

# Appendix 1-1

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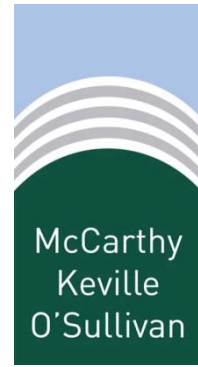
Curriculum Vitae



## CURRICULUM VITAE

### MICHAEL WATSON

*Michael Watson is Project Director and head of the Environment Team in McCarthy Keville O'Sullivan (MKO). Michael has extensive experience as project strategy advisor & coordinator on large multi-disciplinary project teams on complex projects requiring EIS/EIAR, EPA Licence application's, hydrogeological assessments, environmental due diligence and general environmental assessment on behalf of clients in the wind farm, waste management, public sector, commercial and industrial sectors nationally. Michaels key strengths include project strategy advice, project management and liaising with the relevant local authorities, Environmental Protection Agency (EPA) and statutory consultees as well as coordinating the project teams and sub-contractors. Michael is a key member of the MKO senior management team and as head of the Environment Team has responsibilities to mentor various grades of team members, foster a positive attitude and promote continuous professional development for employees.*



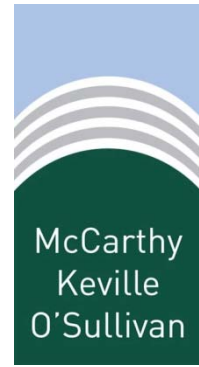
<b>Current Role</b>	Project Director
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>MA Environmental Resource Management, Geography, from National University of Ireland, Maynooth (1999).</li> <li>BA in Geography and Economics, NUI Maynooth (1998)</li> </ul>
<b>Memberships</b>	<ul style="list-style-type: none"> <li>Member of IEMA, a Chartered Environmentalist (CEnv)</li> <li>Member of IGI, a Professional Geologist (PGeo)</li> <li>Member of CIWM, a Chartered Waste Manger (MCIWM)</li> </ul>
<b>Years of Experience</b>	<ul style="list-style-type: none"> <li>Assistant Grade – Geological Survey Ireland – (1999-2000)</li> <li>Assistant - Senior Environmental Consultant – O'Callaghan Moran Environmental &amp; Hydrogeological (2001 – 2014)</li> <li>Project Director – McCarthy Keville O'Sullivan – (2014-Present)</li> </ul>
<b>Key Strengths &amp; Areas of Expertise</b>	<p>Michaels key strengths include project strategy advice for a wide range and scale of projects, project management and liaising with the relevant local authorities, Environmental Protection Agency (EPA) and statutory consultees as well as coordinating the project teams and sub-contractors.</p> <p>Michael's key areas of expertise include managing Environmental Impact Assessments, EPA Licence applications, hydrogeological assessments, environmental due diligence and general environmental assessment on behalf of clients in the wind farm, waste management, public sector, commercial and industrial sectors nationally.</p>
<b>Role in MKO &amp; Relevant Experience</b>	<p>Michael is a key member of the MKO senior management team and as head of the Environment Team has responsibilities to mentor various grades of team members, foster a positive attitude and promote continuous professional development for employees.</p> <p>As Project Director, Michael's responsibilities include coordinating large project teams to deliver technically robust and environmentally sound assessments for all ranges of project types and scales and providing project strategy advice to clients in both the private and public sectors.</p>
<b>Personal Skills &amp; Achievements</b>	<p>In 2015, Michael was interviewed by a panel of professional geologists from the Institute of Geologists Ireland and was awarded Professional Geologist status.</p> <p>In 2017, Michael completed the application process and was interviewed by a panel from the Institute of Environmental Management &amp; Assessment (IEMA) UK and was accepted as a Chartered Environmentalist.</p>



CURRICULUM VITAE

ÓRLA MURPHY

*Órla Murphy is an Environmental Scientist with McCarthy Keville O' Sullivan Ltd. with nearly 2 years of experience in private consultancy. Órla took up her position with McCarthy Keville O' Sullivan in January 2018. Órla's key strengths and expertise are Environmental Protection and Management, Environmental Impact Statements, Project Management, Renewable Energy and Peatland Management.*



