

Appendix 2.4

CONSULTANT CVS

GEORGINA DOWLING



DIRECTOR
HEAD OF ENVIRONMENTAL PLANNING & ASSESSMENT
BUILDING CONSULTANCY

T +44 (0)20 7182 3247
M +44 (0)79 2007 2509
georgina.dowling@cbre.com



BACKGROUND AND CURRENT ROLE AT CBRE

Georgina has over 13-years' experience within the impact assessment sector and was promoted to head of CBRE's Environmental Planning & Assessment team in 2018. The majority of her team's workload involves delivering Environmental Impact Assessments and preparing Environmental Statements to secure planning consent. Since joining CBRE in 2016, and as a specialist in socio-economics, Georgina has successfully broadened the capabilities of the team to include socio-economic and health impact assessments. The key to the success of the team is their ability to provide robust and proportionate advice, evidenced by their 100% track record of screening out the need for EIA where they have advised a negative screening opinion should be issued. As an IEMA EIA Quality Mark registrant since 2016, the team have an on-going commitment to excellence in delivering and promoting best practice.

RECENT EXPERIENCE

Bramley-Moore Dock New Stadium and Goodison Park Redevelopment, Liverpool

Appointed by Everton Football Club to co-ordinate two EIAs for the new stadium development within the Liverpool Maritime Mercantile World Heritage Site (WHS) designated Bramley-Moore Dock, and for the associated redevelopment of Goodison Park. The Bramley-Moore Dock site is particularly contentious as the dock – one of the outstanding universal value features of the WHS designation – must be infilled..

New Garden Square, Birmingham

Appointed by Calthorpe Estates and U+I Group Plc to co-ordinate the EIA for this 3.84 ha commercial estate to the west of the city centre, for a new development of an office-led mixed-use scheme including a hotel.

Eastern Quarry, Ebbsfleet

Appointed to manage the EIA for a s.73 application to vary the consent of this mixed use development for up to 6,250 dwellings, up to 231,000 sqm of built floorspace for: business premises; education community and social facilities (schools, libraries, health centres etc); hotels; supporting retail and leisure facilities.

Wornington Green & Harrow Car Parks, London

Appointed by Catalyst for two projects across four sites: Managing the EIA for the final phase of the Wornington Green residential-led mixed use development in Royal Borough of Kensington and Chelsea; and; producing three EIA Screening Reports and managing the environmental technical consultants for the residential-led re-development of three TfL station car-parks within the London Borough of Harrow.

PATRICK LITTLE



PIEMA
ASSOCIATE DIRECTOR
ENVIRONMENTAL PLANNING & ASSESSMENT
BUILDING CONSULTANCY

T +44 (0)20 718 23313
M +44 (0)7919 044337
patrick.little@cbre.com

BACKGROUND AND CURRENT ROLE AT CBRE

Patrick joined the Environmental Planning and Assessment team at CBRE in February 2014. With three years of previous experience with two Scotland based environmental consultancy firms, Patrick has worked for a number of public and private sector clients across a variety of sectors including residential, commercial, utilities and renewables.

Patrick is experienced in providing advice on Environmental Impact Assessment (EIA) and has held project manager positions on a number of EIA projects. Patrick also has experience in the fields of water resources management, sustainability, environmental monitoring and contaminated land.

Patrick is a Practitioner Member of the Institute of Environmental Management and Assessment (PIEMA).

RECENT EXPERIENCE

Nile Street, London Borough of Hackney

Led the management and co-ordination of an EIA for the redevelopment of a disused former school site in Hackney for a new education facility, with capacity for 250 pupils, alongside 175 residential units and commercial floorspace. Responsibilities included co-ordinating the technical assessments, taking the role of lead author on the Environmental Statement and undertaking consultations with the local authority and statutory consultees.

596-608 Old Kent Road and Land at Livesey Place, London Borough of Southwark

Currently leading the management and coordination of the EIA for a residential-led mixed-use scheme including 372 residential units, 2,415 square metres of employment floorspace, 497 square metres of retail/café floorspace and 1,558 square metres of floorspace for a place of worship, provided in three buildings, of 38 stories, 24 storeys and 10 storeys respectively. Responsibilities included co-ordinating the technical assessments, taking the role of lead author on the Environmental Statement and undertaking consultations with the local authority and statutory consultees.

Erith Quarry, Erith, Borough of Bexley

Led the day-to-day management and coordination of the EIA for the redevelopment of a former quarry and landfill site in the London Borough of Bexley for 750 residential units, a three form entry primary school and complimentary commercial floorspace. Responsibilities include authoring the scoping request and coordinating the technical team.

DOMINIC FLYNN



PIEMA
SENIOR ENVIRONMENTAL CONSULTANT
ENVIRONMENTAL PLANNING & ASSESSMENT
BUILDING CONSULTANCY

T +44 (0)161 455 7666
Dominic.flynn@cbre.com

BACKGROUND AND CURRENT ROLE AT CBRE

Dominic is a Senior Environmental Consultant in the Environmental Planning and Assessment team at CBRE, based in the Manchester Office. Dominic joined the company in 2019. With seven years of previous experience with two Manchester based environmental consultancy firms, Dominic has worked on many infrastructure projects for a variety of public sector clients, including the Environment Agency, Cheshire East Council, Highways England and HS2.

Dominic is experienced in providing advice on Environmental Impact Assessment (EIA) and has held project manager positions on a number of EIA infrastructure projects. Dominic is a Practitioner Member of the Institute of Environmental Management and Assessment (PIEMA).

RECENT EXPERIENCE

M62 junction 10 -12 Smart Motorways Project (Highways England)

Led the environmental input to the design and assessment of this motorway improvement project. This involved coordinating a team of technical specialists and collaborating with the engineering design team to assess the smart motorways design and ensure minimal possible environmental impact from construction and operation of the scheme. The role also involved authoring and reviewing a number of reports and other deliverables to ensure the scheme is legally compliant from an environmental perspective.

High Speed Rail Phase 2b (HS2)

Held the role of lead author for one section of the proposed HS2 Phase 2b route EIA. This involved facilitating the delivery of the Environmental Statement (ES) for the Manchester Airport Station section of the high speed rail route. This involved coordinating the teams of technical specialists, reviewing their technical input and authoring the scheme description and general sections of the ES.

Grays Inn Road (London Borough of Camden)

Acted as the technical reviewer of the Environmental Statement on behalf of the Local Authority for this proposed urban redevelopment scheme in central London. This involved a detailed review and critique of the environmental assessment process and findings in line with relevant industry guidance and best practice to assist the Local Authority with the determination of the planning application.

A500 Dualling scheme

Held role of EIA coordinator on this road improvement scheme, with a total construction cost of £57 million. Day to day role involved coordinating large teams of technical specialists, liaising with the engineering design team, the client and project manager to ensure the assessment and design adhered to the required legislation and guidance, as well as liaising with statutory and non-statutory stakeholders and reviewing technical inputs to the EIA.



Dave Drury

Director

Personal summary

Year of birth: 1971

Nationality: British

Languages:

- English (mother tongue)

Education:

- HNC Civil Engineering – John Moores University;
- Member of the Chartered Institution of Highways and Transportation.

Key skills:

Specialisation – Traffic Engineering and Project Management;

Directional signing;

Expert in Traffic Regulation Orders and Traffic / Network Management;

Excellent management, leadership and interpersonal skills;

Ability to mobilise and lead wide ranging technical delivery teams;

Financial management.

An experienced Project Manager and Director with excellent management, leadership and interpersonal skills who leads the company's Surface Transport business across Scotland and the North of England. Approximately 29 years' experience, 17 of which were working for the Local Authorities of Wirral Borough Council and Liverpool City Council. Has significant experience in traffic and transportation working in both the public and private sector. Has experience in managing transport planning projects which have covered all aspects of traffic management design through concept identification, scheme development and stakeholder engagement. Strives for continuous improvement works closely with client partners to deliver the best solution for their needs.

Experience and skills

Mott MacDonald Limited, Integrated Transport Division, Director (2017-present)

- Projects Director, Mott MacDonald Limited (2013-2017)
- Regional Director, AECOM Ltd, Liverpool (2010-2013)
- Associate Director – AECOM Ltd, Liverpool (2007-2010)
- Team Leader, Liverpool City Council, Traffic Management (2004-2007)
- Engineer and Principal Engineer, Liverpool City Council, Traffic Management (1998-2004)
- Technician, Wirral Borough Council, Traffic Management (1990-1998)

Selected projects

- **Network Management Plan, Wirral – Wirral Council:** Undertook a review/gap analysis in how the Authority was performing against those duties that had been identified in the Traffic Management Act 2004. A revised and updated Network Management Plan has been produced for the authority, with an action plan for areas of improvement.
- **Western Link, Warrington Borough Council:** Project Director for the production of an Outline Business Case for the £212m Western Link scheme to the southwest of the town centre. The scheme is complex, involving highway crossings of numerous watercourses (including Manchester Ship Canal), multiple rail crossings, negotiating major utilities and established commercial and residential areas.
- **Stadium Development, Liverpool Football Club:** Project Manager for the production of the Transport Strategy, Transport Assessment, Travel Plan and the Match Day Traffic Management Plan for the planning application associated with the increase of the existing stadium's capacity to 59,000. The project also involved the stopping up of highways, S106 and S278 works.
- **Etihad Stadium Expansion, Manchester City Football Club:** Project Manager for all the transport work associated with commissions and took the lead in the production of the Transport Assessment and Travel Plan for the planning application associated with the increase of the existing stadium's capacity to 62,500.
- **Centre Park Link, Warrington Borough Council:** Project Director for the design and assessment of several junctions with the town centre of Warrington. The aim of the project is to improve access and egress to the Centre Park area whilst reducing congestion on other major junctions within the town centre. Contra flow bus lanes were proposed as part of the scheme.
- **Birchwood Pinchpoint Scheme, Warrington Borough Council:** Project Director for the design and assessment for three junction improvements in the Birchwood area of Warrington to tackle congestion and provide a more direct bus link between the Business Park and the rail station using ANPR camera enforcement.



Kevin Blakey

Principal Transport Planner

Personal summary

Qualifications:

- Chartered member of RTPI (MRTPI)
- MCD Master of Civic Design (T&C Planning) University of Liverpool;
- BA (Hons) Geography, Anglia Ruskin university

Key skills:

- Transport assessment and travel planning
- Development control advice
- Masterplanning, feasibility studies and access strategies
- Public Transport;
- Stadium and Leisure Sector Skills
- Ability to work within multidisciplinary teams

A transport planner with 18 years' experience working in transport planning in the private and public sectors. Kevin's early career was spent working in Cambridgeshire, more recently for the last 10 years Kevin has been based in Liverpool working on projects across the Northwest. Kevin has wide experience working on large scale stadium and leisure projects from initial feasibility studies through to the planning application stages.

Experience and skills

- Principal Transport Planner, Mott MacDonald, Liverpool – (2015-present)
- Assistant Transport Planner – Atkins, Cambridge – (2002-2004)
- Principal Transport Planner, JMP Consultants, Liverpool – (2005-2015)
- Graduate Trainee – (2000- 2002)

Selected projects

- **Wigan Bolton Strategic Link Road.** Wigan and Bolton Councils commissioned Mott MacDonald to prepare a Transport Assessment in support of the Wigan Bolton Strategic Link Road: a series of 5 new road links which will connect Wigan in the west and M61 Junction 5 in Bolton to the east. Kevin was project manager for this commission for the delivery of the Transport Assessment which was required to accompany a forthcoming planning application as well as the transport chapter of the Environmental Impact Assessment. On account of the scale of the project a total of 17 standalone junction models were required to assess the impact of the development, furthermore a thorough assessment of potential impact on existing public rights of way was required.
- **Warrington Western Link Road.** Wigan Council has commissioned Mott MacDonald to provide transport planning advice on their proposed new link road connecting through West Warrington. Kevin Blakey is leading the transport planning element of this commission and is responsible for the production of the Transport Assessment.
- **Liverpool Football Club- New Training Facility.** Liverpool Football Club commissioned Mott MacDonald to provide transport advice on their new first team and Under 23 training facility in Kirkby, Knowsley. The new facility will replace the current training base at Melwood. Kevin Blakey was responsible for the Transport Assessment which accompanied the planning application for which permission was granted in 2017. The development requires the permanent closure of a key route into a nearby industrial estate. The Transport Assessment demonstrated that the new traffic generated by the development and the closure of the industrial estate road would not have a negative impact on the surrounding transport network.
- **Chester Zoo Car Park and Circulation Study 2016:** Project manager for initial feasibility and subsequent planning application for improved visitor car park. Kevin reviewed existing traffic circulation issues and developed options for improving public transport access as well as access for pedestrians and cyclists. Kevin produced the Transport Assessment and Design and Access Statement for the development.
- **Brunswick Tower:** Maro Developments commissioned Mott MacDonald to undertake a traffic study into the proposed Brunswick Tower development. The Tower consists of 550 residential dwellings on the fringes of Liverpool City Centre. Kevin Blakey was responsible for the production of the Transport Assessment and Travel Plan which accompanied the planning application.
- **Knowsley Lane.** Ion Developments commissioned Mott MacDonald to provide transport advice for a mixed use residential and industrial development near Huyton in Knowsley. The development consists of approximately 30,000m² commercial floorspace, a restaurant, drive through and petrol station along with circa 160 dwellings. Kevin prepared the Transport Assessment for this development.
- **Lydiat Lane :** Kevin was project manager for the transport assessment and travel plan in support of a residential development of 268 dwellings accessed on Lydiat Lane in Thornton, Sefton. A new priority junction and new roundabout on Lydiat Lane will provide access to the site. the design of these junctions and the impact of the development on nearby junctions was the primary focus of the transport assessment. The development was granted planning approval in October 2017.

