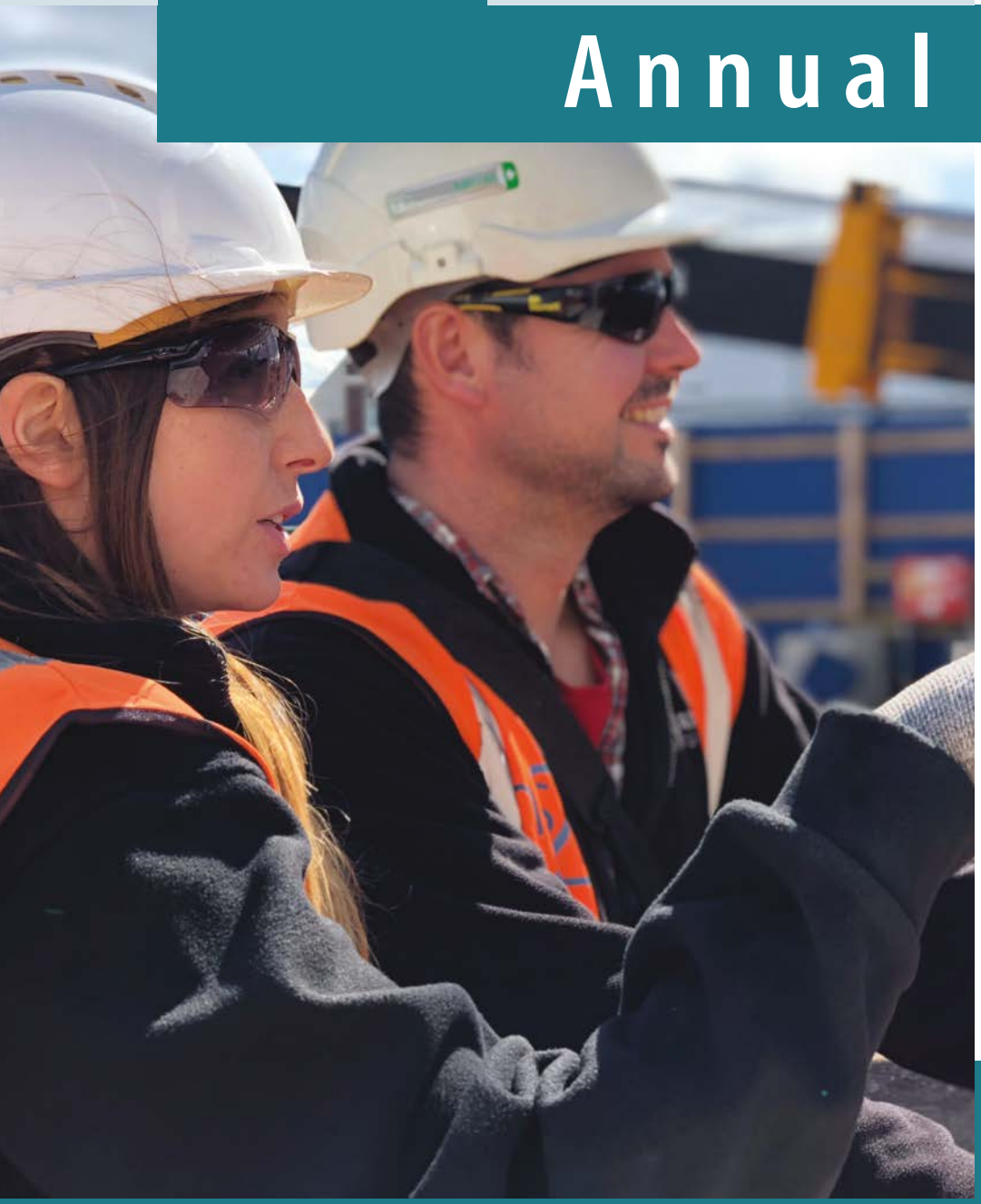
2018 Annual Report



HEADLAND ARCHAEOLOGY

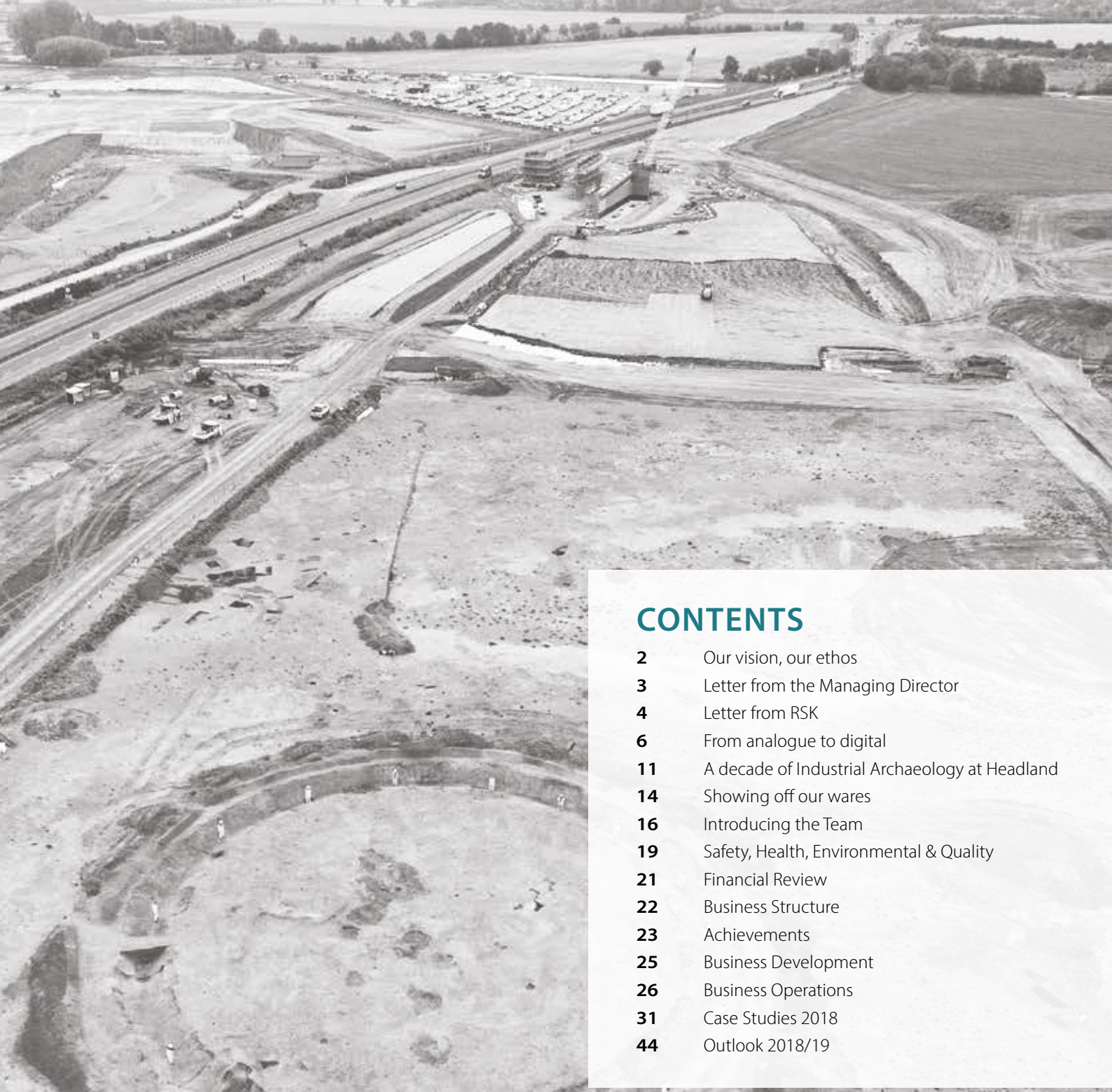
THIS YEAR'S CONTRIBUTORS

Text

Alex Smith (Head of Post-excavation), Alistair Webb (Regional Manager), Andy Boucher (Director / Head of Contracting), Candy Hatherley (Project Manager), Caroline Norrman (Graphics Manager), Chris Lowe (Director / Head of Consultancy), David Betts (Finance Director), Edward Bailey (SHEQ Manager), Julie Franklin (Finds, Publications & Archiving Manager), Kirsty Dingwall (Project Manager), Michael Tierney (Regional Manager), Rachel McMullan (Marketing Coordinator), Russel Coleman (Director / Head of Sales), Tim Holden (Managing Director)

Design

Caroline Norrman (Graphics Manager), Julia Bastek-Michalska (Senior Illustrator), Beata Wieczorek-Oleksy (Illustrator)



CONTENTS

OUR VISION, OUR ETHOS

Headland Archaeology was founded in 1996 by four like-minded archaeologists with a strong commitment to commercially-focused client delivery. In a business traditionally dominated by the not-for-profit sector, Headland Archaeology is one of the UK's leading privately-owned providers of heritage services to the development and construction industries. We offer a wide range of consultancy and contracting archaeological services covering the life cycle of a project from design through to construction. Our pragmatic and professional approach has earned us multiple awards and an industry-leading reputation for delivering on time and within budget. This ethos is applied to all projects, whether we are working on a fast-track road or rail project, a multi-phase housing development or quarry, or a wind farm in a complex upland or lowland landscape setting.

We are respected within the industry for successfully balancing the cultures of business and heritage, and we lead from the front, encouraging innovation and excellence in all aspects of our work.

Headland supports the development and construction sectors throughout the UK from five offices – Edinburgh, Manchester, Luton, Hereford and Leeds. Our regional network means that we can offer our clients essential local knowledge, whilst our national coverage means we can offer our clients a consistent product and customer service no matter where their development is in the UK.

Letter from the Managing Director

Tim Holden
Managing Director

"The quality of our work was recently recognised by Current Archaeology's 'Rescue Project of the Year' award for our part in the A14 improvement scheme"

Letter from the Managing Director

The last year has been one of considerable change for Headland with a record turnover of £16M and the fulfilment of our 10 year succession strategy. In terms of turnover we were the largest archaeological company in the UK without compromising our corporate values that balance Archaeology, Business & Careers. The quality of our work was recently recognised by Current Archaeology's 'Rescue Project of the Year' award for our part in the A14 Cambridge to Huntingdon Improvement Scheme.

Of course, the big story is that Headland Archaeology has recently been acquired by the RSK Group, the UK's leading integrated environmental, engineering and technical services business. Apart from the buzz generated internally, this should be a landmark for the archaeological sector as Headland takes its place alongside engineers, ecologists, planners, and many other disciplines, on an equal footing, and as a recognised part of the development process, a coming of age if you like. We see a lot of scope for cross-selling between Group companies and a much broader offering to clients.

RSK has a very similar ethos to Headland with people at the fore and we feel this will offer benefits and extended opportunities for all staff. As a start, we welcome RSK's in-house archaeologists to our expanding team. We will undoubtedly learn much from each other.

A large part of our turnover this year has been on infrastructure projects such as the A14 Cambridge to Huntingdon Improvement Scheme. It was particularly gratifying to have been able to work alongside colleagues from MOLA, PCA, Oxford and Cotswold Archaeology on the A14 – more evidence perhaps that the industry is growing up as we address the challenges of the infrastructure tsunami.

Apart from these flagship projects, we are also running a 'basics' theme throughout the company as we remind ourselves that our core work requires as much attention as our 'Elephant' projects, our in-house term for projects that are large and somewhat unpredictable. So, with a review of our traditional work-load ongoing, from sales through to delivery, we are determined to provide the most efficient service possible on projects of all scales.

Just to finish off this summary of the year I'd like to remind ourselves of some of our achievements. With a huge effort on all fronts we have brought many publications to completion including the King's Wall at Cowgate in Edinburgh, Home Farm in Fairford, Dubton Farm in Brechin, Aberdeen Western Peripheral Route / Balmedie to Tipperty, and Kisimul Castle in Barra with many more planned for the coming year.

All in all it has been an interesting 12 months and we expect next year to be just as engaging.

BECOMING PART OF RSK GROUP

In March 2019, Headland Archaeology announced that it had become part of RSK Group.

In March we announced that Headland has become part of RSK Group Ltd (RSK), the UK's leading integrated environmental, engineering and technical services business. All at Headland are excited about the new opportunities the acquisition will provide for our staff and clients alike.

Founded in 1989, RSK has evolved over the years and has grown from 1 to over 3,000 employees through organic growth, international expansion and strategic acquisition. With over 100 offices globally, the company provides services in the areas of environment, health and safety, engineering and sustainability management to industrial, financial and public-sector clients in the UK and abroad. The company has a diverse client base, but mainly services key accounts for clients in energy, property, manufacturing, water, government and transport. We are offering comprehensive archaeology and heritage services to the increasing number of large infrastructure projects across the UK and abroad, even at the largest scale.

"We are looking forward to the future as part of RSK Group."

Alan Ryder
RSK Group CEO

Tim Holden
Headland Archaeology Managing Director

As a Registered Organisation with the Chartered Institute for Archaeologists, RSK has an existing large, geographically widespread team of archaeology and built heritage experts that provide services to a wide range of industries across the UK, as well as live archaeological projects in mainland Europe and Africa. By joining forces, we will be able to provide comprehensive archaeology and heritage services, with over 170 professional archaeologists in regional offices across England and Scotland. We will also gain the support of RSK's network of national and international offices across the globe.

We believe that Headland's services are a perfect fit within the group and will realise significant synergies between the two businesses. By combining our services, we will be able to provide a large contracting team with extensive experience of delivering fieldwork to large-scale, national infrastructure projects, and our complementary heritage consultancy teams will also be unified, providing additional expert witness experience. As a company that also offers a wide range of environmental services, RSK is familiar with cross-disciplinary considerations, such as ground condition, contamination and remediation, and ecological, landscape and visual factors, and can facilitate access to experts in these fields. This will be an advantage to the Headland business, enabling us to offer a unique package of geotechnical, geophysical, contaminated land and ecological surveys from site investigations through to mitigation. Becoming part of RSK will enable us to draw on the in-house capabilities within the group and deliver integrated services to our clients with the support of a wider team. In addition, we will also be able to provide enhanced geophysical surveys by providing complementary services to RSK's geophysical division.

"This is a very exciting time for Headland Archaeology", says Dr Tim Holden, Managing Director, Headland Archaeology. *"We have differentiated ourselves in a market saturated by the not-for-profit sector to build a robust, commercial business that put the clients' needs first. Joining with RSK will further enhance the business, enable us to build on our strengths and provide our staff with new opportunities."*

RSK's founder and CEO, Dr Alan Ryder, said: *"I am excited to welcome Headland Archaeology into the RSK Group because, like us, their people and clients are at the core of what they are about. The success that the business has already seen is a testament to their leaders and all their employees. I am looking forward to what we can achieve together."*

Like Headland, RSK is a client-focused business and has a diverse portfolio of projects in technical disciplines that are both complementary and supportive of the services we provide. The acquisition will enable Headland to retain its brand identity, yet gain access to a wide range of great technical and professional resources in a larger organisation, and expand our service offering.