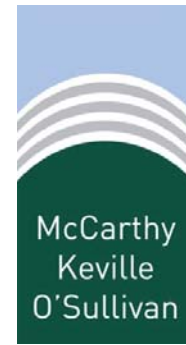
<b>Current Role</b>	Environmental Scientist
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>• MSc. (Hons) Environmental Protection and Management, University of Edinburgh.</li> <li>• BSc. (Hons) Geography, Queens University Belfast.</li> </ul>
<b>Memberships</b>	<ul style="list-style-type: none"> <li>• Graduate Member of IEMA</li> </ul>
<b>Years of Experience</b>	<ul style="list-style-type: none"> <li>• 2018 – Present, Environmental Scientist, McCarthy Keville O'Sullivan.</li> <li>• 2015 – 2017 – Environmental Project Assistant, ITP Energised, Edinburgh.</li> </ul>
<b>Key Strengths &amp; Areas of Expertise</b>	<p><b>Project Management:</b> Involved in managing and assisting in a variety of wind energy and residential projects. This involved liaison with subcontractors and other team members in order to successfully deliver projects.</p> <p><b>Field Work and Site Visits:</b> Carried out fieldwork in various areas, in particularly peat probing and identification of onsite conditions to aid Peat Management Plans and Peat Slide Risk Assessments. Additional survey work includes use of ISCO water pollution samplers, installation of dipwell monitors and headspace sampling regarding surface water levels and instream DOC concentrations.</p> <p><b>Desk studies:</b> Carrying out desk studies in a wide range of environmental topics, including hydrology and geology, archaeology and cultural heritage and landscape and visual. These desk studies mainly feed into larger reports.</p> <p><b>Report Writing:</b> Writing ER, EIA and chapters which have been used for a variety of projects, from energy infrastructure applications, to flood relief schemes and hydrological monitoring.</p> <p><b>GIS Mapping:</b> Fully trained in the use of GIS for producing maps, using spatial analyst and terrain mapping for topography and slope figures used as part of various reports.</p> <p><b>Peatland Environments:</b> Identification of bogland species both in Northern Ireland and Scotland, ability to measure and understand the impact of water table on bog conditions, understanding of restoration and protection methods within peatland ecosystems as well as general legislation involved in protecting these areas. I have then carried out peatland assessments, namely peat management plans, peat slide risk assessments and various technical GIS analysis on deep peat sites.</p>
<b>Role in MKO &amp; Relevant Experience</b>	<ul style="list-style-type: none"> <li>• Production of ER and EIAR chapters for a wide range of project applications, from small developments to large renewable energy applications.</li> <li>• Completing field surveys/sampling for a variety of topics/areas</li> <li>• Project management for a variety of project types</li> </ul>
<b>Personal Skills &amp; Achievements</b>	<ul style="list-style-type: none"> <li>• Co-author of data published in regard to instream DOC concentrations within a restored peatland site in Scotland.</li> <li>• Trained in Level 1 and Level 2 Flood Risk Assessment.</li> </ul>



CURRICULUM VITAE

LORRAINE MEEHAN

*Lorraine Meehan is a Project Environmental Scientist with McCarthy Keville O'Sullivan Ltd., with over 10 years' experience in the assessment of a wide range of energy and infrastructure-related projects. Lorraine's key strengths and expertise include Project Management, Site Design and Environmental Assessment, and Stakeholder Engagement.*