- **Melwood Residential** : Mott MacDonald was commissioned to undertake a transport assessment for a residential development of circa 160 dwellings at the site of Liverpool Football Club's first team training ground. The club has an ambition to move first team facilities to Kirkby leaving the existing training ground open to development. The residential scheme was granted planning permission in late 2017.
- **Plaza 1881**. Mott MacDonald was commissioned by Peel holdings to undertake a Transport Assessment and Framework Travel Plan for the Plaza 1881 Development. The site is located on Liverpool's Princess Dock and forms part of the Liverpool Waters Masterplan. 105 apartments are proposed. A key part of this work was the need to take account of significant committed development in the local area and how traffic and pedestrian circulation at the proposed development would align with the overall movement strategy for the Masterplan area.
- **Winsford Industrial Estate**. Mott MacDonald is commissioned by Cheshire West and Chester Council to advise on access and master planning issues for the expansion of Winsford Industrial Estate. Kevin is project manager for this commission. A range of office, manufacturing and distribution developments are being considered.
- **Haydock Industrial Park Extension**. Mott MacDonald was commissioned by St Helens Council to develop options for the expansion of Haydock Industrial Park. Working as part of a multidisciplinary team Mott MacDonald assessed the potential level of traffic increase resulting from the expansion. The team developed a series of transport improvements which could help mitigate impact and encourage access by public transport, walking and cycling.



Nigel Mann- Noise, Air Quality & Light Technical Lead

Academic Qualifications:

B.Sc Environmental Geology
M.Sc Environmental Science

Professional Qualifications:

Member of the Institute of Acoustics (MIOA)

Associate member of the Institute of Environmental Management and Assessment (AIEMA)



Affiliate Member of the Institute of Lighting Professionals (AILP)

Number of Years Experience:

Working on Similar Activities / Facilities: 17 years

Project Role:

Nigel will oversee the Air Quality, Light and Noise Technical Inputs being put together within the team at WYG, ensuring high level technical review.

Reasons for Selection:

We have selected Nigel to be Noise, Air Quality and Lighting technical lead because:

- He is responsible for WYG's 20 strong team of Noise, Air Quality and Lighting Consultants.
- Nigel has experience completing Noise, Light and Air Quality assessments include detailed modelling using industry standard software for football stadiums, major quarries, industrial noise sources, foodstore and distribution depot schemes together with large scale urban design projects, wind farms and transportation noise.
- He has an in depth knowledge of UK noise and air quality legislation.

Relevant Project Experience:

Power Court Development, Luton

WYG completed Noise, Air Quality, Light Spill, Daylight, Sunlight and Overshadowing assessment for a proposed mixed use football stadium led development in Luton. The proposals included a 23,000 capacity football stadium on top a podium surrounded by a mixture of residential, commercial uses in the form of 7 high rise tower blocks.

Wadi Al Asla

WYG completed Noise and Odour assessments for a proposed Mixed Use Development near the city of Jiddah, Saudi Arabia. Set within a 13,290 hectare site, the aim of the proposed Wadi Al Asla development is to offer the premium entertainment, residential and golf destination in Saudi Arabia for a population of 170,000. The entire site is owned by JDURC and the Municipality of Jeddah and the aim is to develop it as an asset for the benefit of the people of Jeddah. Jeddah is the major urban centre of western Saudi Arabia, and an important commercial hub in the Kingdom.

Dewsbury Rams

An assessment was completed of noise and light from the Dewsbury Rams Rugby Stadium on a proposed residential development and new proposed practice pitches.

Daniel Clampin



Job Title:

Principal Environmental
Consultant

Academic Qualifications:

BA

Professional

Qualifications:

Associate Member of The
Institute of Air Quality
Management (IAQM)

Associate Member of the
Institute of Environmental
Sciences (IES)

Number of Years'

Experience:

6

Reasons for Selection:

- He has five years' experience in air quality monitoring, modelling and management as part of WYG's 20 strong team of Noise, Air Quality and Lighting Consultants.
- Daniel is responsible for the management of the air quality and odour team at WYG. He manages large-scale projects including public and stakeholder consultation and meetings.
- He has undertaken air quality assessments across the UK, using ADMS-ROADS, ADMS-5 and AERMOD. This software has been used to model projects for both residential and industrial schemes modelling the effects on both residential and ecologically sensitive receptors.

Project Experience:

Glasshoughton Link Road

Daniel assessed the proposed link road options and completed a detailed WebTAG assessment for Air Quality for the proposed link road adjacent to the M62. This was inclusive of a Greenhouse Gas assessment.

Bradford to Shipley Corridor

Daniel is working on the proposed new bus route from Bradford to Shipley which is within an AQMA. Daniel is completing the modelling using ADMS roads for this application.

Seacourt Park & Ride, Oxford

Daniel completed an Air Quality assessment and Environmental Statement Chapter to assess the changes in Air Quality as a result of a proposed Park & Ride in Oxford. The assessment involved a study of both the changes in traffic flows immediately surrounding the proposed development and the net benefit the scheme would have in terms of Air Quality.

Featherstone Link Road

WYG completed Air Quality and Noise assessments for two identified relief road options at the Former ROF Featherstone site, Wolverhampton for Staffordshire County Council. WYG completed noise and air quality webtag valuations for both options to identify the effects of each route. A Greenhouse Gases WebTAG assessment was also completed for changed in Carbon Dioxide emissions associated with the scheme options.

Graham Davis

Technical Lead



Job Title:

Principal Environmental
Consultant

Academic Qualifications:

BA Geography
Post Graduate Diploma in
Acoustics & Noise Control

Professional

Qualifications:

Associate Member of the
Institute of Acoustics
(AMIOA)

Number of Years'

Experience:

7

Reasons for Selection:

- He has seven years' experience in noise monitoring, modelling and management as part of WYG's 22 strong team of Noise, Air Quality and Lighting Consultants.
- Graham has been responsible for the management of large-scale projects including public and stakeholder consultation and meetings.
- He has undertaken noise assessments across the UK, using CADNA noise modelling software for a variety of projects, including for proposed waste facilities, delivery assessment as industrial units and industrial noise sources.

Project Experience:

Beddington Lane Waste Management Facility

Graham supporting and undertook a noise Environmental Impact Assessments and Environmental Permit Applications for the proposed energy from waste by pyrolysis facility. Graham was responsible for the robust and representative modelling of the waste paper facility, forklift and HGV movements around the site during both the weekday and weekend.

Cheshire East Waste Facility

Graham assisted in the assessment of a new waste transfer station and vehicle maintenance building as a Local Authorities main waste hub as part of a Discharge of Condition noise assessment. Both external and internal acoustics were assessed on the existing sensitive receptors surrounding the proposed development site.

Royal Mail Group – East Midlands & Edinburgh Airports

Graham completed assessments of personal noise exposure of airside employees with respect to the Noise at Work regulations. Assessments of airside noise levels were undertaken to determine the requirements for hearing protection.

Power Court and Newlands Park Development, Luton

WYG completed Noise and Air Quality assessments for a proposed mixed-use football stadium led development in Luton. The proposals included a 23,000-capacity football stadium on top a podium surrounded by a mixture of residential, commercial uses in the form of 7 high rise tower blocks and creation of a Leisure hub at Junction 10 of the M1. Graham undertook monitoring of aircraft noise from Luton Airport and detailed modelling of existing transportation noise sources and proposed sources of noise associated with the stadium and development-related road traffic.

BUROHAPPOLD ENGINEERING



ROB FROST

BSc MSc FGS CGeol SiLC

POSITION

Associate Director

DISCIPLINE

Ground Engineering

QUALIFICATIONS

BSc (Hons) Physical Geography
MSc Environmental Technology

MEMBERSHIPS

Fellow of the Geological Society (FGS), Chartered Geologist (CGeol), Specialist in Land Condition (SiLC), Member of the Association of Geotechnical and Geoenvironmental Specialists (AGS)

BUROHAPPOLD

2007 - present

Rob Frost is an Associate Director within the Ground Engineering discipline with over eighteen years experience of undertaking ground engineering projects. He has been involved with the development of the Emirates Stadium, the Olympic Stadium and with the Tottenham Hotspur Stadium redevelopment project all of which are on brownfield sites.

Rob co-ordinates the Ground Engineering inputs for projects leading a team of specialist with the aim of identifying and utilising a sites assets and working with what a site has rather than against it. By fully assessing and understanding a sites constraints, opportunities may be realised and Rob's team seek to understand sites both above and below the ground to develop opportunities. Rob is a Chartered Geologist and a registered Specialist in Land Condition.

LONDON 2012 OLYMPIC STADIUM, LONDON, UK

Client: Olympic Delivery Authority

Architect: Populous

BuroHappold worked as part of Team Stadium, an integrated design and construction team led by Sir Robert McAlpine and including architects Populous to develop the London 2012 Olympic Stadium. The innovative design features a lightweight, cable-supported roof and a simple de-mountable superstructure and accommodates a capacity of 80,000 spectators for the Olympic and Paralympic Games. The stadium is constructed on a brownfield site in the Olympic Park in Stratford, and BuroHappold has been responsible for all the engineering design of the stadium and surrounds.

Rob led the on-site Ground Engineering team and was heavily involved with the assessment and construction works from early 2007 until mid-2012.

TOTTENHAM HOTSPUR STADIUM REDEVELOPMENT, LONDON, UK

Client: Tottenham Hotspur Football Club (THFC)

Architect: Populous

The new Tottenham Hotspur football stadium is encompassed within the Northumberland Development Project as part of the regeneration of approximately 20 acres of land within Haringey in north London. A 60,000-seat stadium, providing a stunning spectator experience and the highest quality of safety and access, is planned, surrounded by well-designed public space that provides space for fans on match days and supports community activities at other times. There will be a new club shop and club museum, as well as offices for the Tottenham Hotspur Foundation. Surrounding derelict land will be redeveloped to provide a new supermarket and 500 new homes, as well as making significant improvements to the High Road, preserving listed buildings and green spaces.

Rob was involved in the assessment of the industrial land in and around the current White Hart Lane Stadium. Works included waste categorisation, risk assessment and groundwater modelling for the proposed new stadium development. Rob was also involved in assisting the client with the enabling works phase of the development, which included significant groundworks.

Tight programme and the constraints of needing to keep the existing stadium fit for use during the works were the main challenges during the enabling works phase.

Rob worked closely with the client's project team supporting their needs in order to work around some of the constraints imposed on the works. Rob developed the idea to re-use natural gravel arising from the excavation works as feedstock for the concrete batching plant, reducing the projects carbon footprint and creating significant cost savings.

BUROHAPPOLD ENGINEERING

ROB FROST

BSc MSc FGS CGeol SiLC

POSITION

Associate Director

DISCIPLINE

Ground Engineering

QUALIFICATIONS

BSc (Hons) Physical Geography
MSc Environmental Technology

MEMBERSHIPS

Fellow of the Geological Society (FGS), Chartered Geologist (CGeol), Specialist in Land Condition (SiLC), Member of the Association of Geotechnical and Geoenvironmental Specialists (AGS)

BUROHAPPOLD

2007 - present

BRISTOL ARENA, BRISTOL, UK

Client: Bristol City Council

Architect: Populous

The Bristol Arena is a new 12,000 capacity performance venue, due to be located close to Bristol Temple Meads station on Arena Island - the former diesel depot site. The arena will be a catalyst for development in the Bristol Temple Quarter Enterprise Zone and will attract millions of pounds of investment to the city region. SMART: Work involves informing Populous' design by ensuring safe and comfortable movements of the pedestrians during ingress, egress and interval time circulations. A key part of this work is to ensure improved connectivity and accessibility to the site that has major access problems due to drastic difference in the surrounding street levels and severe constraints on road and pavement capacities.

Rob leads the Ground Engineering team for the multidisciplinary works on the Bristol Arena site. The site has been used for railway purposes for over 100 years and despite some earlier remedial works is still impacted by contamination. Rob's role is to assess and mitigate this contamination legacy together with ensuring appropriate foundation solutions for the development are adopted.

The complexity of the site history, geology and sensitivity of the adjacent River Avon, makes specification of ground investigation challenging and has required careful thought which Robs investigation design attempted to overcome.

Rob's work has ensured that the specification of remedial measures will not impact on the tight project construction schedule, or be prohibitively expensive.

MCLAREN PRODUCTION CENTRE DEVELOPMENT, LONDON, UK

Client: McLaren Group

Architect: Foster + Partners

Our extensive multi-disciplinary experience was rigorously tested on the design of the birthplace of the next generation of supercars for McLaren. The housing for the specialist plant and equipment, required to design and produce these exceptional machines demands a huge, but beautiful workable space. However, planning permission dictated a restricted height, meaning our experts had to create an innovative design to maximise space whilst working to a tight budget and programme.

The challenge that faced our experts involved finding the perfect balance between size and cost. To achieve the required square footage for the Production Centre, a significant 200x100m basement was decided upon after extensive desk studies of the site. These dimensions provided the biggest footprint whilst mitigating dig costs.

Our structural engineers collaborated to create the maximum useable space by combining minimal structural frame and careful planning of services. The basement is formed as a monolithic reinforced concrete box to make the substructure as robust as possible. The effect has been a clear production line flow through the building ground and basement floors to facilitate manufacture.

Rob was involved in the investigation of a historic onsite landfill and production of a remedial strategy for the construction. Rob also ran and managed the geotechnical investigation works for the deep basement construction.

The main challenge was convincing the local authority regulator regarding the suitability of the proposed measures to manage the historic landfill. .