From analogue to digital

Spotlight on Headland's Graphics Team

Since Headland was set up in1996, we have seen our end product transformed from an arduous analogue process with mixed results to a fully streamlined and semi-automated digital workflow. This has been spearheaded by our Graphics team whose work creates a visual representation of the archaeological data we record.

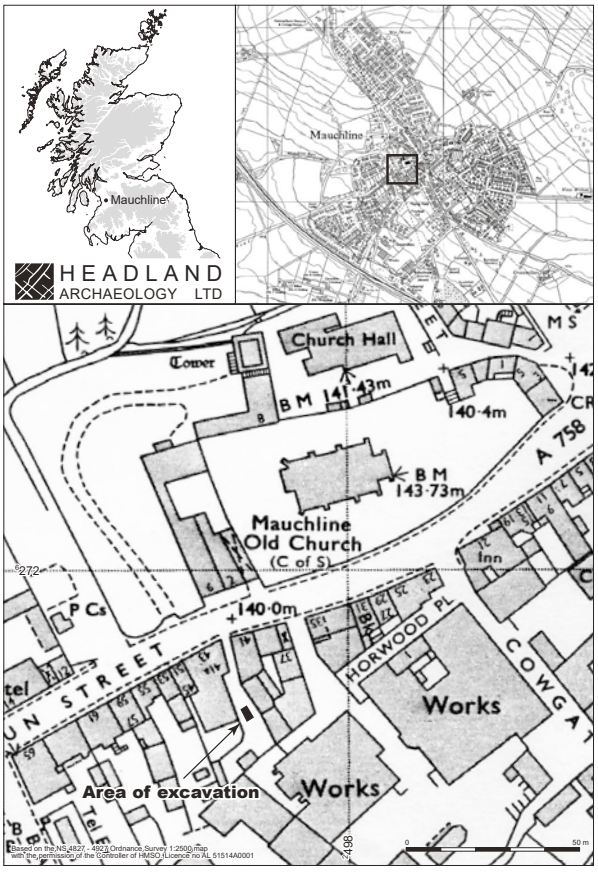
In our early days, illustrations were largely pulled together by the same person who was writing up the results at the end of the project. The results varied and were largely down to the individual's own interest and mastery of the tools available to them.

Our transformation began alongside our pioneering of the routine use of digital survey for site planning within the archaeological sector. This has had a direct impact on our design workflows and has forced the adaptations of software, the graphics team's skill sets and our working templates, allowing us much greater flexibility with our output.

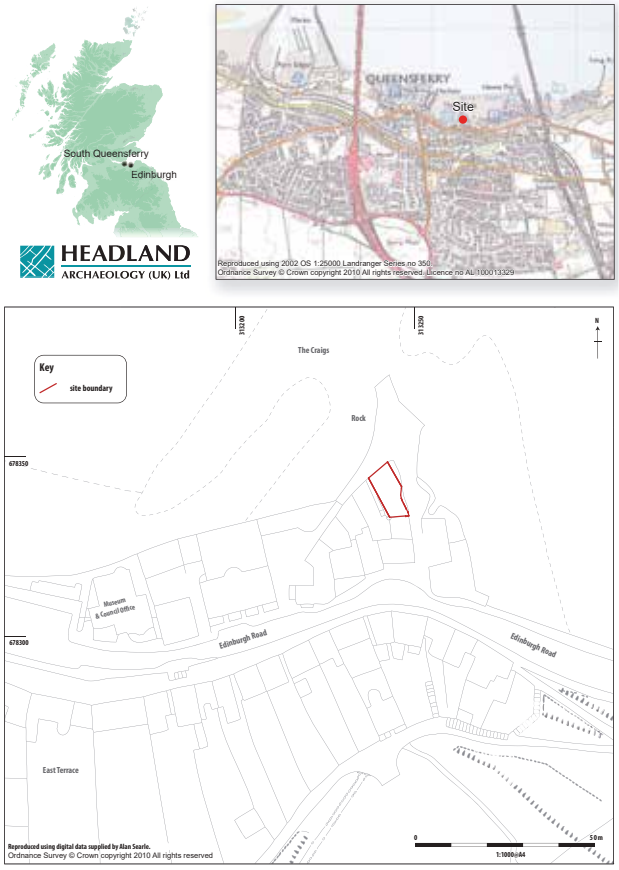
Today we have a team of dedicated illustrators, highly skilled in a host of software applications, graphic design and archaeological drawing. This piece takes a look are our progression through the past 20+ years from 'analogue' to 'digital' systems.

ANALOGUE

Before Headland had an established graphics department, much of our illustrative work, including the 3-in-1, was made by using a photocopier, pen and ink, glue and scissors. The resulting images were by no means bad but compared to what we produce today may appear inexact and rather inefficient. This manual process reflects our on-site practices at the time – things like planning were largely carried out using hand drawing. We invested in our first Total Station EDM in 1996 but it would take until 2003–4 before it was fully incorporated in our excavation fieldwork strategy; prior to that its use on-site way limited to establishing control points and recording drawing points.



▲ *2001 Site location (3-in-1)*



▲ *2010 Site location (3-in-1)*

TRANSITION

As our on-site survey techniques and strategies were established and fine-tuned for a variation of types of sites and remains, the graphics team too started our transition to more digital methods offsite. We began to create semi-digital standard plans and section drawings for client reports, using digital photos and digitally drawing artefacts using interactive stylus tablets. Artefact drawing particularly is a very niche type of archaeological illustration and the guidelines for different material types are long established and strictly adhered to. In going digital we set out to win over a very traditional audience, one artefact at a time. Whilst still true to their handmade counterparts, our digital approach gave us greater freedom to revise and resize existing drawings without the need to start from scratch. This time and resource-saving practice has been somewhat revolutionary in changing established traditions in archaeological illustration; they are now presented digitally more often than not in the public domain.

During this transition we utilised, and sometimes discarded, a long line of software applications whilst we were 'feeling' our way into a more digital approach to our graphic work. In terms of survey processing and illustration preparation we have gone from Penmap to AutoCAD; AutoCAD then partially gave way to DraftSight; and a third player has since entered the stage – QGIS.

DIGITAL

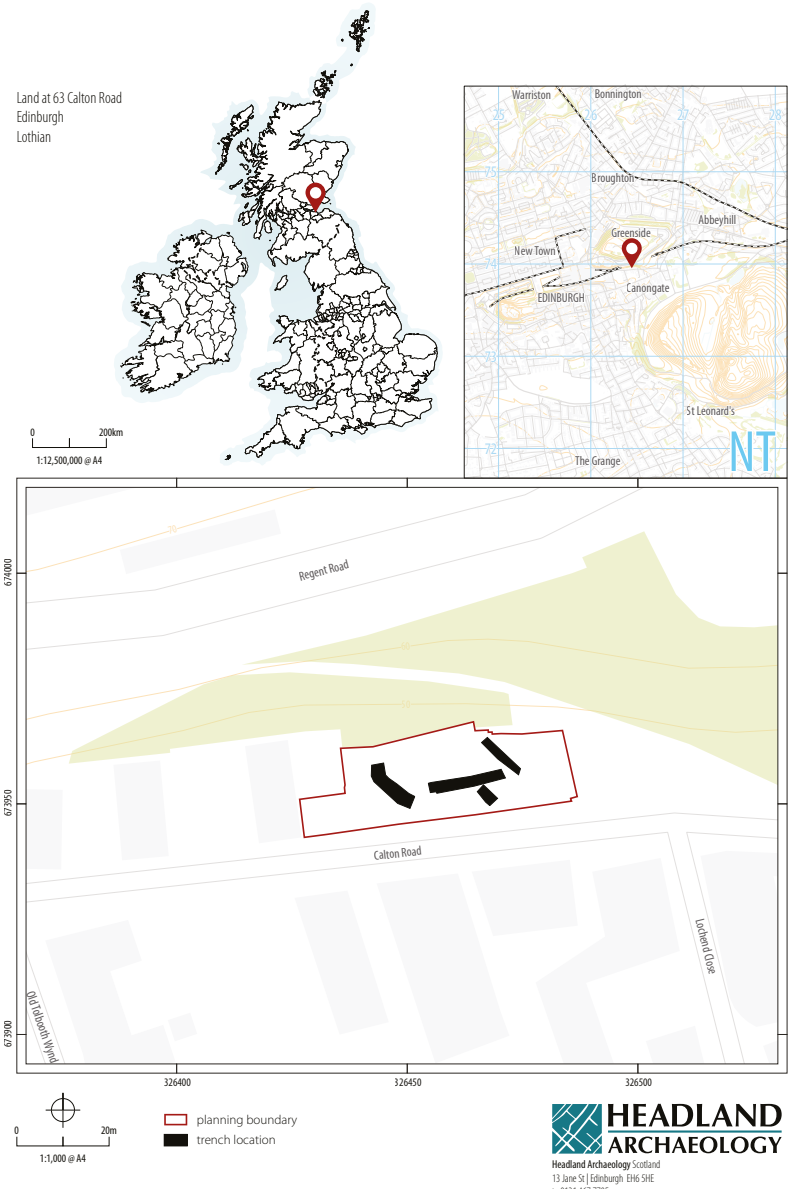
Once our analogue sources, the Ordnance Survey maps, were upgraded and available digitally there was no longer anything holding us back and we entered the digital age. Our workflows have since shortened by a considerable measure and can be handled largely by QGIS, which has become the graphic starting point for all sites. It comes equipped with an amazing array of tools that enables us to quickly export the requisite views. Survey data now arrives to us not only as line art requiring interpretative styling and annotations but at times also as fully immersive 3D data. As our output is still largely restricted to a 2D printable product we still need to display our 3D data as 2D objects. We are now working towards a paperless future where we can share a more interactive experience with our clients!

*Our analogue to digital journey is perhaps best represented through the lens of one of our most widely produced illustrations – the **'3-in-1'**.*

What is it?

The 3-in-1 consists of three maps of varying scale within one illustration that visually locates the site and is placed at the beginning of a report. Its design has been updated over the years, but has retained the same elements and their positioning. The three different location areas are arranged to allow the eye to naturally 'read' each item in a Z pattern. Same as we would do with text, our eye naturally starts scanning from top left to top right, then diagonally down to bottom left, stopping at the bottom right.

The first map locates the site within the country, whilst the second is zoomed in to the local area and the last shows the site/development area itself with site boundaries and other relevant site information such as trench locations and planning boundaries.

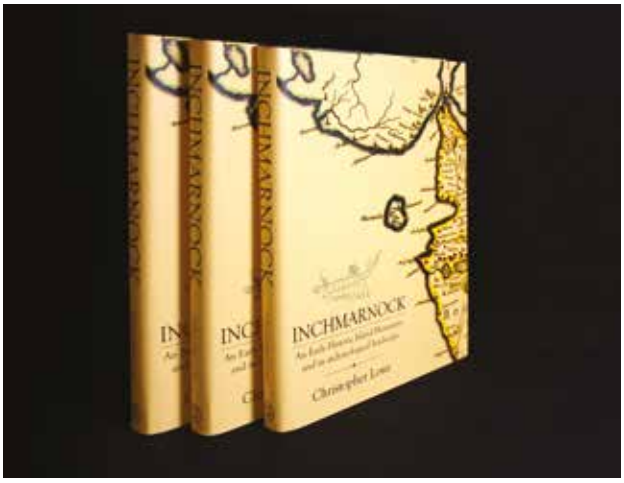


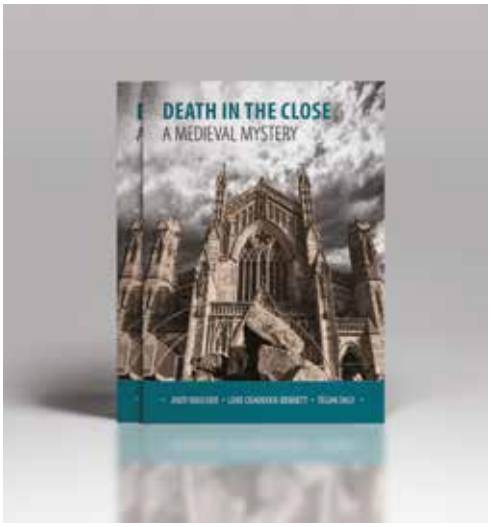
▲ *2018 Site location (3-in-1)*

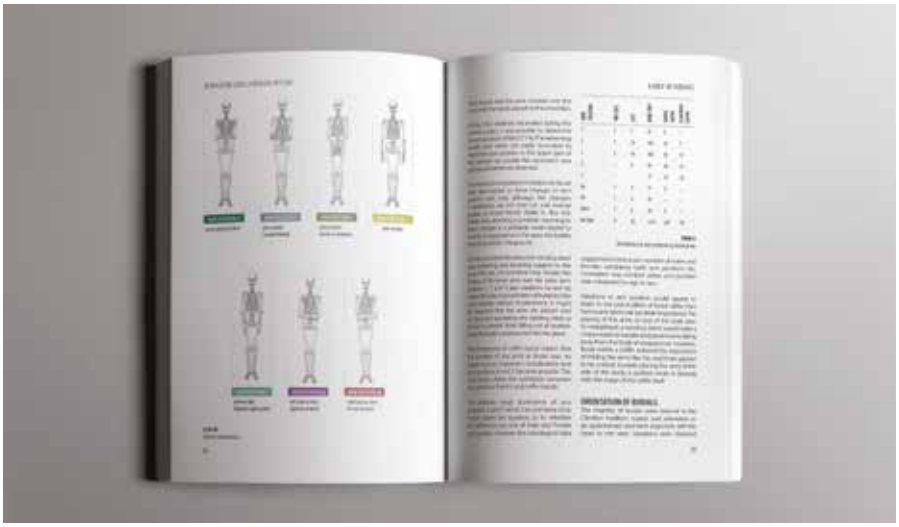
Typesetting

Another great example of our progress from analogue to digital processes is how we produce our reports.