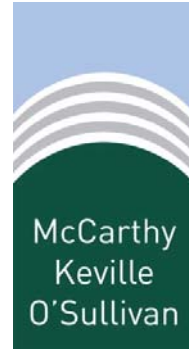


<b>Current Role</b>	Project Environmental Scientist
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>Bachelor of Science (Hons.) Environmental Science, NUI Galway (2006)</li> </ul>
<b>Years of Experience</b>	<ul style="list-style-type: none"> <li>2015 – Present Project Environmental Scientist, McCarthy Keville O'Sullivan</li> <li>2014 – 2014 Environmental Planner, Stantec Consulting (Calgary, Canada)</li> <li>2007 – 2014 Assistant Environmental Scientist, McCarthy Keville O'Sullivan</li> </ul>
<b>Key Strengths &amp; Areas of Expertise</b>	<p><b>Project Management:</b> Management and coordination of multi-disciplinary project teams on the environmental assessment of a wide range of development and strategy-related projects and plans, including the preparation of Environmental Impact Statements / Environmental Impact Assessment Reports (EISs / EIARs), Strategic Environmental Assessment (SEA) Environmental Reports, Screening and Scoping Reports, and Constraints &amp; Feasibility and Site Selection Studies.</p> <p><b>Site Design and Environmental Assessment:</b> Preparation of constraints and feasibility mapping and reports to inform site selection studies, the assessment of impacts and alternatives, and identification of the optimum proposed site design and layout.</p> <p><b>Stakeholder Engagement:</b> Organisation of extensive scoping and consultation exercises, including engagement with the relevant authorities and stakeholders on proposed and ongoing projects, preparation of Screening and Scoping Reports, preparation of information for public consultation documents, meetings and websites, and organisation of and attendance at public consultation meetings.</p>
<b>Role in MKO &amp; Relevant Experience</b>	<ul style="list-style-type: none"> <li>Project Manager of the Environmental Assessment of a wide range of projects and plans including: <ul style="list-style-type: none"> <li>Numerous renewable energy, infrastructural and commercial/industrial projects across Ireland;</li> <li>Strategic Environmental Assessment (SEA) of land-use and local economic and community plans (LECPs).</li> </ul> </li> <li>Significant contribution to EISs and SEA Reports, including baseline and impact assessment report-writing and mapping, and coordination of final project outputs.</li> </ul>
<b>Personal Skills &amp; Achievements</b>	<ul style="list-style-type: none"> <li>Contributed to the successful achievement of planning permission for numerous projects, including: <ul style="list-style-type: none"> <li>Large-scale projects of national and regional importance, e.g. Cloncreen Wind Farm, Co. Offaly (63 MW), Slievecallan Wind Farm, Co. Clare (72 MW), Solid Fuel Manufacturing Facility, Foynes Port (150,000 tonnes per annum)</li> <li>Small and medium-scale projects, e.g. Coillte Single Turbines (Co. Cork, Co. Roscommon), 38 kV Grid Connection (Co. Cork)</li> </ul> </li> <li>Strong organisational skills, with an ability to coordinate and participate effectively as part of a larger multi-disciplinary team to achieve project goals.</li> </ul>



# CURRICULUM VITAE

Jimmy Green



*Jimmy Green is a Senior Planner with McCarthy Keville O'Sullivan Ltd. and is a professional planner with over 18 years of experience in both private practice and local authorities. Prior to taking up his position with McCarthy Keville O'Sullivan in 2004, Jimmy worked as an Assistant Planner, Executive Planner and Senior Executive Planner in Galway County Council and as an Assistant Planner in Donegal County Council. Jimmy is primarily involved in co-ordinating and preparing Environmental Impact Statements, leading significant and complex development proposals through the planning process and has a strong ability to work with many other disciplines and individuals, as well as with Council officials, elected members and members of the public. Jimmy also has significant experience in dealing with Strategic Infrastructure Development proposals and bringing them through the planning process directly with An Bord Pleanála.*

<b>Current Role</b>	Senior Planner
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>▪ Masters in Regional and Urban Planning (MRUP); University College Dublin 1999</li> <li>▪ Bachelor of Arts Degree, Human and Physical Geography 1997</li> <li>▪ Member of Irish Planning Institute (MIPI)</li> </ul>
<b>Years of Experience</b>	<ul style="list-style-type: none"> <li>▪ 2004 – Present, Senior Planner, McCarthy Keville O'Sullivan Ltd.</li> <li>▪ 2003 – 2004, A/Senior Executive Planner, Galway County Council</li> <li>▪ 2002 – 2003, Executive Planner, Galway County Council</li> <li>▪ 2001 – 2002, Assistant Planner, Galway County Council</li> <li>▪ 1999 – 2001, Assistant Planner, Donegal County Council</li> </ul>
<b>Relevant Experience</b>	<p>Senior Planning Consultant on significant range of Infrastructure, Retail, Housing and Commercial Projects. Listed below are a sample range of projects in which Jimmy has been involved through the co-ordination and preparation of Planning Applications, Environmental Impact Statements/Environmental Impact Assessment Reports.</p> <p><b>EIS/EIAR Projects:</b></p> <ul style="list-style-type: none"> <li>▪ Letterpeak Wind Farm (Galway)</li> <li>▪ Lettergunnet Wind Farm (Galway)</li> <li>▪ Lettermuckoo Wind Farm (Galway)</li> <li>▪ Esk Wind Farm Wind Farm (Cork)</li> <li>▪ Knocknagoum Wind Farm (Kerry)</li> <li>▪ Killaveenoge Wind Farm, (Cork)</li> <li>▪ Shehy More Wind Farm, (Cork) and its associated cable route</li> <li>▪ Waste Facility, Carrick-On-Suir, (Carrick Town Council)</li> <li>▪ Anaerobic Digestion Facility, Tuam (Galway)</li> <li>▪ Town Centre Mixed Use Development, Tuam (Co. Galway).</li> <li>▪ Magheramore Wind Farm, County (Mayo),</li> <li>▪ Cloontooa Wind Farm, County (Mayo)</li> <li>▪ Ballykinava Wind Farm, (Mayo)</li> </ul>