BUROHAPPOLD ENGINEERING

ROB FROST

BSc MSc FGS CGeol SiLC

POSITION

Associate Director

DISCIPLINE

Ground Engineering

QUALIFICATIONS

BSc (Hons) Physical Geography
MSc Environmental Technology

MEMBERSHIPS

Fellow of the Geological Society (FGS), Chartered Geologist (CGeol), Specialist in Land Condition (SiLC), Member of the Association of Geotechnical and Geoenvironmental Specialists (AGS)

BUROHAPPOLD

2007 - present

LONDON 2012 OLYMPIC MEDIA CENTRE, LONDON, UK

Client: Olympic Delivery Authority

Architect: Allies & Morrison

Rob managed the Ground Engineering team working on the construction of the Olympic Media Centre buildings and was responsible for making sure the required remedial measures were satisfactorily installed, and that the correct materials were imported and exported from the soil hospital. This was a key challenge in ensuring suitability for planning approval of the development.

Continuity of advice and project knowledge provided by Rob's team were key to helping integrate the numerous external and project related contractors who worked on the site over various periods of time.

BATH WESTERN RIVERSIDE DEVELOPMENT, BATH, UK

Client: Crest Nicholson

Architect: Feilden Clegg Bradley Studios (masterplanning), Holder Mathias Architects (Buildings)

As one of the largest brownfield regeneration projects in the South West, Bath Riverside comprises approximately 70 acres of land west of the city centre adjoining the river Avon. The project is a major opportunity for Bath to transform derelict industrial land into a platform for the city's future economic and social prosperity. The overall scheme includes predominantly residential units, a school, commercial and leisure spaces and will improve the accessibility and transport links to the site. The sustainable engineering approach on this project integrated a centralised district heating system currently utilising CHP and provision to supplement this with biomass as the development expands.

Rob has been involved with the ground investigation and assessment of the Bath Western Riverside development. As a residential development on a site impacted by contamination, the challenge has been to overcome the potential risks to future users while ensuring remedial measures are practical, durable and cost effective.

Rob has provided specialist expertise in relation to contamination to the project team and client, allowing the early adoption of costs saving and practical design approaches.

EDINBURGH HARBOUR DEVELOPMENT, EDINBURGH, UK

Client: Forth Ports PLC

Architect: RTKL

BuroHappold worked alongside RTKL as masterplan architect to provide environmental and engineering advice to the masterplanning team for the first stage of the redevelopment of Leith Docks in Edinburgh. The proposed mixed-use development covers an area of 18 hectares and will revitalise the existing major shopping centre of Ocean Terminal; regenerate the water's edge creating a waterfront esplanade with a marina hosting the Royal Yacht Britannia; create a place of interest in this area of Edinburgh; and provide over 1,800 residential units.

BuroHappold along with a selection of preferred sub consultants prepared the Environmental Statement to support the outline planning application for this phase of development. Key challenges were the engagement of the water's edge with the development, creating good urban streets and dealing with overlapping environmental issues

Rob provided specialist advice in order to successfully discharge the outline planning permission conditions in relation to land contamination. He specified and led the ground investigations and was responsible for the reporting and consultation with Edinburgh Council and SEPA.

Development of appropriate remedial solutions for the proposed development proved challenging due to the dense nature of the proposed development and significant depths of fill used to create the docks area.

BUROHAPPOLD ENGINEERING

ROB FROST

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QUALIFICATIONS

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MEMBERSHIPS

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BUROHAPPOLD

2007 - present

MARY HILL AND BOTANY LOCKS, GLASGOW, UK

Client: Confidential

BuroHappold was commissioned to provide the multidiscipline engineering for the Glasgow Canal Regeneration Project at the Botany and Maryhill Locks. The developer prepared plans for a mixed-use development that was to be an exemplar in sustainable development.

Rob reviewed previous desk based work and identified areas of potential contamination requiring further investigation.

The main challenge was ensuring the safety of the site personnel and equipment in this area of Glasgow during the ground investigation works.

Rob provided specialist review allowing targeting of the ground investigation so reducing the ground investigation costs.

KING ABDULAZIZ INTERNATIONAL AIRPORT, JEDDAH, SAUDI ARABIA

Client: General Authority of Civil Aviation, Saudi Arabia

Contractor: Saudi Bin Ladin Group

Rob was responsible for the production of environmental assessment reports and recommendations for addressing the onsite landfill to support the redevelopment of King Abdulaziz International Airport in Jeddah, in the Kingdom of Saudi Arabia.

The main challenge was working and gaining access to the relevant parts of an active international airport safely. This was achieved through use of local contacts and developing relationships with sub consultants.

Rob was able to concisely investigate and report on the main issues likely to affect the ground in relation to construction so streamlining the reporting.

AEROSPACE CITY, QATAR

Client: KPF

Assessment of regional geology, review of previous site investigation data and construction of a site conceptual model. Design of a number of separate geotechnical and contamination site investigations. Production of investigation specifications for tender and review of tender returns.

BUROHAPPOLD ENGINEERING



PAUL BRENTON

MEng CEng MICE

POSITION

Associate Director

DISCIPLINE

Water

QUALIFICATIONS

MEng Civil Engineering Design
and Management

MEMBERSHIPS

Member of the Institution of Civil
Engineers

BUROHAPPOLD

2013 - present

Paul is a coastal and maritime engineer of projects working on projects worldwide. He has been Project Director on major UK harbour redevelopment projects, most notably at Hayle and Folkestone, where he led not on the engineering design, but also the marine licensing approvals and planning submissions.

He is a Chartered Civil Engineer and professional reviewer for the Institution of Civil Engineers. His experience and skills are recognised in the industry, including through his role as a lead author for CIRIA's Beach Management Manual 2010, a globally respected guidance manual.

FOLKESTONE HARBOUR, FOLKESTONE, UK

Client: Strand House

Masterplanning Architect: Farrells

Cost Consultants: Deacon & Jones

First Phase Architects: ACME

Landscape Architects: Macfarlane

Paul is the project director leading the engineering component of the multi-phase redevelopment of Folkestone Harbour, the restoration and conversion of a largely disused harbour area into a vibrant mixed-use development of up to 1,000 new homes and associated commercial space.

The development hinges on successfully creating a site that will be safe from the sea for the next 100 years. Paul has led the development of the shoreline defences, by reinforcing the existing shingle beach, and the dredging of the harbour to elevate the site level above expected flood levels.

Under Paul's leadership, BuroHappold has provided a highly-valued project leadership and engineering consultancy over six years, providing a responsive and proactive service at all times. This is reflected in our retention in the first phase development.

HAYLE HARBOUR SOUTH QUAY, HAYLE, UK

Client: Bowmer & Kirkland

Architect: Feilden Clegg Bradley

Conservation Architect: Stephen Levrant

Paul led the engineering design of a design-build contract to redevelopment the derelict and contaminated South Quay into a supermarket and residential development. This built on BuroHappold's previous extensive masterplanning work for the whole harbour for ING. BuroHappold successfully delivered to time and budget the earthworks, structural, geotechnical, highway, and harbour engineering scope.

Hayle Harbour is a constituent part of a World Heritage site, with all the harbour structures listed. This combined with an extensive list of planning conditions, on a derelict and contaminated site, set a significant challenge to the redevelopment in terms of cost, programme and viability. The in-filled harbour channels were dredged with the contaminated sediments reused as fill to elevate the site above flood level. The 250 year old harbour sluicing was returned to its former glory, and the supermarket and new public realm opened to programme.

MILLBAY DOCKS, PLYMOUTH, UK

Client: ECF

Paul acted as the technical lead for the masterplanning and licensing for the marine elements of this harbour redevelopment project.

Millbay Docks is an historically important site with much of the quays walls of listed status. These structures required repair and modification to ensure they were fit to host the new development.

They were successfully incorporated into the masterplan with ancillary works to protect the newly created homes from wave overtopping.

BUROHAPPOLD ENGINEERING



SARA MOSLEMI ZADEH

PhD, MSc, BSc

POSITION

Engineer

DISCIPLINE

Water

QUALIFICATIONS

Bachelor in Water Engineering,
Masters in Urban Water
Engineering and Management,
PhD in Civil Engineering

MEMBERSHIPS

Graduate Member Institution of
Civil Engineers

BUROHAPPOLD

2017 - present

Sara joined BuroHappold Engineering's water team as an engineer in 2017. During her time at BuroHappold, Sara has contributed to masterplanning projects at district and city levels as well as concept designs for various sites in the UK and abroad including India, China, and Middle East. This has involved work on a sustainable water demand management strategy, sustainable surface water strategy, watershed analysis and flood risk assessment and flood mitigation strategy.

Whilst previously working as an infrastructure engineer at Ramboll UK, Sara gained an understanding of hydraulic drainage design, and experience of preparing various reports such as design strategies, water resource/demand management strategy notes, drainage and pavement specifications, feasibility studies, FRA and CCTV survey reports. In her previous work she led design responsibilities on incorporating sustainable drainage features (SUDS) using computer aided software and also has experience in pavement design.

Sara has worked on projects from feasibility stage, through design to completion and handover; often delivering to a tight project programme. On the project level, she has been involved with the administration of projects with clients, architects and multidisciplinary team in conjunction with local authorities and statutory bodies to achieve adoption approvals.

Sara has broad experience working on projects in various sectors including residential, commercial, educational and leisure developments, for private and public sector clients in the UK and overseas. She also has a very strong academic background in water engineering and sustainable urban water management with a PhD in "Improving the sustainability of greywater recycling in urban mixed-use regeneration areas".

VAUXHALL CROSS, LONDON, UK

Client: VCI Property Holdings

Architect: Zaha Hadid

Sara's role involved preparing flood risk assessment and water demand calculations for the project.

The site was located near the river Thames in flood zone 3, with 1 in 100 or greater probability of river flooding. After requesting an updated flood extent map from the Environment Agency, Sara realised that the site was located within breach extent zone and the latest maximum water level was higher than the designed ground floor level, with the proposed site also having three basement levels.

She immediately informed the design team and the architect and set up a meeting with the Environment Agency to discuss a possible flood mitigation practice due to having critical infrastructures at the basement, and the complication of providing the required threshold level.

With her attention into detail she spotted the difference between the latest flood map and the previous one and with her knowledge of the site she raised the awareness to the design team and suggested various flood mitigation practice.

EDEN QINGDAO, QINGDAO, CHINA

Client: QEP

Architect: Grimshaw

Sara was the lead water engineer on this project. Her role involved water resource management and strategy, designing greywater recycling and rainwater harvesting system, and specify water quality and treatment required based on Chinese standard.

The main challenge for the project was lack of access to the site information. The other challenges in particular was that the site were surrounded with one of the most contaminated rivers in whole China and Qingdao had serious shortage of water. As part of her design for this sustainable development she incorporated the best practice with aim to establish a new benchmark and best example for urban developments in China. As water is a precious resource in China, in her approach to the design she considered infrastructure that does not require large fixed investments, whilst simultaneously maintaining desired comfort and service levels.

BUROHAPPOLD ENGINEERING

SARA MOSLEMI ZADEH

PhD MSc BSc

POSITION

Engineer

DISCIPLINE

Water

QUALIFICATIONS

Bachelor in Water Engineering,
Masters in Urban Water
Engineering and Management,
PhD in Civil Engineering

MEMBERSHIPS

Graduate Member Institution of
Civil Engineers

BUROHAPPOLD

2017 - present

UNIVERSITY OF CAMBRIDGE BIOMEDICAL CAMPUS, CAMBRIDGE, UK

Client: University of Cambridge

Architect: Allies & Morrison LLP

Sara designed the concept foul and stormwater drainage network based on sustainable urban water design standards and Sewers for Adoptions guidance. She calculated greenfield and existing run-off rates and based on the results, calculated the proposed discharge rate from the site based on the Cambridge City Council requirements. She also designed the attenuation required for the site using various SUDS features that were suitable for the site condition considering space availability, functionality and cost.

The project has four proposed phasing strategies in order to keep occupying some of the existing buildings while constructing a few new building blocks at each phase. This phasing strategy made the drainage design complicated, as each phase should have been reviewed individually to assess which part of the existing drainage network needed to be retained and which part needed to be redundant or rerouted, so all the existing and proposed buildings could function during each phasing strategy. Sara has sensibly designed the surface and foul for each phase and also provided various options for costing consultants in order to keep the phase 1 costing to a minimum.

Sara used her expert knowledge and experience on designing SUDS features for this project and proposed the most possible sustainable foul and surface water strategy for the developed site using her previous experience working with a similar site (ABCAM building) and her experience with Cambridge City Council requirements.



MARK CROWTHER

BSc (Hons) MSc CEnv MIEMA

POSITION

Associate

DISCIPLINE

Environmental Consultancy

QUALIFICATIONS

BSc (Hons) Environmental
Geology, MSc Catchment
Dynamics & Management

MEMBERSHIPS

Member of the Institute of
Environmental Management and
Assessment (MIEMA), Chartered
Environmentalism (CEnv) with the
UK Society of Environment

BUROHAPPOLD

2010 – present

Mark leads BuroHappold's environmental and engineering input to projects providing close attention to detail and collaborative coordination.

Mark has a strong knowledge of a number of environmental and engineering disciplines. He is therefore able to effectively communicate opportunities and constraints and act as an intermediary between clients, masterplanners, architects and technical specialists throughout the development planning process.

Mark is an experienced Environmental Impact Assessment (EIA) project manager, having delivered Environmental Statements for a variety of proposals, including major urban regeneration schemes in the North of England and London, for town and country planning. Key projects with successful planning outcomes in the UK include: Middlewood Locks masterplan, Salford; Prince of Wales Drive masterplan, London; City Reach masterplan, Leeds; Angel Gardens, Manchester and 2&3 Angel Square, Manchester.

He has experience of consultation and regulatory interfacing with a variety of statutory consultees through the development planning process, including local authorities, the Environment Agency, Natural England and Public Consultation.

Mark is a Chartered Environmentalist (CEnv) with the UK Society for the Environment and a Full Member of the Institute of Environmental Management and Assessment (MIEMA).