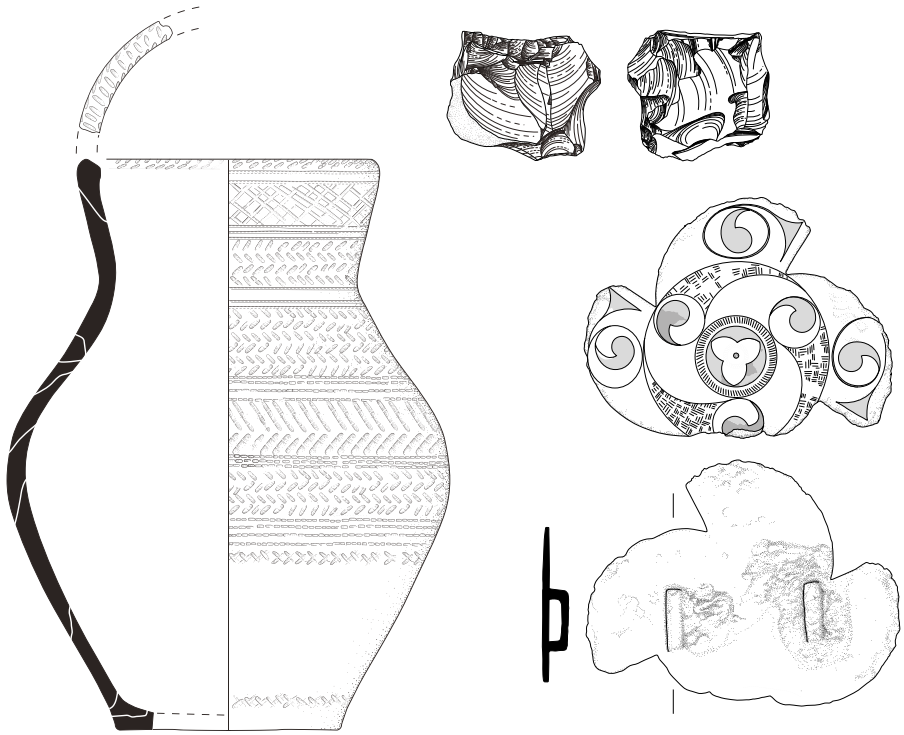
After researching graphic design trends across diverse sectors we were inclined to believe that the heritage sector lagged behind in its design approach, with dated reports loosely formatted in Microsoft Word and under-representing high-quality photographs and illustrations, resulting in rather dry and un-engaging final products. Graphics Manager Caroline Norrman subsequently created a new reporting format that merged both style and function with a focus on the seamless integration of text, images and illustrations. The final report is both a record for posterity and an overall illustration of the quality of the work carried out; as such she felt it was vital that it be of the highest quality. To aid the roll-out of this new product she prepared a comprehensive InDesign template for use in-house which allowed us to maintain this high standard in a cost-effective and efficient manner. The other members of the graphics team were trained in typesetting in general and in our new conventions in particular. Additionally, this has allowed us to typeset publications in-house and thereby adding another product to our repertoire.

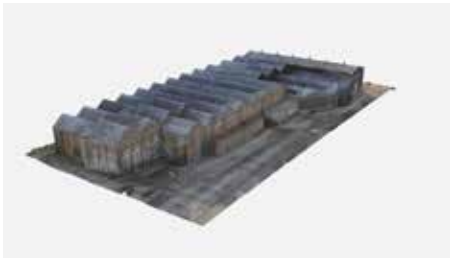






All in all our graphics team has grown quite substantially since we first started, not only in personnel, but capability. In fact, the majority of our work is now conducted outside of the traditional spheres of illustration like artefact drawing and has blossomed into a service that brings clients all the way from planning to publication. Outside of project work the graphics team produces all our promotional material, creates all our branding and designs marketing material including this Annual Report. They are a vital part of the wider Headland team and without them, and their 3-in-1 maps, we would literally, and figuratively, be lost!





GRAPHICS TEAM

written by
Caroline Norrman
Graphics Manager

Julia Bastek-Michalska
Senior Illustrator

Rafael Maya-Torcelly
Illustrator

Beata Wieczorek-Oleksy
Illustrator

Eleanor Winter
Junior Illustrator

A decade of Industrial Archaeology at Headland

The word archaeology often conjures up images of prehistoric roundhouses, Roman roads and medieval villages. It may be surprising to know that many of the projects that Headland works on are concerned with the more recent past, covering the last 300 years. Many of these sites illuminate the innovation of our Georgian and Victorian ancestors as they developed new technologies and established cutting-edge businesses and transport systems to serve rapidly growing populations. In this piece we will explore the different types of industrial sites we have encountered and how they have helped us expand our understanding of the Industrial Revolution and its impact on the contemporary population.

PRODUCTION OF GOODS

Pottery and glassware were both major industries in the 18th and 19th century as demand for these goods was high and imports were heavily taxed. Two Headland sites excavated in Glasgow in advance of development, the Verreville Glassworks and the Caledonian Pottery, shone a light on the inventive owners racing to modernise their businesses.

Verreville Glassworks

At Verreville Glassworks the 200ft glass cone dominated the skyline of Glasgow for over a century. Established to produce flint glass for fine table and homewares, including decanters and chandeliers, the factory soon turned to bottle glass and later into pottery production to turn a profit. The foundations of the buildings and kilns uncovered during the excavation showed modernisation was an on-going process at the Works with new inventions, such as steam technology, quickly brought onto the factory floor.

Caledonian Pottery

At the Caledonian Pottery in Rutherglen wares were produced on an industrial scale from its establishment on the site in the 1870s. Here, the purpose-built factory was linked directly to the railway via a private siding to the factory door, allowing for deliveries and finished goods to arrive and leave quickly and efficiently. To increase fuel efficiency the factory was overhauled in the 1880s and a system of connected kilns heated by coal gas was invented and patented. The range of goods was huge and included Rutherglen teapots, beer bottles, ink pots and ceramic spirit barrels, which were then exported to be sold throughout the world.

Beaverbank Tannery

Some of the sites we have excavated are a bleak reminder of the harsh conditions in which many people worked in Victorian Britain. Excavation work prior to the development of a site in Edinburgh identified the remains of Beaverbank Tannery. The tannery was known as Beaverbank Leatherworks and was established in the mid-19th century. The main tannery building contained 97 tanning pits built in a grid system. The processing of leather in the Victoria era would have been an incredibly filthy job. Tasks would have included unhairing and fleshing the hides with lime before soaking them in pigeon or dog faeces and finally tanning using oak bark. Just imagine working in that!

◀ *Beaverbank Tannery* ▲ *Caledonian Pottery*

TRANSPORTATION AND ENERGY

Our work on industrial archaeology can also take us to the water's edge. Water courses and the sea were a very important part of life in Victorian Britain, as one of the main modes of transportation for people and goods as well as being a source of energy.

The River Frome

A desk-based study and programme of historic building recording conducted by our Midlands and West Office along the River Frome in the Stroud Valley in Gloucestershire revealed just how important the river was to the growth of the cloth industry. Alongside a detailed examination of the cloth mills along the banks of the river, the study showed that before the construction of the canal the river had been straightened in places. This was done in order to ease passage and later an 18th-century navigation system was devised to transport the goods up the river and products of manufacture back down to the Severn using timber cranes. Ultimately the Stroudwater and Severn and the Thames Canals were built to help expand the industry further.

Crown Point Weir

The programme of archaeological work, recording the Crown Point Weir on the River Aire in Leeds prior to its demolition, highlighted the importance of the waterway to transport goods and people and to power the textile industry. As the industry grew so did the demand for an easier route along the river. To alleviate this problem the river was transformed into a navigable system with a complex system of cuts, weirs and locks in c 1700. This channel, in turn, allowed for a significant increase in the development along the banks of the river and the construction of the weir. The recording of the weir showed it was a substantial and functioning structure built of sandstone blocks within a timber framework, highlighting the quality and longevity of its early Georgian engineering.

Trade

Much further afield we explored the maritime heritage in St Helena when we were commissioned by Royal Haskoning to produce a Conservation Management Plan for the Jamestown wharf and waterfront. The island was a centre of world commerce during the 18th and early 19th century as a vital staging post for the English East India Company and many of the fortifications, the wharf and colonial houses survive from this period. Our plan helped identify significant sites and set out policies for managing changes in their future use or development and is already in use on the island to help protect and enhance its historic fabric.

These types of projects are fascinating to undertake and can flex our skills in archival and architectural history, historic map research and early industrial techniques. Many brownfield sites across Britain contain elements of our industrial past and, through well-designed archaeological programmes, these can be dealt with in a timely manner and enhance our understanding of how we lived a few centuries ago.

written by
Candice Hatherley
Project Manager

◀ *Crown Point Weir, Leeds* ▲ *St Helena*

Showing off our wares

We have so many great projects on the go just now that it is hard to know where to start and next year is shaping up to be even more exciting.

This has been a big year for post-excavation, with six projects published and giant strides taken towards completing other major publications.

Headland's publications this year include three backlog projects pushed through to completion by Publications Manager, Julie Franklin. The most significant of these was a site of national importance, a project which included the largest haul of Middle Neolithic Impressed Ware pottery ever found in Scotland at a site discovered on the approach road to the new Kincardine Bridge in 2005. The project found evidence for occupation of the area, throughout the Neolithic and Bronze Age and was written up with the help of Alison Sheridan of the National Museums of Scotland, the renowned expert on pottery of this period. It was published as *'Neolithic and Bronze Age Occupation at Meadowend Farm, Clackmannanshire: Pots, Pits and Roundhouses'*, Scottish Archaeological Internet Reports 77.

Another major backlog site was 144–166 Cowgate, excavated in Edinburgh's Old Town in 2004. This was published under the title *'Discovering the King's Wall: Excavations at 144–166 Cowgate, Edinburgh'*, Scottish Archaeological Internet Reports 69, by our own Magnar Dalland, detailing new evidence for Edinburgh's 15th-century defences. Medieval occupation deposits found nearby provided rich sources of artefacts.

In *'The development of Candlemaker Row, Edinburgh from the 11th to the 20th centuries: excavations at Greyfriars' Kirkhouse'*, Scottish Archaeological Internet Reports 71, Julie Franklin interpreted another Edinburgh Old Town site, exploring 800 years of domestic and industrial activity.

▲ *Decorative glass beaker from Greyfriars' Kirkhouse*

One of our more spectacularly located sites, Kisimul Castle, which sits on its own islet in Castlebay, on the Hebridean island of Barra was published as *'Kisimul, Isle of Barra. Part 1: The Castle and the MacNeills'*, Proceedings of the Society of Antiquaries of Scotland 146. It was written by our managing director, Tim Holden and covers the architectural survey of the building and theorises about how it might have looked in its 15th-century heyday. Part 2, which covers the archaeological findings there, is due out in November 2018 in the same journal.

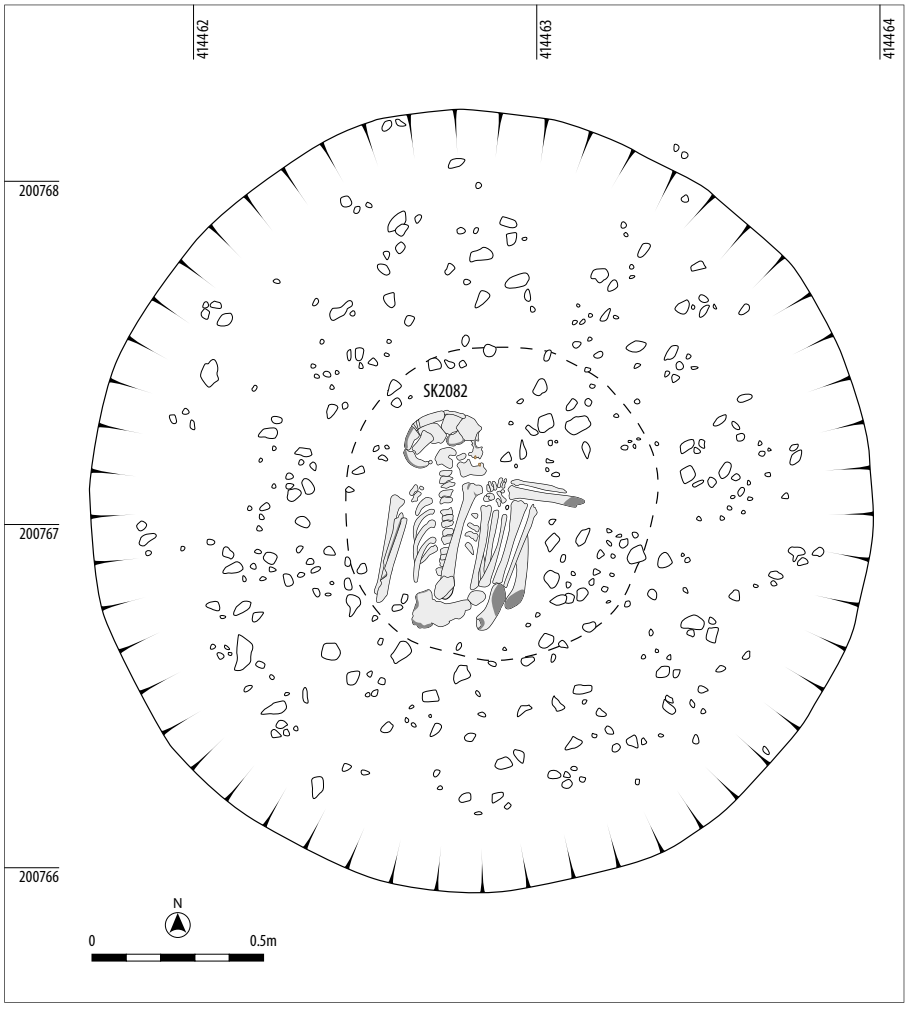
Luke Craddock-Bennet of our Midlands and West office published *'Prehistoric Burials and Anglo-Saxon Settlement on Land at Home Farm, Fairford: Excavations in 2013 and 2014'*, in Transactions of the Bristol and Gloucestershire Archaeological Society 135. The site includes a 'flat grave' Neolithic burial, Iron Age pit burials, including a dog burial and several 6th-century Anglo-Saxon sunken-floored buildings.

In *'An Iron Age settlement and souterrain at Dubton Farm East, Brechin, Angus'*, in Tayside and Fife Archaeological Journal 23, Matt Ginnever of our Scotland office reports his findings of an Iron Age settlement with an unusual souterrain within a roundhouse which might have functioned as a cold storage facility.