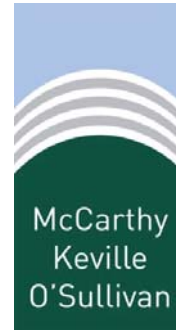
	<ul style="list-style-type: none"> <li>▪ Ballyhorgan Wind Farm, (Kerry)</li> <li>▪ Cahermurphy Wind Farm, (Clare)</li> <li>▪ Glenmore Wind Farm, (Clare)</li> <li>▪ Esk Extension Wind Farm (Cork)</li> <li>▪ Knockalough Wind Farm, (Galway)</li> <li>▪ Cleanrath Wind farm, (Cork)</li> <li>▪ Carrigarierk Wind Farm, (Cork)</li> <li>▪ Dromnahough – Lenalea Wind Farm Cable Route, Co. Donegal</li> <li>▪ Shehy More Wind Farm Cable Route, Co. Cork</li> <li>▪ Magheramore, Ballykinava and Cloontooa Wind Farms Cable Route connections, Mayo</li> </ul> <p><b>Strategic Infrastructure Development EIS/EIAR Applications</b></p> <ul style="list-style-type: none"> <li>▪ Carrickaduff Wind Farm, (Co. Donegal).</li> <li>▪ Ardderroo Wind Farm, (Co. Galway),</li> <li>▪ Cloncreen Wind Farm (Co. Offaly);</li> <li>▪ Meenbog Wind Farm (Co. Donegal)</li> </ul> <p>Jimmy has been the EIS co-ordinator and Senior Planner for a significant number and wide range of private and public sector clients, and experience includes Planning Application Project Management, Environmental Impact Assessment Report Preparation, Retail Impact Assessment, Strategic Infrastructure Development (including Section 182A development) as well as extensive involvement in preparing appeals and responses to An Bord Pleanála, condition compliance and expert witness/Judicial Review processes.</p>
<p><b>Practical Skills and Aptitudes</b></p>	<ul style="list-style-type: none"> <li>▪ In excess of 18 years’ planning experience, including 5 years with Local Authorities and 14 years in the Private Sector</li> <li>▪ Significant expertise in planning research, analysis &amp; plan preparation.</li> <li>▪ Ability to consider complex issues and proposals objectively and logically.</li> <li>▪ Ability to work on own initiative and as part of a multi-disciplinary team to meet client needs.</li> <li>▪ Solution orientated – achieving effective results within given timescales.</li> <li>▪ High standards of professional integrity and competence.</li> <li>▪ Has a wide range of experience in project managing multi-disciplinary teams to co-ordinate successful planning outcomes</li> </ul>
<p><b>Management/ Supervision</b></p>	<ul style="list-style-type: none"> <li>▪ Project Manager of in-house planning team</li> <li>▪ Experience as lead consultant on large multidisciplinary project design teams - including from project inception, feasibility &amp; design to construction</li> <li>▪ Extensive experience in Local Government and private sector</li> </ul>
<p><b>Interpersonal &amp; Communication Skills</b></p>	<ul style="list-style-type: none"> <li>▪ Significant experience in public consultation events</li> <li>▪ Ability to communicate at all levels</li> <li>▪ Ability to interact and co-ordinate within multidisciplinary project teams.</li> </ul>
<p><b>Licenses Held</b></p>	<ul style="list-style-type: none"> <li>▪ Full Clean Driving Licence</li> <li>▪ Safepass</li> <li>▪ Corporate Member of Irish Planning Institute</li> </ul>
<p><b>Physical / Other</b></p>	<ul style="list-style-type: none"> <li>▪ Motivated &amp; solution orientated</li> <li>▪ Strong analytical skills</li> <li>▪ Strong inter-personal and team leadership skills</li> <li>▪ High standard of professional knowledge and CPD</li> <li>▪ Genuine interest in planning issues</li> <li>▪ Extensive experience across public and private sector projects and clients</li> <li>▪ Corporate Member of IPI</li> </ul>