CENTRE HOUSE, LONDON, UK

Client: St. James (Berkeley Homes)

Mark was overall lead of the EIA process to accompany a full detailed planning application for a large residential-led mixed-use development at Centre House, White City, on behalf of St James Homes, within the London Borough of Hammersmith & Fulham.

This involved early negotiations with the local planning authority around screening and scoping of the EIA, followed by coordination of the EIA, with inputs from the ten environmental disciplines. All work was completed and submitted in full compliance with the requirements of the local planning authority as set out in their scoping response.

Close collaboration with the internal and external technical consultants and adding value through communicating efficiently with the development consultants, planning consultants and architects ensured the process ran smoothly. The planning application has just been submitted.

FULHAM GASWORKS, LONDON, UK

Client: St William Homes LLP

Mark led BuroHappold's input to a hybrid (i.e. part outline and part full) planning application for the construction of a residential led mixed-use scheme which aims to provide up to 1,900 new homes, employment/retail space and new public realm, including a central park, as the project environmental lead, EIA coordinator and BuroHappold's project manager for engineering input.

Mark ensured that the scheme proposals were fully coordinated with all statutory requirements, with key issues including ground contamination, townscape, heritage, site logistics/waste strategy and sunlight, daylight and overshadowing to adjacent residential properties.

This ensured that significant adverse environmental effects were avoided on the final scheme design, which would have otherwise have been reported within the Environmental Statement for planning. The planning application is currently under consideration.

BUROHAPPOLD ENGINEERING

MARK CROWTHER

BSc (Hons) MSc CEnv MIEMA

POSITION

Associate

DISCIPLINE

Environmental Consultancy

QUALIFICATIONS

BSc (Hons) Environmental
Geology, MSc Catchment
Dynamics & Management

MEMBERSHIPS

Member of the Institute of
Environmental Management and
Assessment (MIEMA), Chartered
Environmentalist (CEnv) with the
UK Society of Environment

BUROHAPPOLD

2010 – present

101 PRINCE OF WALES DRIVE, LONDON, UK

Client: St William Homes LLP

Mark led BuroHappold's input to a detailed planning application for a large scale mixed-use scheme on the former Battersea Gas Holders site within the Vauxhall Nine Elms Battersea Opportunity Area. The scheme is first to come forward as part of the Berkeley Group and National Grid joint venture, St William. The scheme includes 12 buildings which will range from 2 to 26 storeys with just under 1,000 new homes and a mix commercial and education uses.

Key site issues included infrastructure and ground constraints associated with the historic use and wind, overshadowing and visual impacts from the tall buildings and noise and vibration with the site being surrounded by railways lines on three sides.

Mark's close coordination and attention to detail ensured that no significant adverse effects were reported within the Environmental Statement for planning. This ultimately led to a smooth planning process, with no comments received on environmental matters, with the scheme approved unanimously at planning committee.

ANGEL GARDENS, MANCHESTER, UK

Client: MODA Living

Mark led BuroHappold's environmental and engineering input, coordinating seven EIA disciplines and nine engineering disciplines, for a mixed-use development included a 34 storey tower in central Manchester. The development forms a key phase of the NOMA (North Manchester) masterplan, an £800 million regeneration project.

Mark was integral to balancing a number of interdisciplinary environmental and engineering issues. For example, the northern building was lowered from eight storeys to six due to overshadowing impacts on existing buildings which required the tower to be raised to maintain the quantum of development, increasing the potential for wind downwash and potential effects on pedestrian comfort. Through workshops, which Mark chaired, an optimal solution was found that reduced overshadowing and wind impacts, with an offset provided in the tower massing to alleviate downwash.

Through understanding the motivations of the architect, landscape architect and environmental specialists, Mark coordinated and communicated the key requirements through the design process to ensure the final scheme submitted for planning had no significant environmental effects. No comments were received on BuroHappold's input to the project through the planning process, with the scheme successfully achieving planning permission.

MIDDLEWOOD LOCKS, SALFORD, UK

Client: Scarborough Development Group

Over a four year period, Mark led BuroHappold's environmental and engineering input to this large scale mixed-use masterplan, for 13 high-rise residential plots on the border of Manchester City Centre, with project value of £700m.

The key site issues were ecology (breeding birds and bats), ground contamination, drainage/flood risk and noise and vibration with the site being wrapped by railway lines converging on Salford Station. Additionally, due to changing economic conditions, Mark assisted with the resurrection of a formally approved masterplan (2006) through both an article 18 extension of time application and a section 73 change of use application within a very short time period.

Through a can-do attitude and close collaboration with the design team, Mark ensured that the planning application was submitted to the deadline. Mark's close coordination has ensured that no comments / objections on environmental grounds have been lodged for all seven separate planning applications to date, with all receiving planning permission.



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ACADEMIC QUALIFICATIONS

BSc (hons) Environmental Biology

MSc Habitat Creation and management

PROFESSIONAL QUALIFICATIONS

MCIEEM

POSITION

Principal Ecologist

Email: Philip.preston@wyg.com

Background

I am an ecologist with approximately 18 years' experience in nature conservation in both public and private sectors. I have extensive experience in ecological survey techniques and mitigation along with project and team management. My project experience encompasses major infrastructure schemes, private commercial and residential developments, on-shore wind energy, solar energy, conservation projects and major urban regeneration schemes.

Key areas of technical expertise include Habitat Regulations Assessments, water vole survey techniques and mitigation I have extensive experience with regard to water vole ecology and mitigation and provide advice to the national ecology team within Wardell Armstrong regarding this subject. I am also experienced in conducting habitat and protected species surveys, evaluation and assessment, habitat creation, restoration and management, preparing and submitting relevant documentation for Protected Species licensing (i.e. EPSL and conservation licences). In addition to project management and technical report writing I also manage the Ecology team within the Leigh office to ensure our core team of full time ecologists and our team of casual ecologists and sub-contractors are utilized to ensure projects are delivered on time and within budget.

Previous Experience

Langsett Reservoir

I managed works associated with the preparation of a report to inform a Habitats Regulations Assessment in relation to a proposed permissive footpath and cycle route located adjacent to an SPA and SAC. This involved liaison with internal design team, colleagues within the ecology team and the client to determine whether or not the proposed project is likely to result in an impact upon the designated site. This report is to be used to inform the Local Planning Authority when undertaking their assessment of the planning application for this project.

Lathom solar farm

I managed a team of ecologists to co-ordinate a series of ecological assessments associated with a proposed solar farm development in Lathom, Lancashire. The site was located within a sensitive area known to be utilized by pink footed goose (a qualifying feature of a local SPA designated for its value to support wintering populations of this species), and consultation with Natural England and the RSPB raised concerns regarding loss of foraging habitat and fragmentation of flight pathways used by migrating wildfowl. As a result a series of wintering bird surveys were undertaken to determine the value of the site and surrounding area for pink footed geese and determine likely effect on favorable conservation value the population associated with the designated site.



Area 10 Environmental Support

I have managed all works associated with the environmental support agreement between Wardell Armstrong and Balfour Beatty Mott Macdonald for approximately 3 years. This has involved close liaison with my client contacts along with the management and provision of assessments for ecology, noise, landscape and cultural heritage. In addition I have managed all works to deliver feasibility studies and preliminary design documents for biodiversity and landscape enhancement works to be undertaken within Highways England estate in 2017-2018. Such works include the creation and enhancement of wildflower grassland areas contributing to a target of 50 Ha within the network and creation of important foraging habitat for twite.

Longstone edge quarry and mine

I managed a team of 12 ecologists to ensure relevant ecological surveys such as great crested newt, reptile, bat, wintering bird, breeding bird and National Vegetation Classification (NVC) surveys were undertaken. An Environmental Statement was produced to inform the planning application for the restoration of an existing stone quarry and the continuation of mining operations. The site was located within 5km of a number of internationally designated sites (Special protection Area (SPA) and Special Area of Conservation (SAC)) and mining operations were scheduled to extend beneath an SAC. A report to inform a Habitats Regulations Assessment was incorporated into the Environmental Statement to allow an assessment of likely significant effects upon qualifying features of the designated sites.

High Speed 2 ecology surveys, Birmingham.

I formed part of a team of ecologists to undertake baseline ecological surveys over urban and rural sections of the 1st stage of the HS2 route leading into Birmingham. This involved acting as lead surveyor for reptile, great crested newt, water vole and otter surveys within a variety of habitats. I also performed the role of great crested newt species lead while designing the survey requirements for this species prior to the survey season along with providing input into preliminary mitigation measures for known populations of great crested newts.

Bowers Marsh Nature Reserve creation, Canvey, Essex.

I designed and submitted the method statement in support of a conservation licence under section 16 of the Wildlife & Countryside Act 1981 (as amended) to capture and translocate water voles from bankside habitat along 3km stretch of watercourse scheduled to be re-profiled in relation to a flood alleviation scheme. In addition to design works, I was involved in the capture of water voles from the area of works, transport to an overwinter holding facility and the design of the receptor site in preparation for water vole release in 2012.

Rochdale Canal white-clawed crayfish enhancement works

In 2016 I worked in close partnership with the Canals and Rivers Trust to produce a feasibility study for the enhancement of a section of canal to benefit a population of white-clawed crayfish. Detailed surveys were carried out to confirm the status of white-clawed crayfish following which preliminary design documents have been produced to provide features within the canal to benefit the species.

Matthew Davison BSc., MIFM.

Nationality: British

Date of Birth: 27th December 1983

PROFILE

Matthew is a marine ecologist with 13 years' professional survey, data and reporting experience. Matthew has worked on some of the UK's largest marine developments including the Navitus Bay Round 3 offshore wind farm, Swansea Bay Tidal Lagoon Project and numerous offshore oil & gas installations. He routinely authors technical reports, baseline characterisations and environmental statements in support of environmental impact assessments (EIA's) and habitat regulations assessment (HRA). He is a competent project manager with experience of overseeing complex multi-disciplinary studies incorporating survey, laboratory and office based duties.

Matthew has worked extensively throughout the UK including the North Sea Oil and Gas fields, central North Sea commercial fishing grounds and the English Channel marine aggregate extraction areas. He also has experience of working abroad in South America, West Africa and Norway as well as the eastern Mediterranean and the Black Sea. His experience encompasses a wide range of species, habitats and sampling techniques making him well placed to offer expert advice over a broad range of subject matter.

Matthew has an excellent appreciation of a project's needs, constraints and objectives based on first-hand experience. He has a good practical knowledge of using sampling equipment such as mobile trawls, static nets and baited traps as well as various sediment grabs, digital imaging systems and deep-water profilers. Matthew holds numerous qualifications and accreditations to allow him to work in a safe and effective manner whilst offshore and is a proficient survey manager.

RELEVANT EDUCATION

2003 – 2005 **Marine Biology with Zoology, B.Sc. (Hons), University of Wales Bangor**

ADDITIONAL QUALIFICATIONS / CERTIFICATES

- | | |
|--|--|
| - UKOOA Seafarer Medical (valid) | - HSE First Aid at Work (valid) |
| - RYA Power Boat Level II | - Full clean UK driving licence |
| - BS-AC Dive Leader / Assistant Instructor | - Elementary Electric Fishing Licence |
| - Basic Offshore Safety Induction and Emergency Training (inc. HUET and EBS) (valid) | - Bureau of Ocean Energy Management (BOEM) & Bureau of Safety and Environmental Enforcement (BSEE) Gulf of Mexico Protected Species Observer |
| - JNCC Marine Mammal Observer | |

WORK EXPERIENCE

2017 - Present **Carcinus Limited – Director and Principal Aquatic Ecologist**

- Deliver specialist marine ecology advice and support across a range of marine environments;
- Implement statistically robust survey design and data analysis techniques;
- Responsible for the delivery of technical reports, baseline characterisations and EIA's / HRA's;

- Oversee the provision of all vessel based survey services and to act as survey lead to ensure health and safety procedures are stringently upheld; and
- Provide working knowledge across a broad range of sectors including energy (renewables, oil & gas, nuclear), construction, ports & harbours, conservation and utilities.

2016 – 2017 **THA Aquatic Limited – Principal Aquatic Ecologist**

- Technical lead working in support of environmental impact and habitat regulation assessments particularly within the nuclear and renewables industry;
- Senior project manager;
- Survey manager responsible for overseeing the design and implementation of freshwater and marine surveys; and
- Aquatic consultant providing support for clients in relation to a variety of needs including consenting, research & development, planning, stock assessments, habitat appraisals and best practise.

2010 – 2016 **Fugro GB Marine Limited (Formerly EMU Limited) - Senior Marine Ecologist**

- Provision of baseline characterisations and environmental statements in support of EIA and HRA;
- Provided direct client support in relation to licensing and consenting applications;
- Responsible for designing and implementing numerous nearshore and offshore surveys from multiple platforms including dedicated surveys vessels and commercial trawlers; and
- Performed as survey lead whilst responsible for the following operations:
 - Trawling (beam, otter pelagic)
 - Grabbing (day, van-veen, hamon)
 - Plankton trawling (vertical & horizontal)
 - ROV & AUV surveying
 - Deep ocean CTD profiling
 - Marine Mammal Observation (MMO)
 - Netting (gill, trammel, fyke)
 - Coring (box core, Russian core)
 - Infauna / Epifauna sample collection
 - Drop-down video (Konsberg & Bowtech)
 - Water sampling (Niskin bottles)
 - Physicochemical & PSD sample collection

2006 – 2010 **APEM Limited - Senior Field Scientist**

- Designed, implemented and managed freshwater and marine survey operations throughout the UK;
- Worked in support of a broad range of nationally important developments; and
- Survey manager responsible for implementing the following sampling procedures:
 - River / Lake Habitat Surveying
 - Electric fishing population studies
 - Protected species assessments
 - Freshwater macroinvertebrate sampling
 - Salmonid GIS Walkover
 - Freshwater diatom sampling
 - Water chemistry analysis
 - Sediment tracing

2005 – 2006 **Kames Fish Farming Limited – Marine Husband and Commercial Diver**

- Undertook all general duties e.g. feeding, biosecurity, harvesting and maintenance in association with the profitable production of Atlantic halibut;
- Assisted in day-to-day running of the salmonid hatchery and hill loch nursery farm; and
- Provided dive support for maintenance operations and fish health checks.