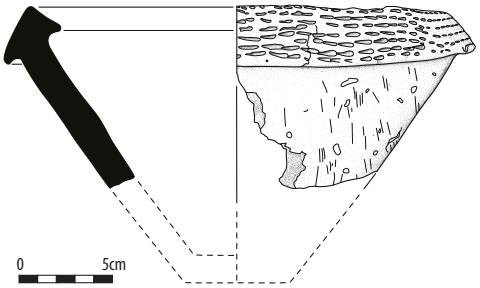
We have also made major progress on four projects which are to be published as stand-alone volumes in the coming year:

» The medieval cemetery sites discovered during the Edinburgh Trams works
» The 19th-century cemetery excavated ahead of road-building at St Peter's Church, Blackburn
» The many and multi-period sites discovered along the course of the Aberdeen Bypass
» The nationally important Iron Age metalworking site of Culduthel Mains Farm, Inverness

▲ *Kisimul Castle*



▲ *Plan of an Iron Age pit burial from Home Farm, Fairford*



▲ *Middle Neolithic collared bowl from Meadowend Farm*

All this will be happening while work on the A14 post-excavation gets underway. Headland's Alex Smith, Julie Franklin and Angela Walker all have key roles in seeing this work through, co-ordinating teams of Headland, MOLA and freelance specialists as they begin to take stock of the nine tonnes of bulk finds, 10,000 registered finds and 7,000 environmental samples recovered during the project and make sense of the many Cambridgeshire sites discovered over the course of the project.

written by
Julie Franklin
Finds, Publications and Archiving Manager

Introducing the Team

People are the key to our business and are at the heart of the great service we offer to our clients. The original founders of Headland are still working in the business and have since been joined by a team with a huge range of experience and knowledge.

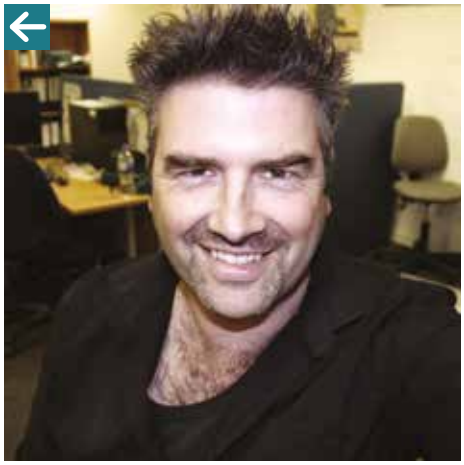
MEET SOME OF OUR NEW STAFF

ALEX SMITH
Head of Post-excavation

Alex has been working in commercial archaeology for eleven years, ever since completing his PhD in 2000. He has responsibility for managing the overall completion as well as the specialist areas of post-excavation, including finds, graphics and environmental work across all offices and operations. He has a strong research background in Roman archaeology and extensive experience producing, editing and managing post-excavation projects, covering sites of all periods.

STUART MILBY
Senior Archaeologist

Stuart has been working in commercial archaeology for 19 years since graduating from King Alfred's College, Winchester. He has worked on a number of large infrastructure projects including the Channel Tunnel Rail Link (HS1) in the Ebbsfleet Valley, Woolwich Arsenal, Terminal 5 Heathrow and the Stansted Airport expansion. He has extensive experience in all aspects of archaeological fieldwork and has a specific interest in human remains and burial sites.



HARRIET BRYANT-BUCK
Project Officer

Harriet has worked for five years in commercial archaeology; during this time she has worked on Anglo-Saxon and post-medieval cemetery sites and multi-period urban and rural excavations. As an experienced human osteologist, Harriet can also complete full osteological analyses of human skeletal remains from archaeological or forensic contexts.

SAM DIXON

Project Officer

Sam joins Headland with over five years' experience working in commercial archaeology. He holds a BA in Ancient History and Archaeology as well as an MA in Archaeology and Heritage. He has worked previously as a Project Officer on the A14 Cambridge to Huntingdon Improvement Scheme. In addition to supervising archaeological works, this role required him to prepare Health and Safety documentation, deliver daily briefings to staff, and liaise regularly with the client and subcontractors.

RACHEL MCMULLAN

Trainer & Marketing Coordinator

Rachel has over three years' experience working in commercial archaeology. She has a wide variety of experience across projects of all periods, enabling her to develop a diverse skill set in excavation, recording, reporting and osteology. She has experience in training from time spent as a supervisor on fieldwork projects in the Kingdom of Jordan. In 2016 she began a commercial archaeology Youtube channel driven by a desire to engage with potential future archaeologists and to promote archaeology through social media.

DANIELE PIRISINO

Project Officer

Daniele holds a PhD in Classical Archaeology in addition to two MAs, one in Classics and Archaeology and the other in Geotechnologies for Archaeology. He possesses expertise in a broad range of digital technologies, such as reality-based 3D modelling, remote sensing and GIS spatial analysis. Daniele's research skills are complemented with eighteen years of fieldwork experience, having taken part in numerous archaeological excavations and field surveys around the Mediterranean and the UK.

WARM-UP FOR WORK

Archaeological work involves significant manual efforts which can ultimately lead to pains, strains and injury. It is important and beneficial to 'warm-up' for work and continue to stretch throughout the day in order to try and prevent this.

The exercises listed below have been provided to MHI by physiotherapists who have reviewed our work activities.

TOP SOIL REMOVAL

This includes hand excavating, machine watching (prolonged standing), bailing out and moving spoil in buckets and wheel barrows.

Forward reach

Clasp hands together and reach palms out forwards as far as you can.

Hold for 5 – 10 secs

Shoulder shrug

Draw shoulders up, back and down in a circular motion.

Upward reach

Clasp hands together and reach upwards with straight arms.

Hold for 3 secs

Lumbar extension

Feet hip width apart, hands on hips, gentle stretch backwards, tuck the chin in.

Hold for 2 – 3 secs x3

Wrist exercise

Paddle the hand up and down 10x

Tilt wrist towards thumb and then to little finger 10x

HAND EXCAVATING AND KNEELING

This includes bailing out of excavations, moving spoil in wheelbarrows and buckets, and working in often restricted spaces.

Hamstring stretch

Place one foot in front of the other and gently lean the trunk forward, stretching towards the toe.

Hold for 10 secs

Quadriceps Stretch

Hold on to something for balance, bend the knee and bring the heel to the bottom.

Stay upright

Hip flexor

Adopt an open kneeling position and slowly lean forward.

Hold for 10 secs

Other Exercises

Lumbar extensions

Wrist exercises

Edward Bailey 07920 118 763
ed.bailey@headlandarchaeology.com

Kirsten Paterson 07827 276 792
kirsten@hse-solutions.co.uk

HEADLAND ARCHAEOLOGY

Safety, Health, Environmental & Quality

During the past year the SHEQ department has been busy providing support to our large infrastructure projects as well as core work. In order to do this we have engaged with our Health and Safety partners at HSE Solutions to provide specialist support to MOLA Headland Infrastructure. The success of MHI and continued growth within Headland's core business means that the number of person hours worked exceeded 287,000. However, despite this Headland had no RIDDOR reportable accidents or incidents to report. This is testament to our commitment to staff health and safety.

Whilst we have had no major incidents ourselves, we closely follow incidents within our own industry and the construction industry in general, so that we learn not just from our own experience, but from that of others' as well. This has led to us focusing on preventing overhead strikes following a couple of incidents during the year.

EXPOSURE	2018	2017	2016	2015
Total man hours worked	287,702	237,465	216,320	143,783
SAFETY	**2018**	**2017**	**2016**	**2015**
Fatalities	0	0	0	0
HSE reportable injuries	0	0	0	0
Lost time incidents (1–7 days)	1	1	0	0
Incidents requiring medical treatment (mti)	0	0	0	0
Incident requiring first aid	4	3	2	3
Dangerous occurrences	0	0	0	1
Near hits/misses	3	3	5	5
HSE/HSA or equivalent improvement notices	0	0	0	0
HSE/HSA or equivalent prohibition notices	0	0	0	0
HSE/HSA or equivalent prosecutions	0	0	0	0
ENVIRONMENT	**2018**	**2017**	**2016**	**2015**
Reportable incidents	0	0	0	0
Minor non-reportable incidents	1	0	0	0
Enforcement action ie. warning letters/prosecutions	0	0	0	0

During the year we identified that one of the main causes of accidents was manual handling injuries. As a result we commissioned, as MHI, a physiotherapist to visit the A14 site and perform a work activity risk assessment identifying potential injuries due to incorrect use of manual tools and providing recommendations and advising suitable stretches staff can do to help prevent these injuries. On the back of this we are providing a guidance leaflet for supervisory staff and a poster for all staff.

Financial Review

BACKGROUND

The market for archaeology continues to show substantial growth in line with the rise in countrywide infrastructure project work. Monitoring the results of the five largest archaeology providers in the UK, as a very rough measure, shows a growth in business activity from approximately £56M in 2016/17 to £73M in 2017/18 (financial years to 31st March), a year on year increase of 29%. The increase from 2015/16 to 2016/17 compares at 13%.

From a company perspective our reported turnover grew by approximately 80% year on year in both 2016/17 and 2017/18.

Managing these large contracts becomes ever more complex with a wide variety of contract awards and client methodologies to understand. We have been awarded contracts on a joint venture basis, on sites where the client supplies and manages all of the civil engineering activities and others where we are required to manage and contract all of the civil engineering activities. As a business we have continued to develop and adapt our systems to cope with these increasing demands whilst remaining focused on delivering growth for the company and efficiency for our clients. We have very recently become part of the RSK Group which opens up many new doors to access expertise and services in a wide range of complementary services and systems.

PERFORMANCE

We have reported our results for the trading company, Headland Archaeology (UK) Limited, for the year to 31 May 2018. These accounts show a total turnover of just over £16M which, for the first time, has put us 'at the top of the tree' in terms of reported turnover within our industry. Our unaudited management accounts for the 10 months to March 2019 show an indicative turnover of £15.7M and continued growth.

In terms of profitability we remain 'at the top of the tree' with a pre-tax return of 10.24% as against an average of 4.96% generated by the other four main providers. We believe that this proves us to be the most efficient of the big providers but we must bear in mind that the four major providers we compare our business against are all registered charitable organisations so should they be returning a combined surplus of £2.9M given that all work goes under the heading of 'charitable activity'?

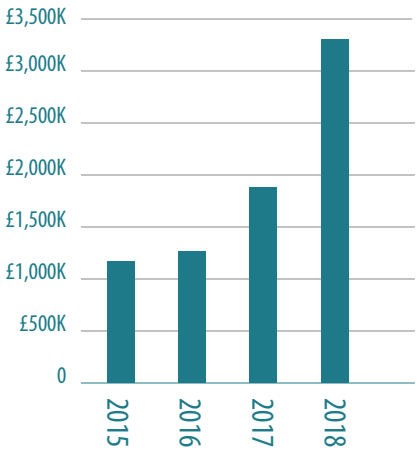
In terms of our reserves, our Group reserves amounted to £3.287M at 31st May 2018 and have continued to rise since then giving us the strength to continue to expand and finance the initial phases of larger contracts. Compared to the other providers we have the second largest reserve available (compared to the Charities' unreserved and undesignated funds).

OTHER ISSUES

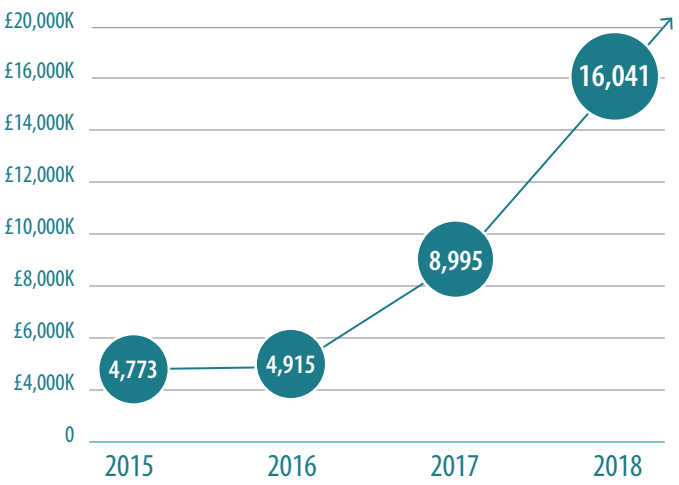
Following very significant investments in asset additions and R&D projects in 2015/16 and 2016/17, we saw a step back in investment as we developed other administrative systems to cope with the rapid growth of the company. We have continued to invest in ongoing R&D, particularly in areas of geophysics survey techniques and paperless recording and are committed to increasing our investment in 2019/20.

As noted above we are delighted to have become part of the RSK Group and we look forward to becoming part of the 'team' which is available to provide a wide range of additional linked services to our clients.

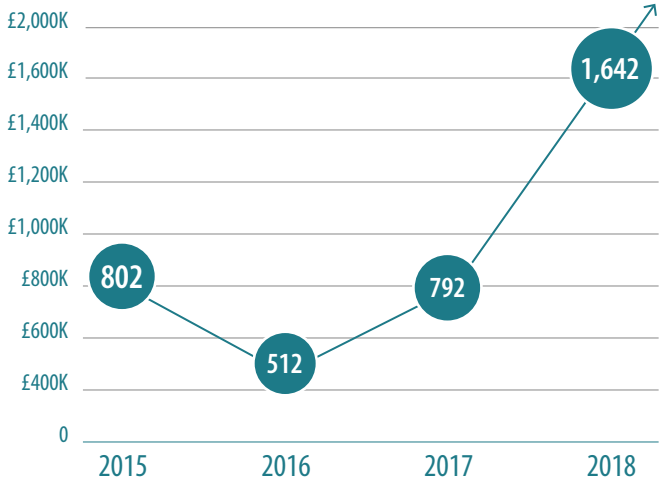
GROUP RESERVES



TRADING COMPANY TURNOVER



TRADING COMPANY PRE TAX PROFITS



Business Structure

CONSULTANCY

The Consultancy team is focused on identifying and managing potential risk. Dealing with heritage issues early on in the life of a development can save valuable time and cost.

Our aim is to get our clients through the planning process. We advise on current planning legislation, support project and design teams with heritage assessments and negotiate specifications with local and statutory authorities for archaeological work pre- and post-planning. We then advise on likely costs and timescales to help our clients design programmes and budgets. Our consultancy work is of the highest standard in the industry and our track record in defending our work in public inquiries proves this.

CONTRACTING

The Contracting team is focused on delivering appropriate archaeological services in advance of construction work on time and on budget.

Our philosophy for contracting services is to provide value for money as heritage can be a significant cost in any development budget. As one of the UK's largest contractors, we offer a full range of non-invasive and invasive surveys and have the scale and resources to get teams onto development sites anywhere in the UK, often at short notice. Our network of regional offices enables us to move resources around the country to meet demand. Our experience as principal contractor on large-scale infrastructure projects means we have a clear understanding of our contractual responsibilities in delivering on time and on budget and to agreed specifications. The importance of creating and maintaining a safe working environment, is also paramount.

SPECIALIST SERVICES

Our Specialist Services team is focused on adding value to our clients' developments through the input of some of the UK's leading heritage specialists.