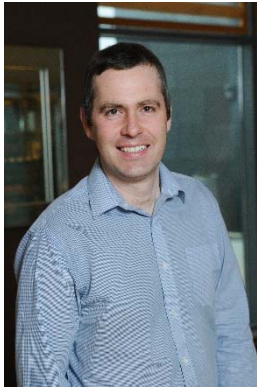
## CURRICULUM VITAE

PAUL SWEENEY

*Paul Sweeney is a Graduate Planner at McCarthy Keville O'Sullivan, Planning & Environmental Consultants. Paul holds a BA (Hons) in Geography and English as well as a Masters in Planning and Sustainable Development from University College Cork where he graduated in 2017. Since joining McCarthy Keville O'Sullivan, Paul has developed experience in a range of sectors through various projects and planning issues with a current focus within the Environmental and Energy sector.*



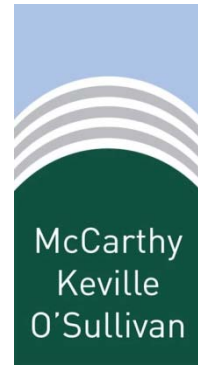
<b>Current Role</b>	Graduate Planner
<b>Qualifications</b>	<p>BA (Hons) in Geography and English;</p> <ul style="list-style-type: none"> <li>• Development of Cities</li> <li>• Economic and Rural Geography</li> <li>• Global Geography</li> <li>• Historical Geographies of the City</li> </ul> <p>Masters in Planning and Sustainable Development;</p> <ul style="list-style-type: none"> <li>• Technical and Political Knowhow,</li> <li>• Urban and Rural Development,</li> <li>• Legal Knowhow</li> <li>• Urban Design,</li> <li>• Sustainability Across Various Scales,</li> <li>• Spatial Literacy in Design;</li> <li>• Introduction to Planning Theory and Practice;</li> <li>• Property Development;</li> <li>• Community Engagement</li> </ul>
<b>Years of Experience</b>	April 2018- Present with McCarthy Keville O'Sullivan
<b>Relevant Experience</b>	April 2018- Present: Graduate Planner with McCarthy Keville O'Sullivan, Galway.
<b>Practical Skills and Aptitudes</b>	<p>Compiling various reports</p> <p>Experience in planning research and analysis</p> <p>Gathering of data</p>
<b>Management/ Supervision</b>	Coordination across various teams
<b>Interpersonal &amp; Communication Skills</b>	<p>Strong interpersonal skills;</p> <p>Strong leadership skills;</p> <p>Good written and verbal communication skills;</p> <p>Ability to work by on my own merit and as part of a multi-disciplinary team</p> <p>Strong presentation skills</p>
<b>Licenses Held</b>	Full clean driving licence



## CURRICULUM VITAE

### OWEN CAHILL

*Owen is an Environmental Engineer with McCarthy O'Sullivan Ltd. with over 10 years of experience in the Environmental Management and Construction Industries. Owen's wide ranging multi sector experience has provided him with specialist knowledge and understanding of the challenges in the planning and delivery of developments with the minimum environmental impact and with practicality and constructability in mind. Owen has been involved as a Project Manager on a range of energy infrastructure, commercial, residential, waste facility and quarry projects as well as managing the licensing requirements of a number of EPA licensed facilities.*