RELEVANT PROJECT EXAMPLES

Oil and Gas

Al_Khalij_EMoS_Survey, Qatar (2018): Party Chief & Lead Ecologist. Coordinated all grab, video, CTD and water sampling operations.

Energiean, Levant EBS (2017): Offshore environmental subcontractor, Eastern Med study to assess proposed pipeline and well locations using box core and CTD profilers.

Repsol Saltire to Chanter Decommissioning Survey (2017): Offshore environmental subcontractor, North Sea physico-chemical monitoring study.

EnQuest Mallard Pipeline EBS & MMO (2016): North Sea study to assess proposed pipeline using box core and digital imaging techniques.

CNR International Post Decommissioning Survey (2016): Offshore environmental subcontractor, North Sea physico-chemical repeat monitoring study.

Ophir EBS & Site Survey (2015 – 2016): Survey lead, Gulf of Guinea to assess baseline conditions and map hydro-thermal vent activity.

JX Nippon EBS & MMO (2015):

Marine ecologist, North Sea AUV study to assess baseline conditions and mitigate seismic activities.

Chevron EBS & MMO (2015): Survey lead, North Sea study to establish baseline and mitigate seismic activities. Produced baseline and marine mammal report.

OMV Bulgaria EBS (2014): Survey lead, Black Sea post exploration environmental study to establish site conditions. Produced baseline report.

Tullow Norge Oil Site Survey (2014): Marine ecologist, ROV site survey in Norwegian Sea to assess suitability prior to drilling platform installation.

RWE Zidane Site Survey (2014): Marine ecologist, Lophelia ROV mapping study in Norwegian Sea.

Transport and Development

Morden Wharf Phase I Intertidal Survey (2018): Undertook extended Phase I habitat survey to characterise biotopes and describe intertidal habitats around Morden Wharf, River Thames.

Giffords Second Mersey Crossing (2009 – 2006): Undertook transitional waters field study to assess fish and benthic ecology in support of EIA.

London 2012 Olympic Development (2009 – 2010): Fish population study of River Lea and Bow Locks; fish rescues were undertaken throughout Olympic park development sites.

Renewables (Offshore Wind)

Swansea & Cardiff Bay Tidal Lagoon Project (2016 - 2017): Implemented intertidal fish characterisation study and produced spatial / temporal data review.

Hornsea Round 3 OWF (2010 – 2012): Designed and implemented intertidal multi-method fish surveys (consistent with WFD monitoring protocols) to inform baseline. Co-authored environmental impact assessment.

Methil Wind Demonstrator Project (2015): Produced fish and shellfish ecology baseline of

Rampion Round 3 OWF (2012): Assessment of black bream nests using acoustic data to map

the Firth of Forth later used to inform the impact assessment. densities and establish sensitivities from proposed development.

Navitus Bay Round 3 OWF (2013 – 2014): Undertook benthic and fish ecology characterisation surveys. Produced fish & shellfish baseline and environmental impact assessment.

Neart na Gaoithe Round 3 OWF (2010 – 2011): Contributed to the fish and shellfish baseline characterisation and impact assessment.

Nuclear Energy

New Nuclear Build (confidential client) (2016): Produced migratory fish and ichthyoplankton baseline for a site on the west Cumbrian coast. Provided technical assessment of CWS design in relation to BAT fish recovery and return systems.

EDF Energy Sizewell C NNB (2016): Undertook high-level review of existing baseline and entrainment study to assess quality of data and determine areas for improvement ahead of submission.

EDF Energy Hinkley Point C NNB (2008 – 2010): Survey manager for baseline characterisation. Implemented the subtidal and intertidal ecology surveys including habitat biotoping.

Marine Aggregates

Lough Neagh Fish Ecology (2016): Produced baseline characterisation in support of sand extraction industry; particular emphasis given to assessing pollan (*Coregonus autumnalis*) population.

Eastern English Channel Marine Aggregates (2010 – 2013): Benthic and fish ecology monitoring study in support of annual licensing area applications.

Area 451 / 466 (2014): Produced detailed herring spawning and sandeel habitat assessment using layered methodology drawn from PSD, BGS and commercial landing records.

Hastings Shingle Bank (2010 - 2015): Long-term brown crab commercial monitoring study which involved on-board observation of catch.

Ports and Harbours

Hartlepool Victoria Harbour (2018): Multidisciplinary benthic ecology survey to assess infauna, sediment chemistry, epifauna and seabed habitats in support of maintenance dredge licence.

Port of Leith Redevelopment (2014): Produced fish & shellfish baseline characterisation and ES.

Emsworth Yacht Harbour (2017 - 2018): HSE SCUBA survey to characterise seabed habitats in support of maintenance dredge licence.

Langstone Harbour Redevelopment (2013): Produced fish and shellfish baseline and impact assessment; included nursery function for bass and clupeid species.

Nigg Bay, Aberdeen Harbour Redevelopment (2015 - 2016): Produced fish and shellfish baseline and impact assessment; particular emphasis given to River Dee migratory species.

PROFESSIONAL MEMBERSHIPS

- Registered member of the Institute of Fisheries Management (IFM)
- Member of Porcupine Marine Natural History Society
- Committee member for Bishops Waltham North Pond Conservation Group (BWNPCG)



Rayner has 20 years' experience in delivering international environmental studies. Rayner's extensive experience in the delivery of various types of projects in different environments means that he has a very strong grounding in most environmental disciplines. However, Rayner has a strong focus on delivering studies with the coastal and marine environment with a specific specialism in fish ecology, underwater noise and lagoon invertebrates themes. He currently holds protected species licenses for the Lagoon sand shrimp *Gammarus insensibilis* and the Tentacled lagoon worm *Alkmaria rominiji*.

Rayner has a great deal of experience of managing and implementing biophysical field studies and assessments both nationally and, internationally.

Rayner has been resident working as a senior environmental scientist in the UK, Antarctica and Africa (Malawi, Mozambique, South Africa); and is currently based in Emsworth, UK. Rayner has a strong foundation in delivering UK based projects, but also extensive experience of delivering international projects.

The majority of Rayner's experience has been gathered in consultancy, which has been supplemented by experience as an environmental regulator and within academic institutions. The sectors Rayner has been involved includes, for example, offshore oil and gas projects, offshore wind farms, submarine cables and pipelines, ports and harbour development, dredging and disposal, coastal hinterland development schemes, coastal defence, adapting to climate change impacts, coastal habitat creation, catchment flood management, shoreline management and protected areas management etc.

Rayner has held visiting researcher positions at University College London, University of London (2014-2015), University of Southampton (2013-2016) and has provided guest lectures for postgraduate modules at Bournemouth University providing students with an insight into marine EIA approaches within industry. Rayner has mentored students and acted as a PhD supervisor at the University of Southampton.

Core skills:

- Environmental Project Management
- ESIA and biodiversity assessment
- Critical Habitat Assessment
- Environmental Management Planning
- Marine biophysical field survey
- ICZM, Shoreline Management Planning and
- Conservation Management

Personal

Male, Long-term partner, 3 children
Born 1973, Kingston, United Kingdom
Citizenship: British

Professional Affiliations

- Institute of Fisheries Management - Member
- Advisor: Southern Inshore Fisheries Conservation Authority, Recreational Anglers Group
- Guest Lecturer: MSc Environmental Assessment and Management Module at Bournemouth University; and MSc Ecology and Conservation at UCL

Education

- 2004: MSc. (Fisheries Science and Ichthyology). Rhodes University, South Africa.



- 1996: BSc.(Hons). (Freshwater & Marine Biology). The University of London

Training

- Offshore Survival and Emergency, Sea Survival/STCW95 2006-2020
- HSE IV Commercial Diver
- Current UKOOA & HSE Dive Medical
- Firefighting and Fire Prevention at Sea
- Statistical thinking for fisheries (University of Reading)
- RYA Level 1&2 and Advanced Powerboat License (Commercially endorsed)
- JNCC Marine Mammal Observer & European Seabird at Sea surveyor
- Universal Driver: Off-road driving

Languages

English – mother tongue

Spanish/French/Chichewa - Basic

Specific Country Experience

Rayner has been resident working as a senior environmental scientist in the UK, Antarctica, Africa (Malawi and South Africa).

Rayner has worked on projects in a wide range of countries, including Europe (UK, Pan European studies), Middle East (Oman & Khazaksthan), Africa (Republic of Guinea, Mozambique, Ghana, South Africa, Malawi, Kenya, Angola), the Pacific rim (Papua New Guinea), the Falkland Islands, Ascension and the Caribbean (Antigua).

Project Experience

Fathom Ecology Ltd 2017 – present. Managing Director

Survey of the Lagoon Sand Worm *Alkmaria rominiji*, Portland Marina, Dorset. Designed

and completed survey, and report for marina expansion plans.

Liverpool Dock Development: Technical Specialist & PM. Authored marine mammal environmental statement and ecological scoping report for major new sporting development planned for Liverpool docks.

ESIA for a coastal development to extract titanium deposits in central Mozambique. Technical Specialist. Production of Marine Ecology chapters on Marine Mammals, Seabirds and Corals.

Castle Marinas, Birdham Pool, UK. Technical Specialist and PM. Translocation of the endangered Lagoon Sand Shrimp. EIA monitoring and licensing.

ESIA for a coastal abalone farm in southern, Oman. ESIA Technical Lead. Delivery of a full ESIA for a proposed aquaculture development near Mirbat, Oman.

Marine EIA for a 130MW LNG development in Ghana. PM and Technical Lead. Delivery of a marine ecology baseline and impact assessment for marine infrastructure development for the 130MW gas-to-power project (FSRU, pipeline etc) in western Ghana. Work completed to IFC standard.

Solent Thresher Shark Project – Technical Specialist and Surveyor. Secrets of the Solent HIWWT and SIFCA – working with recreational anglers tagging Thresher Shark to better understand distribution and abundance of this elusive species in the English Channel and beyond.

AHTI Limited 2015 – 2017 Director

ESIA for LNG production in Coral Sea, Papua New Guinea. Technical Specialist – Fish Ecology & Marine Mammals, Reporting on



assessment of environmental risks to marine ecological aspects.

ESIA for LNG production in the Iranian Gulf, Technical Specialist – Fish Ecology, Seabirds & Marine Mammals, Reporting on assessment of environmental risks to marine ecological aspects.

Lough Neagh, Northern Ireland. Technical Specialist . Fish Survey assessing endangered & endemic fish the pollan (*Coregonus autumnalis*) to inform the EIA and Habitat Regulations Assessment (HRA).

ESIA for Tengiz Chevron, Caspian Sea, Kazakhstan. Technical Specialist and PM for fish, marine mammal and seabird surveys. Produced Risk Assessment for Transport of manmade structures through differing ecoregions including Black Sea and Volga Don Canals: Exotic species risk and biofouling assessment – South Korea to Caspian Sea. Produced to IFC standards.

*Zoological Society of London 2014 – 2015
Programme Manager of European Marine &
Freshwater Conservation*

Thames Marine Mammal Conservation – survey, technical lead and PM. Aerial, land and boat based monitoring surveys and reporting on marine mammals in wider Thames Estuary.

FishNet – Greece and Spain. Technical Specialist and Surveyor. Conservation project to protect freshwater fish from extinction. Survey and reporting on the Critically Endangered Hellenic stickleback, Corfu killifish & Spanish Valencia.

DP World London Gateway – Ecological Advisor and Technical Specialist. Consulted for knowledge on fish spawning and migration in Thames with particular emphasis on smelt.

Angel Shark Conservation Work, Canary Isles, Spain. PM & Ecologist. Working with the Universidad de Las Palmas de Gran Canaria to minimise angling impacts on angel shark.

Migratory Fish conservation, Thames, Medway and Tributaries, UK. PM & lead Ecologist. Migratory fish monitoring work using traps, remote sensing DIDSON, telemetry and barrier removal of eel (elver, glass, yellow and silver), sea-lamprey and smelt. Findings helped deliver the Eel Management Plan for the Thames region.

*EMU Limited 2007-2014 Senior Marine
Ecologist*

Hornsea Round 3 OWF. Lead Fish Ecologist, Marine mammal and Seabird observer. Designed and implemented offshore fish surveys to inform baseline. Co-authored environmental impact assessment.

Eastern English Channel Marine Aggregates. Surveyor Lead and Reporting. Benthic and fish and shellfish ecology monitoring study in support of annual licensing area applications.

Navitus Bay Round 3 OWF, Dorset UK. Technical Expert - Fish Ecologist & Underwater noise. Undertook benthic and fish ecology characterisation surveys. Jointly produced fish & shellfish baseline and environmental impact assessment.

Natural England, Technical Specialist – Marine mammals and seabirds. Produced evidence standard for marine mammals and seabirds to enable statutory agencies to provide best practise industry guidance.

Hastings Shingle Bank Aggregate License. Survey Lead and PM. Long-term brown crab and Dover Sole commercial monitoring study which involved on-board observation of catch, reporting for license consent.



Neart na Gaoithe Round 3 OWF. Scotland, UK. Technical Specialist – Fish & Shellfish Ecology Led the fish and shellfish baseline characterisation and impact assessment including underwater noise assessment.

MMO Review of Post-Consent Offshore Wind Farm Monitoring Data Associated with Licence Conditions. Project No: 1031: Lead fish ecologist developing a more strategic approach to post construction fish and shellfish monitoring.