We employ a full team of in-house specialists to support the work of our Consultancy and Contracting teams, providing a fully integrated service. Their knowledge and experience means our clients can be sure they have met industry best-practice but also that the work we recommend is appropriate to their development.

Site works are only part of potential heritage costs; post-fieldwork analysis and reporting both contribute significantly to these. Our experts can alert you as to what is a rare and important discovery. Conversely, they will also point out what is routine and commonplace and will recommend dealing with these sites quickly, dispensing with the need for unnecessary and expensive work both in the field and in reporting. Our team of specialists can save you time and money both on and off site.

CONSULTANCY

Our services include:
early stage risk appraisals / feasibility studies / masterplanning / environmental impact assessments / heritage statements / desk-based assessments / expert witness

CONTRACTING

Our services include a range of pre- and post-planning determination services such as:
geophysical survey / fieldwalking / topographic survey / coring / historic building recording / trial trench evaluation / excavation mitigation / watching brief

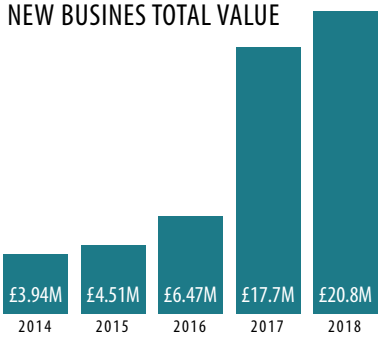
SPECIALIST SERVICES

Our services include:
geoarchaeology / palaeoenvironmental studies / archaeobotanical studies / photogrammetry / historic building recording / artefact analysis / human and faunal remains / graphics / publication

Achievements

Headland Archaeology is a privately-owned company. It was founded to deliver profitable archaeological work to the highest standard. We are respected within the industry for successfully balancing the cultures of business and heritage, and we lead from the front, encouraging innovation and excellence in all aspects of our work.

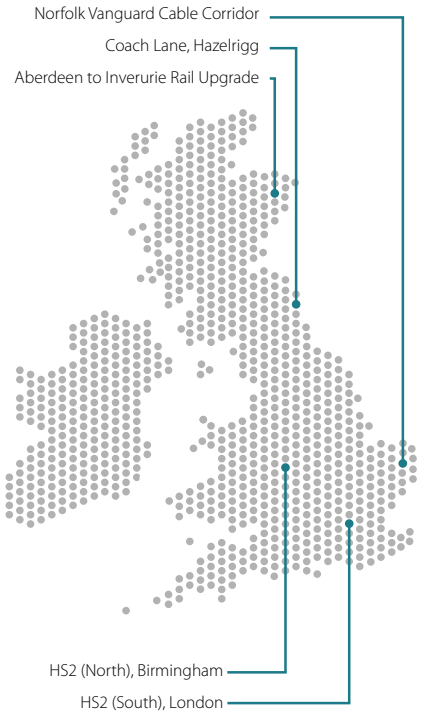
NEW BUSINES TOTAL VALUE



£150K

AVERAGE VALUE OF PROJECTS CONVERTED

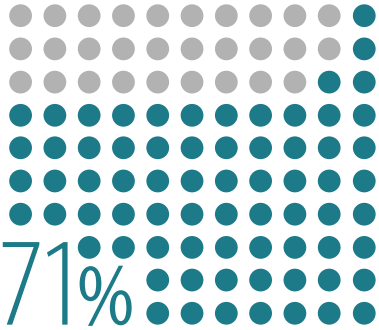
MAJOR PROJECTS



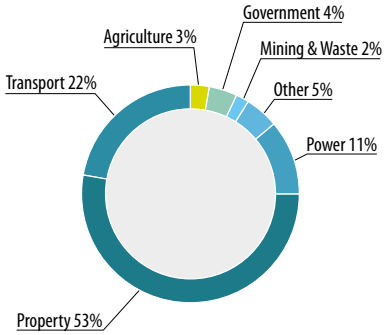
596

ENQUIRIES

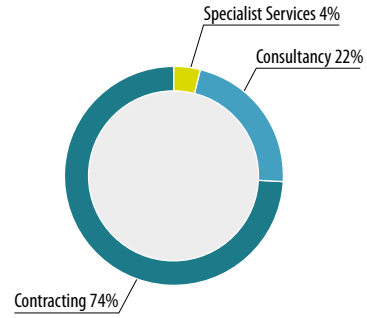
REPEAT BUSINESS



SECTORS



SERVICES



6,500

HECTARES SURVEYED

Business Development

SALES

With the surge in infrastructure projects, we have been careful to balance resources so that we can continue to provide a service to long-standing clients and maintain a profile in local and regional markets. We have therefore been much more selective in following up sales enquiries than in previous years.

With several of our regional offices heavily involved in infrastructure projects, the other regional offices have assisted not in only in preparing tenders and quotations but also in delivering these contracts using resources drawn from all over the UK.

As such, this year saw a lower volume of sales enquiries than last year but the impact of large housing developments, road, rail and grid connections drove the value of sales enquiries to record levels of almost £40M. With 27% of all enquiries converted, almost £20.8M of new business was added during the year.

Sales were a little quieter than usual in our Midlands & West region which has seen some large housing developments and the occasional infrastructure project in their area in recent years. In contrast, the South & East region had merely been ticking over whilst the A14 was ongoing but since that project has largely been completed, resources have returned and we have been more active in sales and marketing. As a result, we have seen a significant increase to the level of sales enquiries than we used to see a couple of years ago. The North region repeated last year's strong performance and Scotland remained steady, both with a mix of housing, commercial property, renewables, grid connections and local authority developments.

The opening months of the new financial year have been promising and we expect another busy year ahead in the sales team.

MARKETING

As in previous years we have continued to exhibit and attend at sector-specific trade shows and conferences where we continue to be well-received. This year has also seen us design several editorial advertisements for industry magazines such as Design & Build. Our social media presence has continued to grow with production of regular content and we have also expanded onto two new platforms, Instagram and Youtube, allowing us to diversify our content by producing videos as well as written and visual pieces.

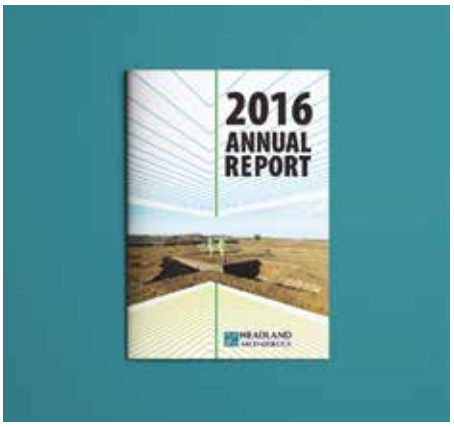
We continue to draw attention to our website through our News and Opinion stories, having prioritised producing regular updates and stories about the company as a whole rather than relying solely on exciting project news.

The Annual Report is the key document for our marketing year and much work has gone in to keep producing a quality product that meets our high standards. Our success in this endeavour is well conveyed by positive feedback from our clients.

"Thank you for sending me your annual report – always an interesting read! I thought that the '20 years of Headland Archaeology' was brilliant, and the whole booklet was beautifully designed as always. It really is a fantastic advert for Headland, but also the profession."

- Matt Ritchie, Forestry Enterprise Scotland

We have also received special recognition this year for our contributions to the CIfA Yearbook, where we have been reserving the back page for advertisement for the past 12 years. This year our 'Archaeology 2050' design was very well-received by the publishers who also recognised our ongoing contributions with a special feature page displaying a collage of our back-covers for the past 12 years.



Business Operations

CONSULTANCY

It's been another busy year for the consultancy team with over 90 projects being worked on during the course of the year. Renewables, in general, and wind power, in particular, continues to be a key market for our services and the framework with RES has seen us working on projects in Highland Region and in Northern Ireland. As ever, renewables work in 2018 has been a mix of new applications, as well as extensions to existing schemes and resubmissions for others that have already been consented.

The year saw us return to the proposed wind farm development at Stranoch, near Stranraer; originally worked on over the period 2012 to 2014 on behalf of Wind Prospect, the original application was consented in 2016. The new application, for EDF Energy, involves fewer but larger turbines, varying in tip height from 140m to 175m. Usefully, we were able to offer the same consultant team as had worked on the original application, minimising project start-up costs. As before, one of the key issues for the development concerned the Neolithic chambered cairn at Cairn Kenny and minimising potential effects of the scheme on its setting.

The issue of setting – understanding how it contributes to the significance of the asset and whether or to what extent that contribution would be affected by the proposed development – is a key feature of the consultancy team's work. In addition to working on developments and setting assessments involving the usual types of archaeological monuments and listed buildings, this year we were also called upon to apply our understanding of setting to an asset that was only built in the 1980s and listed in 2017 – the Category A-listed late-Modernist Aviva UK insurance company headquarters in Perth – where Aviva had applied for planning permission to erect a wind turbine close to the building. The building itself is located next to the M90 and has extensive views over the city to the north; it will be interesting to see how impacts on certain restricted viewpoints are treated in the planning balance.

In terms of geographical spread, we have been working on wind farm developments in Wales, Northern Ireland and Scotland. Meanwhile, our Principal Consultant and expert witness, Dr Stephen Carter, has been busy on wind farm-related public inquiries in South Lanarkshire, Northern Ireland and Ireland, the last in connection with the potential World Heritage Site issues in the vicinity of the Brú na Bóinne WHS, as prefigured in last year's Report.

Desk-Based Assessments and Heritage Statements continue to be a mainstay of the team's workload and we have worked with a range of developers, including house-builders, planning consultants and their agents over the course of the past year. Projects have ranged from large-scale infrastructure, residential housing developments and out-of-town innovation parks to individual properties. Among the former, Headland's consultants were involved in preparing the cultural heritage inputs to the Planning Permission in Principle for the Glasgow Airport Investment Area, part of the Glasgow City Deal project that we have been involved with since 2016, working with Sweco on behalf of Renfrewshire Council.

The consultancy team has also contributed to other major ongoing projects which are being taken forward by the Contracting Division, including consultancy support to WSP in connection with the North Section of HS2.

In north-east Scotland our consultants have been working on the Desk-Based Assessment for the Aberdeen to Inverurie Railway upgrade project and contributing to the Cultural Heritage Management Plan for the scheme. This will ultimately involve reinstatement of the double track from Kittybrewster to Inverurie as well as track improvements and resignalling works. Three new stations are also to be constructed at Dalcross, Forres and Kintore, as well as extensions to existing platforms elsewhere.

In Northumberland, the team has been preparing the EIA Report for the proposed surface mine at Dewley Hill on behalf of Banks Mining. The EIA will be complemented by a large-scale programme of geophysical and topographical survey, fieldwalking, and trial trenching across the proposed site.

Meanwhile, in East Anglia our consultants are currently preparing the baseline and detailed setting assessments for the grid connection corridors which occupy a swathe of land between Thorpeness and Friston in connection with the 900MW East Anglia TWO and the 800MW East Anglia ONE North offshore wind farms on behalf of Scottish Power Renewables; another project where extensive geophysical survey and other programmes of work have been front-loaded into the EIA.

To round off a busy and varied year, away from our commercial work we have also had the opportunity to contribute to some of the broader heritage issues facing planning. Oxford City Council is preparing a new Local Plan which will contain a strategy for development of the city to 2036. The council is expecting higher density development, particularly in the city and district centres and transport hubs. The question of how to deliver higher density development without negatively impacting on townscape character and the historic environment will therefore be crucial to the success of the Local Plan. To address the cultural heritage issues raised by higher density development, Dr Stephen Carter was part of LDA Design's team which was commissioned by Oxford City Council to prepare a Technical Advice Note regarding high buildings in the city. The study will analyse how heritage assets relate to their settings, the contribution that settings make to heritage significance and the potential for high buildings to affect that contribution. The forthcoming Technical Advice Note will provide a useful tool for planners working in sensitive urban environments.

CONTRACTING

The department's focus for the year was building and looking ahead. With one eye on potential future demand for our services we needed to create a landscape where new-to-sector employees could be rapidly up-skilled. Alongside this we took opportunities to grow our current workforce with skilled and well-motivated new recruits, and the inception of improved more efficient systems.

GROWTH

One of our big success stories for the year has been the increase in the use of our geophysics section. The rather unique service we provide covers a combination of no-nonsense access and rapid delivery of surveys with regular feedback from intrusive fieldwork allowing future interpretations to be honed. General feedback from our regular clients is one of satisfaction with our reliability at a reasonable price and quality of product.

Bolstered by our well-established track record for delivering linear infrastructure projects, our staff have contributed to two major schemes through MOLA Headland Infrastructure (MHI) – the A14 Cambridge to Huntingdon Improvement Scheme (reported below) and work on HS2 in London, Birmingham and elsewhere. These have benefited from the flexibility presented by the wide geographic distribution of our offices and broad skills base we possess.

The year also saw us embracing the early development of new initiatives, creating more joined-up working across our various offices and departments. These include unifying approaches from post-sales through to report delivery, the latter something that will be supported through Alex Smith as the new lead in the Post-excavation department. These initiatives will be built on through 2018–19, providing more streamlined working across the company.

DEVELOPING STAFF

We engaged with the training department to build a scaleable and sustainable staff learning and development system. This was a massive challenge and our staff contributed to some of the 150 modules created to date. Our brief was for training that could be delivered, monitored and assessed anywhere, as one major obstacle to learning how to do the job appeared to be that people were too busy actually doing it to make time to teach others. We have now created a fantastic tool, based on a rapid delivery model, that can be made easily available through technology on site. Our aim is to fully roll this out across the department over the following year.

DELIVERY

We undertook work on 270 projects with a value of £3.7M over and above work on MHI projects. This has included sectors such as house-building, roads, wind farms and utilities. Our staff also worked on completing a number of publications across the year. This underlines our commitment to continue to service existing clients and markets despite having a strong presence on some of the country's major infrastructure projects. The department has planned to reserve resources over the coming years for this very purpose and to ensure that the pipeline continues beyond the 'Age of Infrastructure'.

One might say it is business as usual, but next year both we and our clients should reap the benefits of our 'better way of doing things', as a result of streamlining our processes and improving project delivery, both in the field and during reporting.

Scotland

2017–2018 was a busy year for the Scotland office with several large projects, most notably a three-month excavation at Hazlerigg, Newcastle upon Tyne, for Banks Group at the end of 2017 where we excavated an enclosed and unenclosed Iron Age settlement. In the New Year we were back on site for Banks Group, this time at their Shotton Triangle site in Northumberland, where we excavated the remains of Shotton medieval village in advance of coal extraction at the site. Both Hazlerigg and Shotton were challenging projects due to the site flooding on the former and the 'Beast from the East' snowstorm hitting the latter. However, our experience and ability to adapt quickly to changing conditions on site meant that both projects were completed on time to the client's satisfaction.