<b>Current Role</b>	Environmental Engineer
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>Bachelor of Science (Hons) Construction Management, Galway Mayo Institute of Technology (2004)</li> <li>Master of Science Construction Management, Galway Mayo Institute of Technology (2007)</li> <li>Master of Science Environmental Engineering, Queens University Belfast (2010)</li> </ul>
<b>Memberships</b>	<ul style="list-style-type: none"> <li>Affiliate Member of the Institute of Environmental Management &amp; Assessment (2016)</li> </ul>
<b>Years of Experience</b>	<ul style="list-style-type: none"> <li>Environmental Technician, Pentland Macdonald, Holywood, Co. Down (December 2010 – May 2011)</li> <li>Environmental Health &amp; Safety Officer, Kepak Group, Clonee, Co. Meath (June 2011- March 2012)</li> <li>Environmental Engineer, McCarthy Keville O'Sullivan, (October 2013- present)</li> </ul>
<b>Key Strengths &amp; Areas of Expertise</b>	<p>Owen's key strengths include his multi sector professional experience on projects with the ability to adapt to the requirements of a project throughout the planning, construction and operational phases. and liaising with the relevant local authorities, Environmental Protection Agency (EPA) and statutory consultees as well as coordinating the project teams and sub-contractors.</p> <p>Owen's key areas of expertise are in project management, environmental impact assessment, wind energy &amp; solar energy construction &amp; environmental management planning and waste permit management. on behalf of clients in the wind farm, waste management, public sector, commercial and industrial sectors nationally.</p>
<b>Role in MKO &amp; Relevant Experience</b>	<p>Owen plays a large role in the management and confidence building of junior members of staff and works as part of a large multi-disciplinary team to produce EIS/EIAR Reports.</p> <p>As a Project Manager, Owen's responsibilities include coordinating project teams to deliver technically robust and environmentally sound assessments for all ranges of project types in both the private and public sectors.</p>
<b>Personal Skills &amp; Achievements</b>	<ul style="list-style-type: none"> <li>Contributed to the launch of the MKO Water Quality Monitoring Service unit with the use of in-situ continuous water quality loggers which have been successfully deployed at a number of construction projects to provide current water quality data.</li> <li>Strong organisational skills, with an ability to coordinate and participate effectively as part of a larger multi-disciplinary team to achieve project goals.</li> </ul>

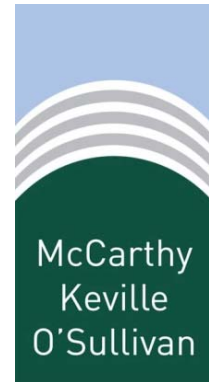




## CURRICULUM VITAE

Eoin Gilson

*Eoin is a Graduate Environmental Scientist with McCarthy O'Sullivan Ltd. who took up his position in October 2018. Eoin holds a BSc (Hons) in Microbiology and a MSc (Hons) in Applied Environmental Science. Eoin has specialist knowledge in environmental field surveys, data analysis and renewable energy systems. Eoin's key strengths and areas of expertise are in data management, report writing and environmental monitoring and management. On joining MKO Eoin has been involved on a range of renewable energy infrastructure projects, working as part of a large multi-disciplinary team to produce EIA Reports.*

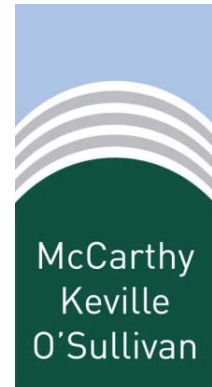


<b>Current Role</b>	Graduate Environmental Scientist
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>• MSc (Hons) Applied Environmental Science</li> <li>• BSc (Hons) in Microbiology</li> </ul>
<b>Memberships</b>	<ul style="list-style-type: none"> <li>• CIEEM – Graduate Membership</li> </ul>
<b>Years of Experience</b>	<ul style="list-style-type: none"> <li>• 0-1 years</li> </ul>
<b>Relevant Experience</b>	<ul style="list-style-type: none"> <li>• Working on a range of renewable energy infrastructure projects, working as part of a large multi-disciplinary team to produce EIA Reports.</li> <li>• Completed a master's research project to test the biogas production potential of perennial wetland grasses and a cost benefit analysis of the economic viability.</li> </ul>
<b>Practical Skills and Aptitudes</b>	<ul style="list-style-type: none"> <li>• Data management</li> <li>• Report writing</li> <li>• Environmental monitoring and management</li> </ul>
<b>Management/ Supervision</b>	<ul style="list-style-type: none"> <li>• Coordination across various teams</li> </ul>
<b>Interpersonal &amp; Communication Skills</b>	<ul style="list-style-type: none"> <li>• Effective written and verbal communicator</li> <li>• Excellent ability to take direction</li> <li>• Ability to work on own initiative and as part of a multi-disciplinary team</li> </ul>
<b>Licenses Held</b>	<ul style="list-style-type: none"> <li>• Full Clean Driving Licence</li> <li>• Safe Pass</li> </ul>
<b>Physical / Other</b>	<ul style="list-style-type: none"> <li>• Physically fit and healthy</li> </ul>