Update the Draft Regional Locational Guidance (RLG) as part of the sectoral planning process for offshore wind, wave and tidal energy, Scotland, UK. Technical Expert. Provision of technical support for the update of RLGs for offshore renewables across regions in Scotland.

Area 451 / 466 (2014). Technical Specialist – Fish Ecology. Produced detailed herring spawning and sandeel habitat assessment using layered methodology drawn from PSD, BGS and commercial landing records.

Environment Agency 2006-2007 Coastal Survey Officer

Transitional Waters Fish & shellfish monitoring for the Water Framework Directive (Directive 2000/60/EC) in the Irish Sea including the River Dee: Rayner was responsible for the monitoring of fish in transitional waters in the Irish Sea (Solway Firth to Cardigan Bay). Sampling techniques included fyke netting, beach seine, beam and otter trawling, benthic grabbing and water sampling.

Icelandic International Development Agency 2003-2005 Fisheries Officer

Small Scale Offshore Fishery Technology Development Project, Malawi, Central Africa. Working with Government of Malawi,

collecting, interpreting and reporting on the socio-economic and catch of fishing gears. Findings contributed towards MSc.

British Antarctic Survey, Rothera Base, Antarctic Peninsula. 2000-2003 Assistant Marine Biologist.

Long term monitoring studies of near shore marine biodiversity. Rayner was responsible for long term near shore marine monitoring programme including studies on climate change, feeding, physiology, iceberg impact and scour on marine benthos, tagging studies of seals, birds and fish, year round ice diving, marine chemistry and oceanography. Rayner managed the Bonner Lab and assisted visiting researchers.

Publications and Articles

Neenan, S., **Piper, R.**, White, P., Kemp, P., Leighton, T., & Shaw, P. (2016). Book Chapter: Does masking matter? Shipping noise and fish vocalizations. In A. Popper, & A. Hawkins (Eds.), The Effects of Noise on Aquatic Life II (pp. 747-753). (Advances in Experimental Medicine and Biology; Vol. 875). New York, NY:

Piper, R. (2010). Re-occurrence of silver pomfret *Pampus argenteus* in the North Sea. Marine Biodiversity Records, 3, E102. doi:10.1017/S175526721000093X

Jolly, M.T., Aprahamian, M.W., Hawkins, S.J., **Piper, R.** et al. Marine Biology (2012) Population genetic structure of protected allis shad (*Alosa alosa*) and twaite shad (*Alosa fallax*) 159: 675.

Latto P. L., Reach I.S., Alexander D., Armstrong S., Backstrom J., Beagley E., Murphy, K., **Piper R.** and Seiderer L.J. (2013). Screening Spatial Interactions between Marine Aggregate Application Areas and Sandeel Habitat. A Method for BMAPA.

DANIEL HACKETT

SENIOR ENGINEER | TEAM LEADER

T: +44 (0)1908 776970 X 241 | Daniel.Hackett@rwdi.com



An experienced consultant and engineer with a broad base of technical expertise, Dan offers our clients design insight and advice across environmental disciplines. Dan is a key member of our Building Science team in the UK whose project experience ranges from residential masterplans and shopping centres to museums, stadia and supertall structures. His recent work has included providing guidance in building design and environmental impact assessments for new landmark development projects in London and throughout the UK.

Project Experience

Wind Microclimate / Wind-sensitive Design

- Al Wakrah Stadium, Doha, Qatar
- Höfðatorg, Reykjavik, Iceland
- The London Spire, London, UK
- Wood Wharf, London, UK
- Edinburgh St. James, Edinburgh, UK

Helicopter Operations (Turbulence Assessment)

- Royal Sussex County Hospital, Brighton, UK
- University Hospital of Wales, Cardiff, UK
- Royal Infirmary of Edinburgh, Edinburgh, UK
- New Children's Hospital, Dublin, Ireland
- SSI Tower, Jakarta, Indonesia

Sailing Quality Assessment

- West Ferry Printworks, London, UK
- Fulham Football Club, London, UK

Employment History

2013-Present
Project Engineers / Team Leader (UK, Building Science) RWDI

2008-2012
Wind Engineer / Building Physics Consultant / Regional Manager (Malaysia) BMT Fluid Mechanics Ltd.

Qualifications

Master of Engineering (Aerospace Engineering), University of Southampton, England

Affiliations

Member, UK Wind Engineering Society Organizer, Young Members' Group

RWDI Learning Lab presenter



DAVID HAMLYN, P.H.D., CENG.

PROJECT MANAGER | SENIOR ENGINEER

T: +44 (0)1908 776970 | David.Hamlyn@rwdi.com



David is an internationally recognized expert on the effects of climate on building performance. Clients around the world seek out his insights on complex building performance challenges, including problems related to wind, dispersion, ventilation, stack effect and glare. David has contributed to the success of major projects in the United Kingdom, Asia, the Middle East and North America, consulting with clients and design teams composed of engineers, scientists and meteorology experts. A sought-after public speaker, he is frequently invited to share his insights on climate and design with fellow engineers and other professionals.

Project Experience

Wimbledon No. 1 Court, London, England

Managed studies into the risk of glare affecting players and undertook wind microclimate studies for the pedestrian realm

Confidential Project – Taiwan

Managed pedestrian-level wind, structural and cladding wind load studies for a complex of high-rise towers of unique architectural design

Confidential Projects, Residential towers, London, England

Led assessments of the potential for stack effect issues in a number of landmark Central London residential towers of up to 50 storeys

Wind Effects on London Helipad

Led an assessment of the effect of nearby proposed buildings on the turbulence levels for pilots landing and departing from the helipad, to ensure that flight operations were not adversely affected by changes to the wind environment

Employment History

2013-Present
**Senior Engineer and
Project Manager
RWDI**

2007-2013
**Consulting Engineering –
Team Leader
Breathing Buildings Ltd.**

Qualifications

**Doctor of Philosophy,
Queens' College,
University of Cambridge,
United Kingdom**

**Master of Engineering,
Queens' College,
University of Cambridge,
United Kingdom**

Affiliations

**Chartered Engineer
(CEng), Institution of
Mechanical Engineers
(IMechE)**

**Frequent speaker at
international conferences
and workshops for
professional audiences**





Education/ Professional Qualifications

BA (Hons) in Architecture,
University of Humberside

Skills/Achievements

Advising on the development
potential of a site

Negotiating disputes

Expert Witness

Outstanding presentation skills.

Lecturer for RIBA accredited CPD
on daylight/sunlight and rights of
light.

Matthew Craske BA (Hons)

Director, Rights of Light and Daylight/Sunlight

Summary

Matthew has gained over 20 years of experience in daylight/sunlight/overshadowing and rights of light, advising local authorities, design teams, developers and adjoining owners. Matthew works on all building types and uses across the country, such as residential development, hotel, commercial, industrial projects, with project costs ranging from £10,000 domestic extensions to multi million pound

Experience

Having started out undertaking the technical assessments by hand, Matthew's appreciation of the impacts from development can be swiftly translated into advice on the best approach for a planning application. Of course, with the advent of specialist computer software, of which Matthew has helped develop, the process is more refined but the underlying principal of leaving adequate light to neighbours remains the same.

Matthew also specialises in rights of light, which is a common law matter outside of the planning process. He provides support on the legal background to the subject (working with solicitors and counsel), advises on the impacts and the best course of actions to take. Matthew advises on compensation budgets and negotiating compensation settlements by way of deeds of release.

Clients

Motcomb Estates, Almacantar, Origin Housing, Grosvenor Properties, Camden Borough Council



Education/ Professional Qualifications

University of Leeds – MEng (Hons)
Architectural Engineering

University of Lincoln – BA (Hons)
Architecture (RIBA Part 1)

Skills/Achievements

Architectural Design

Software: Autodesk Revit (BIM
Software), Autodesk AutoCAD,
Google Sketchup

Adobe Photoshop

Simon Holmes BA (Hons) MEng (Hons)

Associate Director, Rights of Light and Daylight/Sunlight

Summary

Simon is well versed in both rights of light and daylight and sunlight matters on a broad range of projects from large scale masterplans to smaller scale developments.

Experience

Advisor to a range of clients including large scale residential developers, London borough councils and commercial units.

Dealing with daylight and sunlight and rights of light issues and communications with neighbours and stakeholders affected by development.

Delivery of the client's objective.

Worked in multidisciplinary design teams with both Architects and Structural Engineers.

Extensive experience in the early design process, assisting clients with the necessary deliverables for planning and follow up matters relating to rights of light.

Clients

Berkeley Group Plc, Grosvenor, Hub Group, Origin Housing, City of London Corporation

Education/ Professional Qualifications

University College London – BSc
(Hons) Physical Geography

Skills/Achievements

Software: Autodesk AutoCAD,
Google Sketchup

Gracie Irvine BSc (Hons)

Senior Surveyor, Rights of Light and Daylight/Sunlight

Summary

Gracie is competent in both rights of light and daylight and sunlight matters on a range of projects from small scale residential extensions to large scale masterplans.

Experience

Advising a range of clients including large scale residential developers.

Dealing with daylight and sunlight and rights of light issues and communications with neighbours and stakeholders affected by development.

Interpreting the results of technical analysis and summarising the impact and the advice to clients in a report or an environmental impact assessment.

Clients

Berkeley Group Plc, Origin Housing, City of London Corporation



Nathan Allen

**Job Title:**

Senior Environmental
Consultant

Academic Qualifications:

MEnvSci Environmental
Science

**Professional
Qualifications:**

Affiliate Member of the
Institute of Lighting
Professionals (AILP)

**Number of Years
Experience:**

7

Project Role:

Technical Lead

Reasons for Selection:

We have selected Nathan to be the technical lead on this project for the following reasons:

- He has seven years' experience undertaking noise and lighting assessments across Wales and England.
- He has an in depth knowledge of UK lighting standards and ILP Guidance.

Project Experience:**Land off Crawcrook Lane, Crawcrook**

Nathan prepared a Lighting Assessment to assess existing light spill from floodlighting at Ryton and Crawcrook Albion FC onto a proposed residential development at land off Crawcrook Lane Crawcrook.

Power Court Development, Luton

Nathan completed a lighting assessment for a proposed mixed use football stadium led development in Luton. The proposals included a 23,000 capacity football stadium on top a podium surrounded by a mixture of residential, commercial uses in the form of 7 high rise tower blocks. Light spill was assessed at both existing and proposed properties.

SSL Aylesbury

Nathan undertook a lighting assessment for a proposed supermarket development for a site in Aylesbury. The assessment consisted of lighting from both the proposed car park and service yard on existing and proposed residential receptors.

Stanley Green Retail Park, Cheadle Hulme

Nathan undertook a public inquiry for lighting which had the potential to cause a significant environmental effect for a retail development at Stanley Green.



ACADEMIC QUALIFICATIONS

DipLA(Glos) Landscape Architecture
MSc Computer Science & Applications

PROFESSIONAL QUALIFICATIONS

FLI: Chartered Landscape Architect, Fellow of the Landscape Institute
PIEMA: Practitioner Member of the Institute of Environmental Management & Assessment

POSITION

Director

Background

Mary O'Connor's professional expertise, developed over 40+ years, is in the field of landscape planning and environmental impact assessment, in particular, landscape and visual impact assessments, green infrastructure and master planning, and landscape design for new developments. Her work extends across the energy, industrial, commercial, minerals, highways and housing sectors, public consultation and working with local communities. Mary has given evidence to many public inquiries, concerning the landscape and visual aspects of different kinds of development.

Mary O'Connor has been active in the Landscape Institute, having been Honorary Secretary, chairing its then Finance and General Purposes Committee, and subsequently chairing the Professional Practice Committee. She acted as adjudicator in a number of Landscape Awards schemes. She has been central to developing best practice guidelines, including as a member of the Advisory Panel for the Landscape Institute and Institute of Environmental Management & Assessment's Guidelines for Landscape and Visual Impact Assessment 3rd Edition, published in 2013. She has delivered GLVIA3 Masterclasses and Training Events for the Landscape Institute with Professor Carys Swanwick across the UK, and also for PINS Inspectors/ Examiners, for Natural England and Local Authority officers, and for the Irish Landscape Institute. The UK events were Highly Commended in the LI Awards 2016.

She contributed to development of the BREEAM Strategic Ecology Framework 2016 and has lectured on green infrastructure planning and monitoring environmental compliance in construction projects.

Mary represents the Landscape Institute on National Grid's Stakeholder Advisory Group for its Visual Impact Provision project, aiming to remove overhead powerlines from nationally designated landscapes where they are having a detrimental effect on landscape character or visual amenity. She chairs the Approvals Panel of the Landscape Enhancement Initiative under this provision, for landscape schemes to ameliorate landscape and visual effects where overhead lines cannot be removed.

Mary was elected a Fellow of the Landscape Institute in 2015.

Selected Project Experience

Cumbria County Council, Planning & Landscape Advice

- Supporting the County's response to and advising on the planning application by **West Cumbria Mining** for an undersea coal mine with very large-scale buildings and surface facilities and a rail loading facility with a connecting underground conveyor, at Whitehaven.
- Supporting the County's response to the **National Grid North-west Coast Connections**, for connecting Moorside nuclear power station and renewable generation developments to the national grid.
- Cumulative assessment of effects of vertical infrastructure ("**CIVI**") on landscape character and visual amenity across Cumbria including parts of North Lancashire, the national parks and AONBs, to support decision making about future development proposals. Highly Commended in the Landscape Institute Awards, 2015 Strategic Landscape Planning category.

Western Log Energy, Biomass Power Plant, Margam

A proposal for a biomass generating station using treated timber, requiring accommodating filters in the building housing the turbines, resulting in a large building, with storage buildings for feedstock and associated infrastructure. Site location in the setting of Margam Landscape of Historic Interest. Landscape Expert at appeal public inquiry presenting evidence on landscape and visual impact, and impacts on the setting of a "gateway" to Port Talbot. Development was ermitted.