Other highlights included a trial-trench excavation of a medieval cemetery at Windhouse on the island of Yell, reportedly the site of Shetland's most haunted house, and the start of fieldwork on the Aberdeen to Inverurie Rail improvements for BAM Nuttall. Logistically, Windhouse was a challenge due to its remoteness; however, through working in partnership with our local subcontractor archaeologist, we were able to undertake the works with a team sent from Edinburgh without the need to ferry large amounts of kit around the country. The Aberdeen to Inverurie Rail improvements were challenging due to the requirement for occasional night working in order to undertake some of the works, as the project takes place on a working railway.

North

Headland North has had another year of steady expansion and we now have a core team of 16 archaeologists and geophysicists based in our Leeds office. Building on last year's strong financial performance, we exceeded our annual target and expect to post our first £1M turnover in 2018/2019. The geophysics section was increased from two teams to three, giving us the potential to survey 100 hectares per week at peak periods.

We had continued success on large infrastructure projects, being awarded the geophysical survey work for the Lower Thames Crossing (new tunnel below the Thames near Gravesend), East Anglia One North/Two (cable corridor for offshore wind farm), Lutterworth (large housing expansion) and the Southampton to London Jet Fuel Pipeline. These four surveys totalled more than 1050 hectares. Additional staff were also recruited to the General Works team, given the increasing number of evaluations and excavations being undertaken by the office, most notably a 450 trench evaluation for a new distribution centre in Leicestershire.

South & East

This year the South & East office has supported and undertaken projects throughout the East Midlands, East Anglia and the Home Counties. There was an increase in projects in Essex and Suffolk, mainly in the housing sector. New projects and enquiries also came in from Norfolk reflecting a burst of development in the eastern part of our region. Our existing involvement in a large port regeneration scheme in East London continued and we have been supporting the project through the various planning stages, with further geoarchaeological and evaluation work along the Thames.

Watching brief work included a road development in Birmingham and water schemes around Reading. We also undertook a number of strip-map-record evaluations on a large infrastructure project. Meanwhile, our post-excavation specialists have been preparing a number of early prehistoric to medieval sites for publication, the results of excavation in advance of a school development in Reading, two housing developments in Warwickshire and others in Cambridgeshire and Bedfordshire.

Finally, South & East staff have continued to manage the A14 Cambridge to Huntingdon Improvement scheme as part of the MHI team.

Midlands & West

The Midlands & West office continued into 2017/18 with a strong portfolio of work relating to the development sector. This included consultancy work on masterplans in Herefordshire, Swindon, Cambridgeshire, Medway and Darlington; and site investigation and excavation work across Herefordshire, Gloucestershire, South Gloucestershire, Wales, Staffordshire, Wiltshire, Warwickshire and Oxfordshire.

Particular highlights included the excavation of Romano-British settlement remains at Banbury and in the Forest of Dean and the discovery of multi-period prehistoric settlement remains and a section of Roman Road near to Emersons Green, South Gloucestershire. Excavations in the centre of Hereford offered rare glimpses into its Saxon past with keyhole interventions within the Cathedral precinct, and over the location of the city's Saxon ramparts. In the centre of Birmingham, the regional team undertook historic building recording of a former 19th-century music hall and surrounding buildings at the site of the proposed Beorma Quarter development.

Involvement with infrastructure and major projects has included fieldwork on the Elan Valley Aqueduct replacement scheme; excavation work along the Edgar Street Link Road in Hereford; monitoring GI work in connection with the Hereford bypass and the Hinkley Grid connection; and commencement of watching brief work on the construction of the Mynydd y Gwair wind farm.

The consultancy department maintained a diverse portfolio of work including advising on the heritage significance of a number of vernacular buildings across the West Midlands, providing input to the Midlands Metro Authority on several projects in the Birmingham and Black Country area.

The region's post-excavation output has gathered pace, and this year included the completion of reports and publications on medieval buildings excavated in Hereford, Ludlow and Swindon; on a Middle Bronze-Age settlement from Bishop's Cleeve, Gloucestershire; and Romano-British remains from sites in Gloucester and Derbyshire. The office also commenced post-excavation assessment and analysis work on a nationally important prehistoric site from St Athan, South Wales.

SPECIALIST SERVICES

This year heralded the start of major developments within Headland's specialist services, with the creation of an overarching post-excavation department encompassing the finds, graphics and environmental teams. Dr Alex Smith, our new Head of Post-excavation, is working closely with Julie Franklin (Finds, Publications and Archiving Manager), Caroline Norrman (Graphics Manager) and Angela Walker (Environmental co-ordinator) to ensure that we have a dynamic and co-ordinated approach to specialist services at all stages of archaeological work.

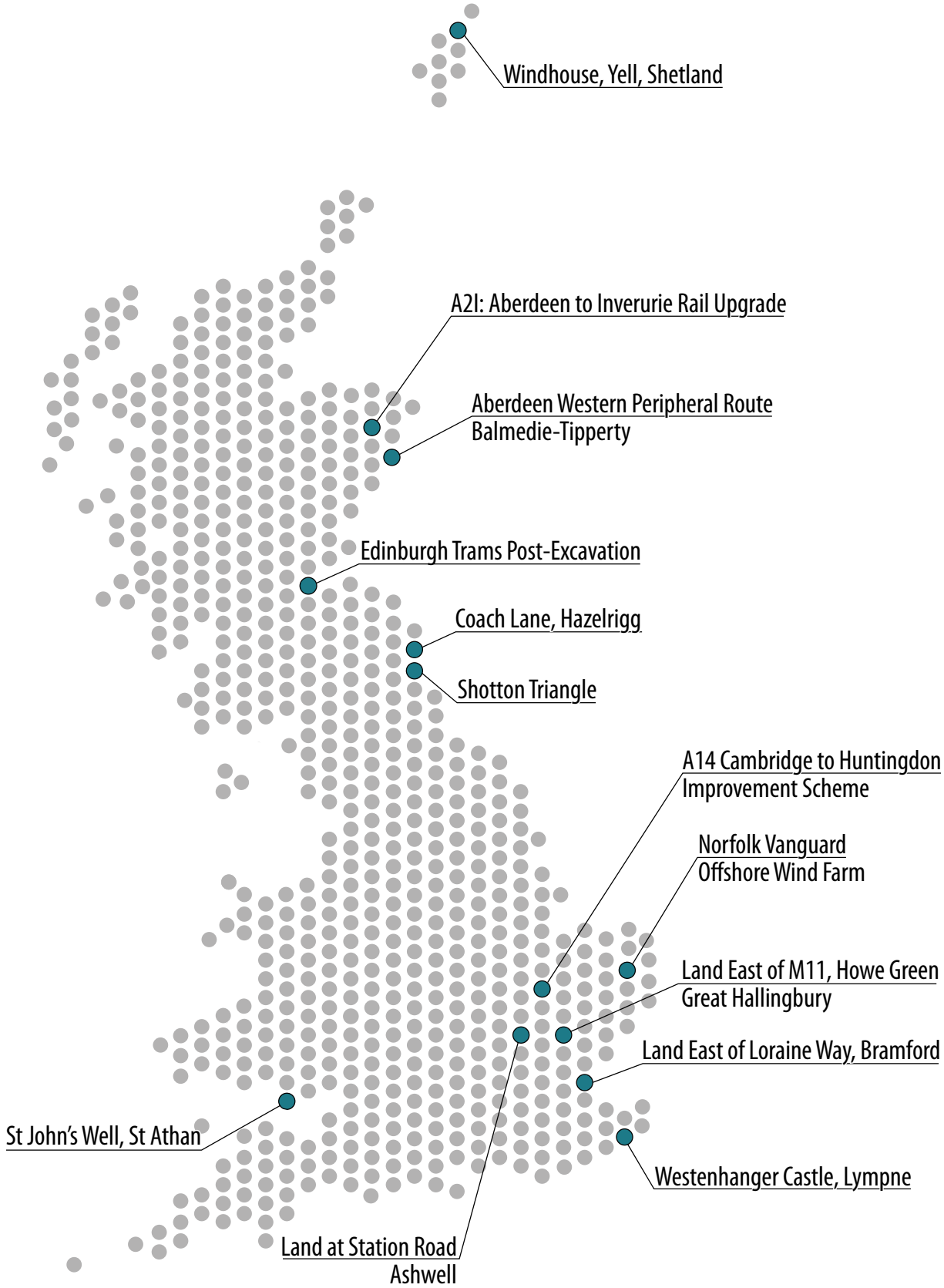
With over fifty active projects on the go, our post-excavation programme remains as full as it has ever been. A particular challenge this year has been the start of the post-excavation phase for the A14, where we have been working closely with our MHI colleagues from MOLA and with other archaeological contractors to make sense of the mountains of data that this project has produced.

The sheer volume of work has led to new systems being put in place to co-ordinate individual work programmes, in order to facilitate the smooth timetabling of post-excavation and other specialist services work. We have also been expanding our staff, with a new illustrator and post-excavation supervisors. We hope soon to be welcoming a post-excavation project officer, the first at Headland, to help drive this stage forward and create momentum within the programme. It is envisaged that the person in this post will also help train other staff in effective report writing, thus contributing towards the overall professional development of people within the company.

The importance of training also underpins our recruitment of new post-excavation supervisors in the South and East office. There is a recognised skills shortage in most specialist areas of British archaeology and we hope to help meet this challenge by undertaking on-the-job training of these staff in finds and environmental specialisms, using the opportunities provided by large infrastructure projects.

The next three to five years should only see the post-excavation programme and team continue to expand, with HS2 following hotly on the heels of the A14, and with many other smaller projects in the pipeline. The academic value of many of these projects will be considerable, and one of the concerns of the post-excavation department is to help bridge the continuing gap between commercial archaeology and university research. The A14 is already onboard with this, having established an academic panel for the life of the project, while also looking at funding partnerships for postgraduate research. Such continued collaboration can only enhance Headland's reputation for high quality, innovative archaeological output.

Case Studies 2018



Land at Station Road, Ashwell

Location	Hertfordshire
Sector	Property (Housing)
Client	Beck Homes (UK) Ltd
Consultant	Archaeology Collective
Contract Value	£14K
Services	Trial Trench Evaluation, Geophysical Survey

Project highlights

- *Effective interplay between geophysical prospection and trial trenching evaluation*
- *Evidence of human activity, from prehistory to the modern era*
- *Discovery of a possible late Iron Age/ Roman road and a possible earlier trackway*

This project showcased the successful interplay between geophysical prospection and trial trenching for a timely and comprehensive assessment of a site's archaeological potential. The preliminary geophysical survey identified a number of magnetic anomalies which were subsequently targeted by our trenches and proven to be archaeological in nature.

Project details

Headland undertook an archaeological evaluation of the Land at Station Road in March 2018 to support a planning appeal for a residential and recreational development. The site was located beyond the south-eastern outskirts of the village of Ashwell, Hertfordshire and consisted of approximately 4ha of arable land. The archaeological evaluation followed up on the compilation of a desk-based assessment and a geophysical survey, in which several potential archaeological features were identified. In addition to the features identified by the survey other archaeological features were also exposed and investigated.

During the evaluation, 22 trenches were opened and investigated, resulting in the identification of several heritage assets. Of these, the most significant were the remains of a possible late Iron Age/Roman road with roadside ditches and other associated linear features, as well as a second, possibly earlier, trackway from which a copper alloy penannular brooch dating from the late Iron Age to Roman period was recovered. All the above discoveries add to the wider understanding of North Hertfordshire road networks during the Iron Age and the early Roman period.

Other remains included medieval and post-medieval pits which might have been used for the disposal of rubbish. An additional medieval or post-medieval feature provided evidence for possible, isolated chalk pitting activities carried out in the area. Further features identified were post-medieval furrows which show that the nature of the site was predominantly agricultural throughout antiquity and into the modern era.

Land East of M11, Howe Green, Great Hallingbury



Location	Essex
Sector	Amenity (Cemetery)
Client	Great Hallingbury Cemetery Ltd
Contract Value	£43K
Services	Trial Trenching, Mitigation Excavation

Project highlights

- *Effective on-site Health & Safety management*
- *Evidence of a possible 11th-century Saxon-Norman building*
- *Evidence of medieval metalwork in the form of a horseshoe and fish hook*

This project showed Headland's capabilities to effectively deal with unexpected H&S issues, minimising the impact on project timeline and goals. Works were executed in two stages and revealed evidence of prehistoric, Roman and medieval activity, including a possible enclosed medieval settlement.

Project details

Headland was commissioned by Great Hallingbury Cemetery Limited to undertake a trial trenching evaluation in support of their planning application for a burial ground including service buildings and a car park. The site was located within the hamlet of Howe Green, Great Hallingbury, Essex. During the trial trenching exercise, features of archaeological interest were found and, as a result, a mitigation excavation was subsequently carried out.

The site was previously used as a car park and as an informal traveller site. There was a large amount of modern building debris and other waste was present on the site, some of which was hazardous. In addition, the presence of a root-protection zone and extensive overgrown areas required a rearrangement of the original trench layout plan. On-site staff promptly took the appropriate measures to safely deal with the modern waste, with the active support of the client, and to re-arrange the location and extent of the evaluation areas. Headland's staff-training programmes and the strong culture of safety at work allowed for site personnel to carry on in a safe and productive environment throughout both stages of the project.

The trial trenching evaluation was carried out in April 2018 and consisted of nine trenches, in which several linear archaeological features were found. These included late prehistoric field boundaries with sandy ware pottery sherds, Roman field boundaries with a variety of potsherds dating to 240–400 AD, and a further field boundary containing glazed post-medieval pottery.

A mitigation excavation followed the evaluation in August 2018; in this phase the remains of prehistoric and Roman ditches were identified and excavated. Additionally, a possible medieval structure was identified. Rectangular in plan, it was probably located within an enclosure and the features within it consisted of a central hearth, post-holes and drip gullies. Medieval ditches were also found, and the vast majority of the pottery recovered from these features dated to the 11th-century, corresponding with the Saxon-Norman period. The most notable finds were a horseshoe and a possible fish hook, which came from the same features as the pottery.

Land East of Loraine Way, Bramford

Location	Suffolk
Sector	Property (Housing)
Client	CEMEX UK
Consultant	Archaeology Collective
Contract Value	£44K
Services	Geoarchaeology, Evaluation

Balancing a set of challenges was the key to this successful project as high voltage power lines had to be navigated safely on the way to trenches cut into complex colluvial geology. The addition of a metal detectorist to the team effectively recovered a plethora of metal finds and a geoarchaeologist was utilised to help fully understand the sedimentary sequences.