# CURRICULUM VITAE

## DAVID MCNICHOLAS



*David McNicholas is a Senior Ecologist at McCarthy Keville O'Sullivan, Planning & Environmental Consultants. David holds a BSc (First Class Hons) Environmental Science and an MSc (Hons) Environmental, Health and Safety Management. David specialises in the preparation of Environmental Impact Assessment Reports (EIARs), Ecological Impact Assessments (EclAs) and Natura Impact Statements (NISs) including ecological surveys and monitoring. David has worked on all phases of wind farm development from feasibility/ scoping, ecological surveys, preparation of full EISR chapters, construction phase environmental monitoring and post-construction ecological monitoring. David has worked as an Ecological Clerk of Works (ECoW) during the construction phase of ten large scale wind farms in Ireland and Northern Ireland, gained significant experience on the implementation of the environmental and ecological measures.*

<b>Current Role</b>	Senior Ecologist
<b>Qualifications</b>	MSc (Hons) Environmental, Health and Safety Management   IT Sligo BSc (First Class Hons) Environmental Science   IT Sligo
<b>Years of Experience</b>	7 years professional ecological consultancy experience with a proven ability to manage projects from conception/ scoping stage to delivery of key project outputs in accordance with statutory requirements, full ecological and ornithological EIAR chapters.
<b>Relevant Experience</b>	<ul style="list-style-type: none"> <li>• Experience gained on a wide variety of projects including 30 wind farms, numerous quarries, road realignment projects, solar farms, tourist amenities, community development, education and training.</li> <li>• Highly experienced senior ornithologist and ecologist for a wide variety of projects.</li> <li>• Specialising in the preparation of EIARs, EclAs and NISs including ornithological and ecological surveys and monitoring for a wide variety of projects and clients.</li> <li>• Experience in managing the technical aspects of delivery as well as project management including business development, client management, financial and risk management.</li> </ul>
<b>Practical Skills and Aptitudes</b>	<ul style="list-style-type: none"> <li>• Highly experienced ornithologist, previous position as Senior Ornithologist.</li> <li>• Bat specialist</li> <li>• Habitat assessment</li> <li>• Preparation of EIAR ornithology and ecology chapters</li> <li>• Appropriate Assessment Screening Reports (AASR)</li> <li>• Natura Impact Statements (NIS),</li> <li>• Ecological Clerk of Works (ECoW)</li> <li>• Due diligence ecological surveys</li> <li>• Water sampling and reporting</li> </ul>
<b>Management/Supervision</b>	<ul style="list-style-type: none"> <li>• Management, execution and monitoring of all aspects of ornithological and ecological field surveys</li> <li>• Training and development in-house and externally</li> <li>• Project financial management</li> <li>• Client relationship management</li> <li>• Business development, including tender preparation</li> </ul>

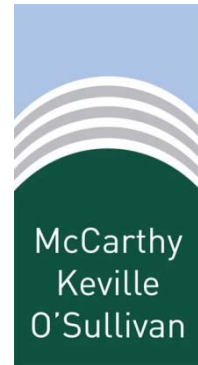
<b>Working with People &amp; Communication Skills</b>	<ul style="list-style-type: none"> <li>• Experienced liaising with landowners for access to sites, members of the public as part of outreach/public info initiatives</li> <li>• Effective and clear communicator</li> <li>• Proven ability to fit into management framework and work with a team coordinating efficient collation of data to achieve project aims</li> <li>• Ability to work independently and manage personal deadlines</li> <li>• Experience in report preparation, contributing data for inclusion in major EclA reports, and co-working with ecologists.</li> </ul>
<b>Licenses/Certs</b>	<ul style="list-style-type: none"> <li>• Full clean driving license</li> <li>• Holds a number of licences from the National Parks and Wildlife Service (NPWS) for protected species surveys and photography.</li> <li>• C-Permit holder with the British Trust for Ornithology (Experienced bird ringer)</li> <li>• Current safe pass holder</li> <li>• Up to date Manual Handling cert</li> </ul>



## CURRICULUM VITAE

### PAT ROBERTS

*Pat Roberts is a Senior Ecologist and director of the Ecology team with McCarthy O'Sullivan Ltd. with over 12 years' experience. Pats key strengths include his depth of knowledge and experience of a wide range of ecological and biodiversity topics. He currently manages the ecological team within MKO and ensures that the outputs from that team are of a very high standard and meet the requirements of the clients.*