National Grid, Visual Impact Provision - Landscape Enhancement Initiative

- Member of Stakeholder Advisory Group, representing the Landscape Institute, for the Visual Impact Provision, to ameliorate landscape and visual effects in designated landscapes by removing overhead power lines where they are having significant adverse landscape or visual impacts;
- Chair of Landscape Enhancement Initiative Approvals Panel, recommending projects to Ofgem for funding under the initiative for landscape schemes to mitigate landscape or visual effects, where overhead lines cannot be removed.

Pennant Walters Limited, Various wind farms in South and Mid Wales

- Maesgwyn wind farm (13 turbines, blade tip height 120m), Neath Port Talbot: ES coordination and LVIA, in operation since 2011, and subsequently engaged as LVIA specialist for a 10-wind turbine extension to this scheme.
- Pant-y-Wal wind farm (21 wind turbines, 115m to blade tip), Bridgend: L&VIA, discharge conditions, in operation since 2013, and subsequently engaged as LVIA specialist for a 10-wind turbine extension to this scheme. Currently engaged on a further 2-turbine extension.
- Esgair Cwmowen wind farm (19 turbines, blade tip height 125m), Powys: LVIA, current planning application.

NIE/EirGrid Renewable Integration Development Project – Phase 3

Development of methodology for assessment, evaluation and impact scoring of proposed electrical infrastructure, transmission routes and substations.

Professional History

2019 to date Director, WYG

Evidence to public inquiries concerning the landscape and visual aspects of developments. Project director for appraisal studies, site planning and landscape design for urban and rural development projects. Landscape and visual impact assessments, master planning, and landscape design.

2005 to 2019 Associate Director, WYG Planning & Design

Project director for appraisal studies, site planning and landscape design for urban and rural development projects. Landscape and visual impact assessments, master planning, and landscape design. Evidence to public inquiries concerning the landscape and visual aspects of developments.

2000 – 2005 Director, WynThomasGordonLewis Limited

Project director, leading or participating in consultancy teams on wind farm, including evidence to public inquiry on obo Bridgend CBC, minerals, strategic industrial and aerospace development, integrated public realm and public art strategy, design guidance, and highways projects.

1996 – 2000 Associate, Wyn Thomas plc

Development planning, landscape and visual impact assessment and expert witness at public inquiry. Major projects included Beaumaris Marina, WDA strategic industrial site, Enron UK CCGT Power Station at Rassau, National Grid Severnside Sub-Station and connection route option studies, stakeholder and consultee workshops for Welsh Development Agency Design Guide.

1995 – 1996 Short Term Contracts

1990-1995 Senior Landscape Architect, Building Design Partnership, Belfast

Senior Landscape Architect with responsibility as Design Team Leader or Job Landscape Architect for variety of urban and rural projects, working in multi-professional teams.

1986 – 1990 Landscape Architect, WDR& RT Taggart, Belfast

Landscape Architect, reporting to the senior landscape architect, participating in multi-professional teams on architectural, engineering, landscape and planning schemes from inception to completion on site.

1985 Freelance

1982 – 1985 Landscape Architect, Brady Shipman Martin, Dublin

Inputs to landscape design and production information for industrial, leisure and tourism projects, and contract supervision.

1981 – 1982 Senior Technician, Dublin County Council Parks Dept

1978 – 1979 Landscape Assistant, Niall Hyde & Partners, Dublin

1973 - 1975 Landscape Trainee, Niall Hyde & Partners, Dublin

Curriculum Vitae: EMILY JONES



ACADEMIC QUALIFICATIONS

BSc (Hons) Landscape Design and Archaeology

Grad Dip Landscape Architecture (2001)

PROFESSIONAL QUALIFICATIONS

Chartered Member of the Landscape Institute

(CMLI, 2005)

POSITION

Associate Director

Expertise

Emily has 14 years post chartership experience and has been involved in a wide range feasibility, design and assessment projects, ranging from mixed use developments, housing, solar farms, road schemes, windfarms, and minerals and waste schemes. She is experienced in working on highly visible schemes through her assessment work carried out for windfarms, pylons and tall buildings. She works on projects from the initial site appraisal stages to inform local plans through to the masterplanning phase and impact assessment, and finally detailed design and landscape management.

Project Experience

The People's Project, Bramley Moore Dock, Liverpool

Emily has been involved with the Landscape and Visual Impact Assessment of the proposed football stadium at Bramley Moore Dock as project lead and reviewer.

Elland Town Centre Public Realm Improvements

Following on from the work for WYCA on the Elland Station Access Package, Emily is currently working on public realm improvements within the town centre of Elland. This involved working alongside in house built heritage specialists, as well as transport planners, to come up with solutions that respect the towns high quality historic heritage whilst introducing green elements throughout the town and a new vibrant setting.

Elland Station Access Package

Working alongside in-house transport planners, Emily prepared the landscape input to the Elland Station Access Package which considered access improvements between the proposed station in Elland and the town centre and surrounding areas. The access package primarily looked at pedestrian and cycling access, upgrading the existing provision and creating attractive and easily accessible routes. Proposals included the introduction of cycle lanes; wayfinding and improved signage; art installations and lighting; and the greening of routes.

Sheffield Ski Village, Environmental Impact Assessment

Emily was involved in the preparation of a Landscape and Visual Impact Assessment in 2005 in relation to proposals for the development of a highly visible ski village on the site of the existing dry ski slope in Sheffield (which has subsequently been removed). Development includes the construction of a snow dome on a steep valley side, a ski village and adventure area. A cable car route was proposed down the valley crossing to the other side of the A61 to create wider linkages to the site. Work included extensive site studies to appreciate the potential visual impact of the development and an analysis of the landscape character of the site and the surrounding area.

Glasshaughton Link Road, Wakefield

Emily has been involved in the preparation of landscape design proposals for Glasshaughton Link Road, which will run in close proximity to the M62. Although a LVIA was not required for this scheme, Emily has been involved in the preparation of outline design proposals along the road corridor, which have included the incorporation of various ecological mitigation measures. Current work underway includes the



preparation of detailed design proposals for the scheme, the preparation of the planting specification and a landscape management plan.

Horsforth Campus, Leeds

Emily was involved in the preparation of a strategic landscape masterplan for a proposed residential development within Horsforth, Leeds. The site is located within the green belt and currently contains Leeds City College Horsforth Campus. The landscape strategy takes into account the existing vegetation on the site, and the sensitive nature of the adjacent residential receptors and green belt designation.

Landscape Character and Analysis - Cherwell District Council

Emily worked within the team who undertook landscape character and constraint analysis of a number of villages within Cherwell to help inform the Council's Local Plan Part 2 (non-strategic sites and development management policies) and its partial review of Local Plan Part 1 (Oxford's unmet housing needs). Her work included detailed site work and covered the southern area of the district, including Kidlington, Yarnton, Begbroke and Kirtlington.

Saddleworth School, Oldham

Emily prepared the LVIA for a proposed school development in Diggle, Oldham. The application comprised of 4 separate planning applications combining demolition works, listed building consent, school development and highways works and the LVIA addressed all applications. The project included a number of sensitive receptors including the Peak District National Park, the Huddersfield Narrow Canal and adjacent residential properties. Various local opposition groups and support groups meant the project had to be handled sensitively and with close attention to detail. Close working relationships between the designers, ES coordinators, and archaeology specialist were established to ensure a coordinated approach to the assessment.

North West Coast Connections, Cumbria County Council

The NWCC project, extending along the whole length of Cumbria's west coast, is a Nationally Significant Infrastructure Project (NSIP) which involves the upgrade and development of the existing electricity transmission network along the coast of Cumbria. WYG Landscape, alongside other disciplines, was appointed to give technical specialist support to the Group of Local Authorities in Cumbria and Lancashire, including Cumbria County Council, in relation to the project. Emily carried out and coordinated the landscape and visual review work for the project, which included the review of National Grid's screening and scoping submissions to the LPA, and the Preliminary Environmental Information (PEI). Due to a planning performance agreement, all review work, for an area covering the length of Cumbria, had to be turned around in a tight timescale which called for adherence to a strict, accurate and methodological work process.

ROF Featherstone, South Staffordshire

Emily was involved in the preparation of a simple LVIA, in accordance with IAN 135/10 and GLVIA3, for proposed road scheme options within the Featherstone area. The route corridors for each option were surveyed from publicly accessible viewpoints and a baseline study carried out for each area. Assessment of each option was carried out which in turn lead to the preparation of WebTAG Landscape worksheets and Assessment Summary Tables (ASTs) for the scheme. The schemes each had sensitive issues to consider including close proximity to a National Trust property and an elevated road corridor over the existing railway.

Curriculum Vitae: SUZANNE STAMP



ACADEMIC QUALIFICATIONS

BSc (Hons) Landscape Design and Ecology

Grad Dip Landscape Management (2005)

PROFESSIONAL QUALIFICATIONS

Chartered Member of the Landscape Institute

(CMLI, 2008)

POSITION

Associate Landscape Architect

Expertise

Suzanne joined WYG in April 2019 and has eleven years post Chartership experience. Over her first nine months with WYG Suzanne has worked on a masterplan for a 10,000 home urban extension in the south of England, the public realm design of a public space in Oldham, and the Landscape and Visual Impact Assessment of the proposed Everton stadium at Bramley Moore Dock.

Previously Suzanne spent nine years with Pegasus Group as landscape architect specialising in landscape planning. During this time Suzanne's work ranged from site promotion and green belt appraisal to LVIA and dealing with reserved matters applications in relation to range of development types, including residential and commercial. Suzanne also developed a strong specialism in the renewable energy sector (wind and solar), in particular LVIAs for large scale wind energy development across the U.K, including Section 36 applications in Scotland.

Prior to this Suzanne worked for WYG for three years, during which time she became chartered. Suzanne's role as a Landscape Architect involved working on a wide variety of schemes including: landscape and visual impact assessment for wind farms, an energy from waste scheme, a power station, and numerous highway schemes; play area design; public realm design; and planting design.

As a Graduate Landscape Architect at RPS Planning Transport and Environment, Suzanne gained valuable experience in Landscape and Visual Impact Assessment (LVIA), primarily within the wind energy and highways sectors.

Suzanne studied a dual degree of Landscape Design and Ecology at the University of Sheffield and began her career as a Year Out Landscape Architect at RPS Planning Transport and Environment where her project experience was largely landscape planning based.

Project Experience

The People's Project, Bramley Moore Dock, Liverpool

Suzanne has been the author of the Landscape and Visual Impact Assessment in relation to the proposed new football stadium at Bramley Moore Dock.

Urban Extension, South of England

Suzanne has provided input into the landscape led masterplan for a proposed 10,000 home extension to a town in the south of England.

Public realm design, Oldham

Suzanne has provided detailed hard and soft landscape design proposals in relation to the renewal of an urban space in the Oldham district.

Goodison Park, Liverpool

Suzanne is also working on the Landscape and Visual Impact Assessment (LVIA) in relation to the outline application of a proposed mixed-use development on the site of the existing Everton football stadium in Liverpool.

Curriculum Vitae: TIM PHILLIPS



ACADEMIC QUALIFICATIONS

BSc (Hons), MSc (Dist) Geographic Information Systems, BTEC Foundation Art & Design

POSITION

Associate GIS and Visualisation

Expertise

Tim is a specialist in visualisation and photomontage, with 19 years' experience in producing 3D visuals for a wide variety of projects including residential developments, retail schemes, public realm and access improvements, schools, highways, railways, windfarms, & for public consultation events.

He uses the industry standard software 3ds Max, Civil 3D, SketchUp, ArcGIS Pro, Photoshop and PanoTools to create high quality visualisations.

Project Experience

Peel Holdings: Liverpool Waters

Regeneration of 60 hectares of historic dockland in north Liverpool including 9,000 new homes, a cultural building, and a new cruise liner terminal. Tim prepared 45 photomontages of the development to illustrate massing and to show the development within the context of the historic surroundings. These images supported the planning application and were used for on-site discussions between the project team and representatives of UNESCO.

Northern Ireland Department of Education: Strule Shared Education Campus, Omagh

Road widening and junction improvements to assist in improved traffic movement and flows associated with the delivery of the Strule Shared Education Campus. Tim prepared several visualisations for the September 2016 public exhibition.

Cherwell District and South Northamptonshire Councils: HS2

Preparation of two sets of visualisations of the proposed HS2 rail link from key viewpoints to be used by the District Councils, Parish Councils and Community groups as the basis for negotiating mitigation measures to reduce the impact of HS2 on noise, visual amenity, habitats and heritage features.

Penzance Heliport Ltd: New Penzance Heliport

Tim produced visualisations to illustrate the proposed heliport buildings and helicopter flight paths as an input into the LVIA and to address concerns raised by RSPB over the potential impact on birds at Marazion Marsh SPA.

Abertawe Bro Morgannwg University Health Board: A Regional Collaboration for Health

Visualisations of the proposed Morriston Health Campus (major acute health and science centre for south-west Wales) and of the proposed Singleton Health Campus (primary care, acute secondary care and a life science and health research centre for Swansea University).

Welsh Government: St Athan Aerospace Business Park:

Master plan for a 117,000 sqm runway-related aerospace business park. Tim produced 12 photomontage views of the proposed site and associated development to accompany the planning application.

Nick Collins BSc (Hons) MSc MRICS IHBC

Nick has over twenty years experience in the property sector, including most recently as a Director of the Conservation Team at integrated design consultants, Alan Baxter & Associates. Nick spent nine years at Historic England as Principal Inspector of Historic Buildings and Areas where he led a specialist team of historic building inspectors, architects and archaeologists on a wide range of heritage projects in East & South London.