Project highlights

- *Discovery of a number of coins including a Saxon Sceat and a Roman silver denarius*
- *83 trenches across a 13ha site*
- *13 sondages deeper than 1m to test the geology and geoarchaeological potential requiring extra health and safety measures*

Project details

In May 2018 the Archaeology Collective commissioned Headland to conduct an archaeological programme of works on a site just outside Bramford in advance of a residential development. The site had a high potential for archaeological remains relating to later prehistoric burial mounds as well as medium potential for prehistoric and medieval field systems.

A previous geophysical survey tentatively identified linear anomalies that respected boundaries indicated by historic mapping.

Before fieldwork began the trench plan had to be designed and appropriate health and safety measures had to be set up around constraints imposed by high voltage power lines that crossed the site. Little consistency in the appearance of trenches and occasional deep trenches meant that further health and safety concerns had to be managed. During a geoarchaeological walkover survey qualitative notes were made of the deposits, the site topography and the sedimentary sequences of key trenches. This established that post-Roman to modern cultivation had led to the widespread deposition of deep colluvium in the centre, north-eastern and eastern parts of the site.

The evaluation identified the geophysical anomalies and field boundaries, a possible Bronze Age ring-ditch and pits, ditches and a field-system of possible Anglo-Saxon or medieval date. A high concentration of lithics in one trench provided evidence for knapping activity. The majority of the artefactual material was early Saxon, with most of the pottery and a brooch pointing towards the 6th century AD.

Metal-detecting took place throughout the evaluation. Several coins were retrieved including a Saxon Sceat (695–740AD) and a Roman silver denarius (42BC).

This project was a significant opportunity to identify archaeology from an extended period of the past that was previously unknown in an area that is being rapidly developed. The multi-faceted methodology and good balancing with the health and safety challenges made this a successful project all round.

St John's Well, St Athan

Location	Glamorgan
Sector	Property (Housing)
Client	Barratt and David Wilson Homes
Consultan	Environmental Dimension Partnership
Contract Value	£108K
Services	Post-excavation Assessment

Project highlights

- *Project designed to fit within client's budget*
- *Work undertaken by in-house team of specialists*
- *Staged delivery of post-excavation work and billing to fit client's requirements*

Headland was called upon to undertake the post-excavation work on a complex project where the fieldwork had been completed by another archaeological contractor. The contract was won on the back of a proven track record of delivering high quality post-excavation work on time and on budget.

Project details

Headland was commissioned by the Environmental Dimension Partnership, on behalf of Barratt and David Wilson Homes, to undertake post-excavation assessment of the results of archaeological fieldwork on land at St John's Well, St Athan, Glamorgan. The fieldwork stage of the project had been undertaken between March 2016 and March 2017 by Archaeological Perspectives Analysis Consultancy (APAC).

The fieldwork revealed substantial evidence of prehistoric activity on the site dating from the later Mesolithic to the early and middle Bronze Age periods. The Mesolithic was represented lithics and pits while later Neolithic structural evidence and associated pits were found in the south of the site with potential Neolithic domestic evidence also identified in the north. The Bronze Age evidence comprised the remains of two probable circular structures and four further discrete areas of cremation-related funerary activity. Three inhumation burials, as yet undated, but likely to relate to the earlier prehistoric period, were also excavated.

The initial finds assessment identified three Mesolithic microliths and associated debitage. The middle to late Neolithic period was represented by Impressed Ware and Grooved Ware pottery, associated lithics, a quern, and other coarse stone tools. The pottery and stone finds are characteristic of domestic rather than funerary activity.

The next phase is characterised by cremations and possibly the inhumations as well, depending on the results of radiocarbon-dating. This phase has been dated to the early Bronze Age by the presence of Vase Urn pottery, possibly continuing through to the middle Bronze Age. Later activity is characterised by finds of medieval to modern pottery, iron, glass, clay pipe, brick, mortar and industrial waste.

Our assessment has identified complexity within areas of the site and the probability for further phases of archaeological activity within the periods identified to date and proposes an updated project design for further analysis of results. Recommendations were made for further work to concentrate on the prehistoric evidence especially as in situ late Neolithic and early Bronze Age assemblages are rare in the region.

Headland is now proceeding with the analysis phase of work to lead the site through to final publication.

Coach Lane, Hazelrigg



Location	Tyne & Wear
Sector	Property (Housing)
Client	The Banks Group
Contract Value:	£200K
Services	Mitigation Excavation

Adverse weather conditions and clay soils provided a challenge on this project. Headland staff were able to rise to the challenge, excavating and recording 25 Iron Age roundhouses in advance of construction of a modern-day housing development.

Project highlights

- *Adverse weather and clay geology made for challenging excavation conditions*
- *Discovery of a previously unknown unenclosed settlement*
- *Excavation of 25 roundhouses*
- *Successful Open Day hosted for the local community*

Project details

From September to December 2017, Headland carried out a programme of archaeological excavation in advance of a proposed housing development on land east of Morley Hill Farm, Hazelrigg, Newcastle upon Tyne. Previous work had indicated the presence of two Iron Age rectilinear enclosed settlements located across the northern part of the development area. The subsequent archaeological excavation took place on approximately 2ha of land centred on Morley Hill. The clay nature of the natural geology provided challenges for the excavators, especially during wet weather.

Two rectilinear enclosures, each containing roundhouses, were identified. A further 13 roundhouses were discovered in an unenclosed settlement outside one of the enclosures. A well-attended Open Day, explaining the results of the investigation, was held at the end of the excavation.

Artefactual evidence, including lithics and a small ground stone axehead, points towards sporadic activity in the vicinity of the site during earlier prehistory. The majority of the finds indicated that the settlements were occupied in the later Iron Age and early Roman period. Pottery, stone tools and animal bone were all recovered.

Research has shown that enclosed settlements of this type were a distinctive northern British Iron Age type. Further radiocarbon dating is now underway to help untangle the chronology of the settlements. The site will be published in 2019 in the Newcastle Society of Antiquaries Journal, Archaeologia Aeliana.

Shotton Triangle

Location	Northumberland
Sector	Mining
Client	Banks Mining
Contract Value	£110K
Services	Trial Trench Evaluation, Mitigation Excavation

A team of nine archaeologists braved the storms of early 2018 to excavate a regionally significant medieval pottery production site in advance of the extension of Shotton Surface Mine.

Project highlights

- *Discovery of an industrial production area containing five kilns*
- *Site of regional significance for medieval pottery production*
- *Evidence of Neolithic and Anglo-Saxon archaeology*
- *37 trenches and 18,000m² area investigated*

Project details

Headland was commissioned by Banks Mining to undertake a programme of archaeological works in advance of a proposed expansion of Shotton Surface Mine, Northumberland. Previous archaeological work had identified prehistoric, Anglo-Saxon and medieval remains, including a medieval village immediately to the north-east of the proposed mine expansion. Trial trenching confirmed the presence of medieval archaeology and subsequent excavation uncovered features associated with medieval settlement as well as some evidence of prehistoric activity.

The project was completed to a high standard despite the significant challenges created by heavy snowstorms in early 2018.

37 trenches were excavated over the course of the evaluation which identified 14 archaeological features. The archaeology seemed to be concentrated in the northern end of the site with medieval features associated with the western boundary of a known village. The presence of residual lithics in the fills of several features in this area suggested there was potential for surviving prehistoric remains.

The excavation phase revealed further evidence of prehistoric and medieval archaeology. Ten potential prehistoric features were identified, several of which contained waste fragments from stone tool production. The medieval archaeology consisted of linear features such as gullies, field and plot boundaries as well as five pottery kilns, five structures, and a number of pits and post-holes. Post-medieval agricultural furrows were also found running across large areas of the site and truncating the industrial area where the kilns were located.

Over 10kg of pottery was recovered, much of which was likely produced during the medieval period, highlighting the regional significance of this pottery production site. An additional 10kg of fired clay and 2.2kg of industrial waste was also recovered, relating to medieval industrial activity.

Further analysis and assessment of what is clearly a regionally significant medieval pottery production site will be undertaken and published in due course.

Edinburgh Trams Post-Excavation

Location	Edinburgh
Sector	Infrastructure (Trams)
Client	City of Edinburgh Council
Contract Value:	£170K
Services	Publication

The construction of a tram system in Edinburgh continues to be one of Scotland's high-profile major infrastructure projects. As part of this Headland conducted the largest excavation to date of a medieval urban cemetery in Edinburgh, as part of the archaeological works ahead of the expected construction work in Leith. The publication of these findings is to be in a full-colour monograph written, edited, designed and produced by our experienced in-house team in conjunction with the City of Edinburgh Archaeology Service.

Project highlights

- *Remains of 388 individuals recovered at two cemetery sites*
- *Team of 23 people brought together to interpret and present results*
- *Accepted historical wisdom about dating of church in Leith overturned by archaeological findings*
- *Ground-breaking use of facial reconstructions and story-telling as part of the publication*

Project details

The plan to bring trams back to Edinburgh involved a major series of archaeological works along key sections of the tram route, particularly where they passed through archaeologically sensitive areas in Leith. There were two parts to the fieldwork: a large-scale watching brief running along the proposed route and an excavation of a medieval cemetery outside the existing South Leith Parish Church graveyard on Constitution Street (literally around the corner from our head office in Leith).

Our most notable discovery was that the human burials on Constitution Street predated the historical foundation date for South Leith Parish Church in 1483 by over 100 years and therefore provided evidence for an earlier, previously unknown, graveyard with possible associated church or chapel. Additionally, unexpected human burials located at the southern end of Leith Walk also provided the first archaeological evidence for the location of the 15th-century Greenside chapel and later 16th-century Carmelite Friary and the late 16th/17th-century Plague hospital historically recorded in this approximate location. Elsewhere, the works provided background detail on the development of Leith and Leith Walk and the material culture associated with Leith's North Sea and Baltic trading connections as well as its 16th-century French occupation.

The nature of the archaeology meant pulling together a team of specialists to get the most out of the material recovered. The bones were studied by osteologists to identify the general health of the population, including any evidence for trauma or disease, as well as looking at diet and childhood geographical origins based on isotopic analysis of bones and teeth. Specialists in pottery, architectural fragments, textiles and other finds looked at the artefactual remains and found evidence for burial methods, imported European pottery and even a piece of the 15th-century church. Environmental experts looked at plant remains, including evidence for flax cultivation or linen production. Headland's graphics team provided the many colour illustrations, as well as designing the cover and type-setting the book.

Julie Franklin, our Publications Manager who specialises in medieval and post-medieval archaeology, took charge of the project in 2017 and pulled the various specialist drafts into one publication. She has worked closely with John Lawson of the City of Edinburgh Council Archaeology Service to place the results of the project in the context of our existing understanding of the archaeology of Leith and has drawn extensively on her own knowledge and research into medieval and funerary archaeology.

As part of the publication project, a series of facial reconstructions were produced by a team from the Centre for Anatomy and Human Identification at the University of Dundee. These were based on skulls recovered during the project and provide an opportunity to look at the human faces of Leith's past. In the same spirit, stories were created to accompany some of these faces which draw together all the facts known about them in terms of when they lived, their health and diet, diseases and injuries, where they grew up, how and when they died and how and where they were buried. A narrative was constructed which provided a plausible life story for each individual which fitted all the known facts and tried to illustrate some of what was happening in Leith at the time.

The monograph is currently in the late stages of production and is due out in spring 2019.

A14 Cambridge to Huntingdon Improvement Scheme

Location	Cambridgeshire
Sector	Infrastructure (Road)
Client	Costain Skanska A14 JV for Highways England
Consultant:	A14 Integrated Development Team (IDT)
Services	Geophysics, Trial Trenching, Earthwork Survey, Photographic Survey, Mitigation Excavation, Community Engagement, Post-excavation Analysis and Publication

Project highlights

- *Over 250ha of archaeological investigations*
- *Discovery of over 6,000 years of human occupation in Cambridgeshire from Neolithic ceremonial henges to 19th-century brick-making industry.*
- *Discovery of the remains of woolly mammoths and woolly rhinos, both over 100,000 years old*
- *Employed over 250 archaeologists from around the world*
- *Delivery of a successful programme*

The A14 Cambridge to Huntingdon Improvement Scheme has spawned the largest archaeological project seen since the recession. Over 250 archaeologists have conducted investigations along the route and uncovered a rich archaeological landscape covering over 6,000 years of human history.

Project details

Our work on this project as part of MOLA Headland Infrastructure and the A14 Integrated Delivery Team was first profiled in our 2016 Annual Report. The MHI consortium was awarded both the Phase 1 Site Investigation and Early Works Access Mitigation contracts with fieldwork beginning in August 2016 and with the contracted works finishing in May 2018. Although this some work yet to complete and additional sites to deal with, the monumental task of post-excavation analysis has already begun. This will involve writing up and interpreting all the data collected as well as the assessment and analysis of all the finds and environmental samples.

During the excavation phase over 40 separate archaeological sites covering c 250ha were investigated revealing many unique and exciting discoveries. There are too many discoveries to list in their entirety, but highlights include: three prehistoric henge monuments, numerous Iron Age and Roman settlements, a Roman trade distribution centre, several Saxon settlements, an abandoned medieval village, 19th-century brick kilns and earliest of all, woolly mammoth tusks and woolly rhino skulls from a dried-up river bed.

In total, over 250 archaeologists from across the UK, Europe and beyond worked on the project, which is the largest of its kind for at least a decade. As a part of the project we were able to run training programmes for students from a number of universities, both under-graduates and post-graduates, and also a programme for non-archaeologists entering the profession. We also ran a community excavation which allowed over 70 local enthusiasts to take part.



Over the next few months a team of experts will be looking through and assessing all the finds. This incredibly rich archaeological landscape covers over 6,000 years of human history in Cambridgeshire and the sheer volume of material that has come out of the ground is truly staggering. In total the post-excavation team will be assessing and analysing:

- *8,000 registered finds (objects such as coins, brooches, intact pots, etc.)*
- *5 tonnes of animal bone*
- *6–7 tonnes of pottery sherds*
- *7,000 environmental samples*
- *300+ human burials*

All this material is of crucial importance for our interpretation of the archaeology. Analysis will help us to consider matters such as how people lived, what they ate, how their economies and societies functioned and how they organised their lives. In order to deal with this mass of material, we now have a team of over 30 specialists engaged in recording and analysis, in addition to many other professional staff working on site phasing, illustrations etc.

The post-excavation phase started during fieldwork, in April 2018, and work over the next year will focus on the assessment of the material in order to further understand the nature of what we have uncovered and its potential to address research and outreach aims. Once the assessment is complete it will be followed by a three-year programme of analysis, leading to multiple outputs, including research-driven academic books, books aimed at wider audiences and a range of digital media and other resources.