Previously Conservation Officer at the London Borough of Bromley, Nick began his career at international real estate consultancy, Jones Lang LaSalle as a Chartered Surveyor. This experience has given Nick an in-depth understanding of the property industry, listed building and planning process, heritage policy and guidance and funding bodies.

EMPLOYMENT

Director, KMHeritage July 2014, ongoing

Director, December 2012 – July 2014

Alan Baxter & Associates, 75 Cowcross Street, London EC1M 6EL

Principal Inspector of Historic Buildings & Areas February 2004 – December 2012

Historic England, 4th Floor, Cannon Bridge House, 25 Dowgate Hill, London, EC4R 2YA

Course Lecturer MSc in Historical & Sustainable Architecture - 2010 2014

New York University in London, 6 Bedford Square, London WC1B 3RA

Conservation Officer April 2001 – February 2004

London Borough of Bromley, Civic Centre, Stockwell Close, Bromley BR1 3UH

Chartered Surveyor – September 1994 – August 2000

Jones Lang LaSalle, 30 Warwick Street, London W1B 5NH

EDUCATION AND TRAINING

University of Reading, Berkshire 1991-1994

BSc (Hons) Land Management

Oxford Brookes University 2000-2001

MSc Historic Conservation (with Distinction)

PROFESSIONAL

Member of the Royal Institution of Chartered Surveyors (RICS)

Member of the Institute of Historic Building Conservation (IHBC)

CURRICULUM VITAE

Alan Lupton

Operations Manager Oxford Archaeology North

Date of birth 10/12/1964

Year joined firm 1995

Education/professional achievements

BA(Hons) Ancient Mediterranean Studies, Bristol 1986

MA (Distinction) Field and Analytical Techniques in Archaeology, Institute of Archaeology, University College London, 1988

PhD in Near Eastern Archaeology - The Development of socio-political complexity in north Mesopotamia / south-east Anatolia 4000-2700 B.C., Cambridge University, 1995

Member of IFA

Relevant experience/key qualifications

Project Manager on the recent major Darrington to Dishforth A1 (M) road scheme project and Assistant Project Manager on the A417/A419 Improvements project around Cirencester. These projects involved highly detailed logistical and safety planning, co-ordination of staff and specialists, and preparation of reports.

Considerable experience of field archaeology and project management from a wide variety of site types, including the management of fieldwork for the excavations at Friarsgate, Warrington, Botchergate, Carlisle, and Mitchells Brewery, Lancaster. Managed production of numerous excavation and specialist publication reports.

Employment

2003-present: Operations Manager, Oxford Archaeology North

Responsible for co-ordination of all work undertaken by OA North, including overseeing fieldwork tenders, scheduling of staff, quality control of fieldwork standards and client reports.

1997-2003: Project Manager, Oxford Archaeology North

Project manager for a wide variety of archaeological and heritage conservation management projects ranging from desk-based assessments and evaluations of development proposals, to mitigation excavation exercises and management of large-scale post-excavation projects. Responsible for all aspects of projects, including production of project designs, method statements and health and safety documentation, organising staff and equipment, management of project budgets, and liaising with clients, specialist sub-contractors, and county/museum/national archaeological authorities. Also involved in consultancy work providing advice to clients and other interested bodies on a variety of archaeological/heritage issues, particularly with regard to the role of archaeology in the planning process.

Oct 1995-Sept 1997 Oxford Archaeological Unit

Project Manager for variety of projects including Romano-British rural site at Thatcham, Berks. and a Late Bronze Age settlement at Shornecote Quarry, Glos.

Responsible for managing all aspects of the fieldwork and project budgets. Assistant Project Manager on the Swindon-Gloucester DBFO Road scheme. Responsible for co-ordinating and producing the post-excavation assessment of a large-scale multi-site project, together with writing the chapters on the Early Prehistoric and Iron Age periods. Field Director for five of the sites.

July-Sept 1995 Hacinebi Tepe, South-east Turkey

Assistant Director of excavation project conducted by Evanston University, U.S.A. at a Late Chalcolithic site on the Turkish Euphrates. Responsibility for excavation and recording of eastern and south-western areas of the site, together with training of graduate students. Undertook all aspects of post-excavation work, including writing of preliminary reports. Also worked at the site in 1992, 1993 and 1994.

May 1988- March 1991 British Rescue Archaeology

Including work as a Supervisor for Sussex Archaeological Field Unit at Hastings Brewery and Lewes Priory, East Sussex, and for Cotswold Archaeological Trust during evaluation of the Cirencester Bypass. Also worked as an Archaeological Technician for Lancashire and Cumbria Archaeological Unit during excavation of Roman urban sites in Lancaster and Ribchester, and for the DGLA, Museum of London, on a variety of urban sites ranging in date from Roman to medieval.

Jan 1987-May 1993 Near Eastern Archaeology

Including work as an Archaeological Supervisor for Cambridge University at Tell Brak, North-East Syria, University of California, San Diego, U.S.A., at Titris Hoyuk, South-East Turkey, for University of California, Berkley, U.S.A, at Nineveh, Northern Iraq, for State University New York Binghamton, U.S.A, at Abu Dhuwari, Central Iraq, for British Archaeological Expedition to Iraq, at Jemdet Nasr, Central Iraq, for the London/Bahrain Archaeological expedition at Saar, Bahrain, for Oriental Institute, Chicago, U.S.A., at Tell Binaat, Northern Syria, for Edinburgh University at Qasr Burqu', Eastern Jordan and Wadi al Qawr, U.A.E.

CURRICULUM VITAE
Helen Evans <i>Heritage Management Services Project Officer, Oxford Archaeology North</i>

Joined OA North 2015

DOB 09.10.1974

Educational/Professional Achievements

PGDip (with distinction), Conservation of the Historic Environment, University of Reading, 2015

PhD Neolithic and Bronze Age Landscapes of Cumbria, University of Sheffield, 2005

MA (with distinction) Landscape Archaeology, University of Sheffield, 1998

BA (class 2:1) Archaeology and Prehistory, University of Sheffield, 1996

Relevant Experience/ Key Qualifications

My work at OA North is based around my research skills and specialist knowledge of heritage report-writing, legislation and project development. I produce conservation management plans, buildings and historic landscape surveys and condition reports, archaeological desk-based assessments, heritage impact assessments, post-excavation analyses and publications.

My Postgraduate Diploma in Conservation of the Historic Environment has provided me with up-to-date knowledge of designation, legislative and planning policy and the production of heritage reports. I am familiar with archaeology and buildings conservation legislation and development control issues relating to designated buildings, monuments and archaeological areas.

I have wide-ranging experience of the historic environment sector. Before joining OA North in 2015, I was self employed and ran a buildings conservation business between 2005 and 2015. Between 1994 and 2006, I trained and worked as an academic and field archaeologist and was employed by various archaeological field units and the University of Sheffield Department of Archaeology alongside my academic studies.

My academic qualifications and practical experience in buildings survey and conservation have provided me with a comprehensive understanding of the archaeological record. I have extensive experience of the archaeology of urban medieval sites, post-medieval and early modern buildings and industrial remains and in-depth knowledge of architectural history and the development of buildings and archaeological landscapes.

My work in buildings conservation (predominantly undertaken within listed buildings) included consultancy advice on building repairs using traditional materials and methods, the production of condition reports and materials specifications, and negotiating with contractors, clients and curatorial bodies.

Deriving in part from my PhD, *Neolithic and Bronze Age Landscapes of Cumbria*, my particular research interests focus on prehistoric landscape archaeology, in which I have considerable experience.

I am a co-editor of the *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society* (responsible for archaeological contributions) and I serve on the committee of the *Cumbria Vernacular Buildings Group*.

Employment

June 2015-present: Oxford Archaeology North, Heritage Management Services Project Officer. Landscape projects, buildings surveys, conservation management plans, desk-based heritage and archaeological assessments, project designs, post-excavation assessment, analysis and publications.

August 2005-June 2015: Self-employed, Jack in the Green Lime. I ran a buildings conservation business specialising in the repair of traditionally constructed buildings. Main responsibilities: project management, tendering, consultancy and report writing and practical lime work.

September-December 2005: Site Assistant, Exeter Archaeology. Excavation of a Roman and Medieval urban site at Princesshay, Exeter.

March 2004, July and September 2003 & March 2002: Co-director, University of Sheffield/National Trust. Direction and supervision of post-graduate students undertaking landscape survey and excavation of Prehistoric features on Sizergh Fell, Cumbria. Direction and supervision of volunteers excavating a Late Neolithic/ Early Bronze Age sand dune occupation site at Roanhead, Cumbria.

November 2002-January 2003: Assistant Archaeologist, National Trust North West Region Audit of historic buildings and archaeological sites.

June 2002 & August 2001: Supervisor, University of Sheffield. Direction and supervision of undergraduate students excavating a Medieval longhouse for Bradbourne Landscape Project.

January 2001, December 2000, November 1998: Project Assistant, ARCUS. Excavation of Post-Medieval and 19th century industrial sites in Sheffield.

November 2000-August 1999: Experienced Excavator, Norfolk Archaeological Unit. Supervision and excavation of Medieval urban sites in Norwich (including Norwich Library Millennium site, Cathedral Close and Norwich Castle).

Publications

2019 Dickson, A. Brown, F. & Evans, H. Crossing the divide: raw material use in the north-west of the British Isles in the late Mesolithic and Neolithic, in A. Teather, P. Topping and J. Baczkowski (eds.) *Mining and Quarrying in Neolithic Europe: A Social Perspective*, Neolithic Studies Group Seminar Papers 16, 149-162

Evans, H, 2018 An early Neolithic occupation site at Holbeck Park Avenue, Barrow-in-Furness, *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society* 3, 18, 1-22

Brown, F, & Evans, H. 2018. Strands (or Broad Span) bloomery, Wasdale, *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society*, 3, 18, 294-301

Evans, H, 2011 Social and Geographical Scale: Regionality and the Cumbrian stone circles. In A. Jones & G. Kirkham (eds.) *Beyond the Core: Reflections on Regionality in Prehistory*, Oxford

Evans, H, 2008 Neolithic and Bronze Age Landscapes of Cumbria. *British Archaeological Report* 463, Oxford

Evans, H, 2008 After the Axe: Ways into the upland landscapes of Cumbria. In A. Chadwick (ed.) Recent approaches to the archaeology of land allotment. *British Archaeological Report* (International Series) 1875, Oxford: 73-87

Evans, H, 2004 Where is the Cumbrian Neolithic? In V. Cummings & C. Fowler (eds.) *The Neolithic of the Irish Sea: Materiality and traditions of Practise*, Oxford

Evans, H, 2004 Who's afraid of the big bad woods? Forest wilderness in the middle ages. In A. Chadwick (ed.) *Stories from the Landscape: Archaeologies of Inhabitation*. British Archaeological Report (International Series) 1238, Oxford

Edmonds, M. & Evans, H. 2007 Made and Found: Cairns and natural mounds on Sizergh Fell. In P. Cherry (ed.) *Studies in Northern Prehistory: Essays in Memory of Clare Fell*. Cumberland and Westmorland Antiquarian and Archaeological Society Extra Series; Vol. XXXIII

CEARA SHIELDS



SENIOR ENVIRONMENTAL CONSULTANT
ENVIRONMENTAL PLANNING & ASSESSMENT
BUILDING CONSULTANCY

T +44 (0)20 7182 3271
M +44 (0)7919 335051
ceara.shields@cbre.com

BACKGROUND AND CURRENT ROLE AT CBRE

Ceara joined the Environmental Planning and Assessment team at CBRE in March 2017 having spent over four years working in a medium-sized multidisciplinary engineering consultancy based in the UK.

Ceara has worked on a range of projects from domestic residential-led mixed-use urban regeneration schemes to overseas industrial sites. She is experienced in Environmental Impact Assessment (EIA) coordination, socio-economic impact assessment (SIA), health impact assessment (HIA) and liaison with technical specialists. Her socio-economic experience includes calculating population and child yield, and assessing employment generation, additionality, housing demand and the impact on local social infrastructure including schools, healthcare facilities and open space and playspace.

Ceara is a member of the Institute of Environmental Management and Assessment (IEMA).

EXPERIENCE

Charlton Riverside, Royal Borough of Greenwich

Appointed by Rockwell Residential to coordinate the EIA process and author the resulting ES, including the socio-economic chapter, to accompany the planning application for the redevelopment of an existing industrial site, in order to commence the implementation of the Charlton Riverside Masterplan. This phase includes the demolition of existing buildings and construction of approximately 1,000 residential units, with commercial and community floorspace.

West End Green & 14-17 Paddington Green, City of Westminster

Appointed on behalf of Berkeley Group to provide the socio-economic assessment of this scheme comprising up to 652 residential units and commercial space. The scheme was consented in April 2016 but as a result of the addition of adjacent 14-17 Paddington Green has been re-assessed.

Hale Wharf, London Borough of Haringey

Appointed by Muse Developments and the Canal & River Trust to coordinate the EIA process and author the resulting ES, including the socio-economic chapter, for the demolition of existing industrial buildings and construction of around 500 residential units in blocks ranging from 4 to 20 storeys with commercial floor space, parking and retention of three commercial barges.

Fitzpatrick House, London Borough of Islington

Appointed by Tibbalds Planning and Urban Design to provide the health impact assessment of this scheme comprising the redevelopment of an existing late 80s office building private office space and ancillary retail space.

Woodside Quarry, Horsforth, Leeds

Appointed by Burford Group Limited to coordinate the EIA process and author the resulting ES, including the socio-economic chapter, to accompany a planning application for the redevelopment of a 20 hectare former stone quarry encompassed by an ancient woodland. The development included the substantial reprofiling of the topography and construction of up to 415 residential units and commercial floorspace.