Windhouse, Yell, Shetland

Location	Yell, Shetland
Sector	Property
Client	Bell Ingram (Inverness)
Contract Value	£16K
Services	Historic Building Recording, Trial Trench Evaluation

Project highlights

- *12 trial trenches excavated, six by hand, six by machine*
- *Discovery of medieval burial ground and possible chapel*

Headland has a proven track record in finding solutions to the often competing demands of planning archaeologist, developer and stakeholder, providing project designs that satisfy the specifications of all concerned.

Project details

A programme of archaeological work was undertaken on Yell, Shetland as part of a pre-planning exercise to determine potential archaeological concerns prior to the redevelopment of an existing property. The building, a former Laird's, house was built in 1707 and remodelled in 1885 before lapsing into ruin in the 20th century. It is also reputedly the most haunted house in Shetland.

In addition to a Historic Building Survey of the existing structure, a programme of trial trenching was undertaken. Headland was able to negotiate with the curator to reduce the sample area of the trenching from 10% to 5%, and to provide a design that met the specifications of the RSPB who owned the surrounding land.

Due to accessibility issues, the trenches closest to the building had to be excavated by hand. The staff rose to the challenge and during the excavation uncovered a number of graves containing human remains and the remains of a wall belonging to an early chapel.

Westenhanger Castle, Lympne

Location	Kent
Sector	Property (Housing)
Client	Arcadis
Contract Value	£10K
Services	Geophysics

The geophysical survey team bring their specialist knowledge to bear, deploying a range of complementary survey techniques to locate the extent of the Tudor Garden depicted on historic maps.

Project highlights

- *Developing a complementary suite of geophysical survey techniques to address client's specific enquiry*
- *Corroborating anomalies in all surveys*
- *Fragmentary outline of the Tudor Garden possibly located*

Project details

Headland was commissioned by Arcadis to undertake a geophysical survey of the possible location of the Tudor Garden at Westenhanger Castle, Lympne. A range of complementary techniques was deployed, comprising magnetometer, earth resistance and ground penetrating radar. This was carried out as part of a wider series of surveys to assess the potential for archaeological remains across the footprint of the proposed Otterpool Park Garden City scheme, and to assess the impact of the proposed development on the historic environment.

The survey tentatively identified anomalies corresponding with three boundaries recorded on historic mapping. Two of these boundaries are thought to possibly locate the southern and eastern extent of a 'walled orchard'. These anomalies were consequently interpreted as of possible archaeological potential as it has been postulated that this 'walled orchard' previously defined the extent of the Tudor Garden. No anomalies specifically thought to be features within the garden were identified; most of the survey area has likely been extensively landscaped, having been incorporated within Folkestone Racecourse for more than a century. However, other linear anomalies located within the 'walled orchard' and perpendicular to the mapped boundaries may have some archaeological potential based on their alignment but the shallow depth at which they have been recorded may preclude this. The majority of the anomalies identified during the survey almost certainly reflect current and recent ground conditions and usage.

The use of three different techniques has successfully created a complementary dataset leading to the discovery of anomalies thought to be associated with the Tudor Garden.

A2I: Aberdeen to Inverurie Rail Upgrade



Location	Aberdeenshire
Sector	Infrastructure (Rail)
Client	BAM Nuttall
Consultan	IKM Consulting
Contract Value	£100K to date
Services	Consultancy, Desk-Based Assessment, Cultural Heritage Management Plan, Watching Brief, Evaluation, Targeted Excavation, Scheduled Monument Consent Application

Project highlights

- *Evaluation of access tracks and compounds along c 27km route*
- *Provision of archaeological staff within maximum 72-hour notice period*
- *Consultation on protection of 10 Scheduled Monuments in proximity to the route*
- *Historic Building Recording at 10 different locations*

Upgrades to existing rail routes may not be the kind of projects which could have major archaeological issues associated with them, since the route is already in place and it is unlikely that sites survive below existing rail lines. The associated infrastructure is where the real risk lies. Haulage roads, compounds and temporary installations all have the potential to impact on archaeological sites, and the speed of construction of these elements requires Headland's skill for fast reaction and pro-active resolution of problems.

Project details

Headland first became involved in the A2I project through our consultancy team, who were tasked with producing a Desk-Based Assessment of the route, followed by a Cultural Heritage Management Plan in which the potential impacts of the scheme were identified and a range of mitigation measures outlined. This document was produced in collaboration with both Network Rail (the owner and manager of the rail network) and BAM Nuttall, who had been appointed as principal contractor for the upgrade. Sharing information on construction methodologies and the intended design of temporary aspects of the route, such as haul roads and compounds, allowed us to accurately predict what archaeological input might be required.

The existing rail route lies close to a number of known Scheduled Monuments, including the surviving remains of the Aberdeenshire Canal. The canal was the main method of transporting goods in the early 19th century, until it was replaced and largely built over by the railway. The Scheduled status of the surviving elements meant that we had to provide specific advice to the principal contractor on how these could be avoided and liaise with both the local authority archaeologist and representatives from Historic Environment Scotland throughout.

On long-running and complex projects such as these, there can be a risk of complacency regarding the methodologies being used. Once the project entered the construction phase, we recognised that the approach of archaeological monitoring on every area of ground-breaking was both time-consuming and expensive, but also was producing limited beneficial results on the archaeological potential of the area. We met with the construction team, discussed alternative approaches which would be less onerous on the developer, but still satisfy the requirements of the Local Authority Archaeologist and produce a more comprehensive understanding of the archaeology present along the route. The new methodology was implemented within a few days of agreement and produced substantial benefits to all stakeholders.

Our team continue to be proactive throughout the life of the A2I project, reviewing the activities on site and making recommendations for alternative works where this might be beneficial.

Norfolk Vanguard Offshore Wind Farm



Location	Norfolk
Sector	Renewables (Wind Farm)
Client	Norfolk Vanguard Ltd
Consultant	Royal Haskoning DHV UK
Services	Geophysics

The geophysical survey team successfully completed a large linear scheme with non-consecutive access to proximal sites. Headland was able to utilise multiple teams to ensure the survey was completed within timetable. This project demonstrated our ability to deliver complex linear surveys.

Project details

From October 2017 to March 2018 Headland undertook a magnetometer survey, covering approximately 600 hectares, along the proposed onshore cable corridor and associated onshore project area for the Norfolk Vanguard Offshore Wind Farm, to provide further information about the archaeological potential of the cable route. This work was focused on areas identified in the Archaeological Desk-Based Assessment (ADBA) as potentially containing buried archaeological remains, following preliminary analysis of aerial photographs, LiDAR, and Historic Environment Record (HER) data. The survey successfully evaluated 127 Priority Archaeological Geophysical Survey Areas, identifying twenty distinct areas of archaeological activity, ranging from isolated ring-ditches to extensive areas of settlement and enclosure.

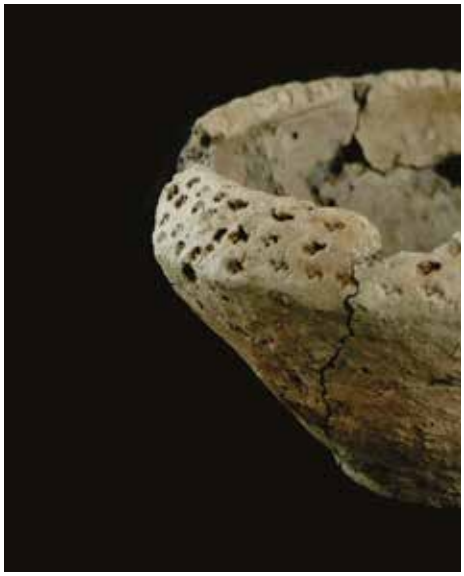
Most of these areas were previously known, although some were less extensive than had been identified by the geophysical survey, whilst several others were not known at all. These areas have been assessed as being of high archaeological potential. Anomalies at numerous other locations have been interpreted as being of possible archaeological potential, including possible field systems, trackways, isolated ditches and pits.

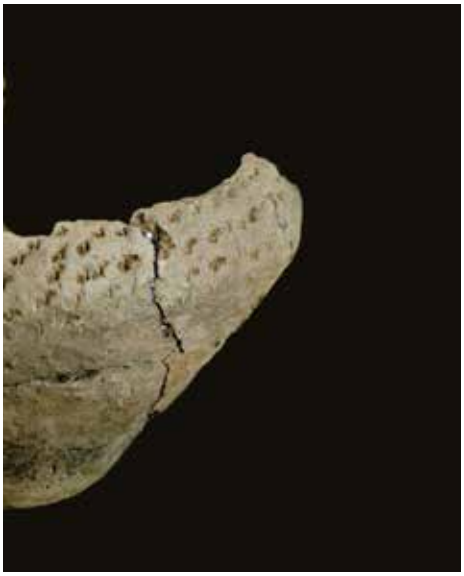
The report has been included in the client's Environmental Statement (ES), as part of a Development Consent Order (DCO) application.

Project highlights

- *600ha of ground subject to geophysical survey*
- *Evaluation of 127 Priority Archaeological Geophysical Survey Areas*
- *20 distinct areas of archaeological activity*
- *Geophysical survey findings directly informed cable routeing / refinement, where possible within the confines of other engineering and environmental constraints*

Aberdeen Western Peripheral Route/Balmedie-Tipperty





Location	Aberdeenshire
Sector	Infrastructure (Road)
Client	Transport Scotland & Aberdeen City Council
Consultant	Jacobs
Contract Value	£300K
Services	Post-excavation Analysis, Publication and Dissemination

Project highlights

- *Nearly 2 years of research, involving 29 internal and 19 external specialists*
- *Over 14,000 lithics catalogued and analysed*
- *152 radiocarbon dates*
- *Talks given to local and national societies, specialist interest groups and charitable organisations*
- *Attendance at Transport Scotland press event, displaying the finds and giving specialist insight to Local Councillors*
- *Providing 750 copies of popular publication 'Highway through History' to local schools, libraries and stakeholders*

Our work doesn't stop when we come off site. Major infrastructure projects can produce extensive archaeological remains which need to be assessed and analysed to meet the objectives of the project. We rely on our in-house expertise along with a proactive approach to project management to make sure that deadlines are met throughout the post-excavation process.

Project details

Headland has been involved in the Aberdeen Western Peripheral Route/Balmedie-Tipperty project since 2012 and undertook a range of site works between then and 2016, including geophysical, topographic and historic building surveys, trial trenching, mitigation excavation and monitoring during construction. The final phase of the project was the production of the two publications, one an academic monograph and one a popular synthesis. Both products were part of the contract with our client, so it was essential that our high-quality service continued through this phase of works to completion in 2018.

The range and significance of the archaeological sites uncovered was considerable. To ensure that the research was of the highest quality, we not only worked with our in-house team of specialists, but also consulted with and commissioned external academic experts who provided key insights into our reports. We also needed to ensure the publications were appropriately illustrated. Rather than opt for a traditional approach to reconstructing the archaeology from each period, we drew on our graphics team's expertise and creative flair, resulting in the production of artist's impressions which give a real sense of the landscape setting of each site. All the while, we maintained our relationship with the consultant and client, providing them with regular updates on progress and the results of our work.

The end result of over two years of work will be the production of two books on the archaeology of the AWPR/B-T in early 2019. 'The Land was Forever: 15,000 years in North-East Scotland' will be published with Oxbow Books, a respected specialist publishing house, and provides a wealth of information which can be used by commercial and academic archaeologists alike in the future. 'Highway through History' will be shortly ready to distribute to hundreds of schools and libraries in the Aberdeenshire and Aberdeen City region and is aimed at a more general reader. From a contractual point of view, it contributes to the aims of providing public benefit, and ensures that there is an achieved goal of encouraging engagement in the heritage of the region by local residents. This has been further enhanced by a number of talks given to local societies over the course of the last two years, presenting the results of site works to interested parties.

Russel Coleman
Sales Director

"We are also trying new ways to attract people into our sector and our business – as opposed to someone else's."

Outlook 2018/2019

At the time of writing Brexit is looming large over us all, not only as citizens but also as people trying hard to run a business. We are not BP or Jaguar Land Rover but, like thousands of other SMEs, we help drive the economy.

For us a sustainable business is top of our agenda. It is difficult enough trying to manage the peaks and troughs of infrastructure projects when some months a team of hundreds is required to meet the programme followed by a gap or downsizing before ramping up again.

Then also having to factor in whether the current boom in infrastructure will stop to fund Brexit – and bring us back to austerity – or that half our workforce will be going home, or that new recruits will not be forthcoming is giving us the headache of the century.

Still it's better to have a plan than no plan.

We are working hard to maintain a local and regional presence in addition to national infrastructure. We aim to find new markets for our existing services and to develop new services. Headland has always been at the forefront of the commercial sector. Often first on site, we are highly visible, and clients increasingly offer us the opportunity to provide non-archaeological services. It saves them valuable time in procurement, and it means they don't have multiple contractors competing against each other but all under one contract. Our team of construction managers and quantity surveyors is already helping us to manage a growing number of sub-contractors. For us, we learn new skills each time and this further embeds us within the construction sector which we very much feel part of as a business.

We are also trying new ways to attract people into our sector and our business – as opposed to someone else's.

Our structured training programme and dedicated trainers have attracted much attention within the sector and outside, providing opportunities for people not treading the traditional path into archaeology via a degree. Recent recruits have included people from across all walks of life, none of whom had any experience in archaeology and many of whom had not previously considered such a career or realised that the opportunities existed. It helps them and it helps us.

Hopefully, when we come to write next year's Outlook, Brexit will have resolved itself and we can get on with running a growing, sustainable business, continue to deliver challenging projects and provide our people with a real long-term career.

HEADLAND ARCHAEOLOGY

SOUTH & EAST
Luton
01525 861 578

NORTH
Leeds
0113 387 6430

MIDLANDS & WEST
Hereford
01432 364 901

SCOTLAND
Edinburgh
0131 467 7705

follow us on
@HeadlandArch UK

www.headlandarchaeology.com

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SCOTLAND

EDINBURGH
13 Jane Street
Edinburgh EH6 5HE
0131 467 7705

NORTH WEST

MANCHESTER
57 Hilton Street
Manchester M1 2EJ
0161 236 2757

MIDLANDS & WEST

HEREFORD
Unit 1, Clearview Court, Twyford Road
Hereford HR2 6JR
01432 364 901

SOUTH & EAST

LUTON
Building 68C, Wrest Park, Silsoe
Bedfordshire MK45 4HS
01525 861 578

YORKSHIRE & NORTH

LEEDS
Unit 16, Hillside, Beeston Road
Leeds LS11 8ND
0113 387 6430

www.headlandarchaeology.com