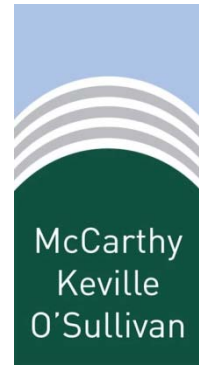
<b>Current Role</b>	Senior Ecologist/Director of Ecology
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>BTEC N. Dip (Countryside Management) (1995)</li> <li>B.Sc. (Environmental Science) (2005) National University of Ireland, Galway</li> </ul>
<b>Memberships</b>	<ul style="list-style-type: none"> <li>Member of Chartered Institute of Ecology and Environmental Management (CIEEM)</li> </ul>
<b>Years of Experience</b>	<ul style="list-style-type: none"> <li>12 years post graduate experience working as a professional ecologist</li> <li>Over 10 years previous experience working as a nature conservation warden, tree surgeon/surveyor</li> </ul>
<b>Key Strengths &amp; Areas of Expertise</b>	<ul style="list-style-type: none"> <li>In depth knowledge and experience in ecological surveying for a wide range of habitats and species including Habitats, Bats, Mammals, Marsh Fritillary, Freshwater Pearl Mussel, Invasive Species, Aquatic Macro-invertebrates</li> <li>Over 12 years post graduate experience of providing ecological services in relation to a wide range of developments at the planning, construction and monitoring stages</li> <li>Excellent understanding of the Appropriate Assessment process and the requirements thereof in relation to plans and projects.</li> <li>Level of knowledge and experience to provide advice and services tailored to the requirements of the client</li> </ul>
<b>Role in MKO &amp; Relevant Experience</b>	<ul style="list-style-type: none"> <li>Director of the Ecology team at MKO with responsibility for ensuring that the outputs from that team are of a very high standard and meet the requirements of the clients and relevant legislation and guidelines.</li> <li>Overseeing ecological assessments, Appropriate Assessment services and input into EIARs for numerous large scale developments including windfarms, flood relief schemes road projects, amenity, leisure and commercial projects</li> <li>Overseeing invasive species surveying, treatment and management</li> <li>Overseeing Ecological Clerk of Work services provided by the company for a variety of clients including Local Authorities, Private Contractors and Irish Water</li> </ul>
<b>Personal Skills &amp; Achievements</b>	<ul style="list-style-type: none"> <li>Twelve years ecological experience with eight years project management experience</li> <li>Proficient in use of MS Office programs, GIS Mapping Software, AutoCAD</li> <li>Certificate in Mammal Identification (Mammal Society)</li> <li>Freshwater Invertebrate Sampling (Field Studies Council)</li> <li>Bat Detector Workshop (Bat Conservation Ireland)</li> <li>Bats &amp; Arboriculture Training Course, (BCT &amp; Arboricultural Association)</li> <li>Assessing Forest Structure for Restoration Management Plans (CIEEM)</li> <li>Fresh Water Pearl Phase 1 &amp; Phase 2 Surveying (Evelyn Moorkens)</li> </ul>



## CURRICULUM VITAE

Erin Johnston

*Erin is an Assistant Ecologist with McCarthy O'Sullivan Ltd. with 4 years of post graduate experience in both private consultancy and research. Erin holds a BSc (Hons) in Ecology, a Masters in Ecological Assessment, and a PhD in Environmental Science. Since joining MKO Erin has been involved in a range of projects including solar and windfarm applications, small scale housing developments. Within MKO Erin plays a role in carrying out Stage 1 and Stage 2 Appropriate Assessment Reports and contributing to Environmental Impact Statements.*



<b>Current Role</b>	Assistant Ecologist
<b>Qualifications</b>	PhD, NUIG (2017) Geomalacus maculosus: An assessment of trapping methods, forestry management impacts, and feeding preferences MSc Ecological Assessment, UCC (2013) BSc (Hons) Environmental Science, NUIG (2012)
<b>Memberships</b>	British Ecological Society Irish Ecological Association Environmental Science Association of Ireland Bat Conservation Ireland Cork Nature Network
<b>Years of Experience</b>	4
<b>Key Strengths &amp; Areas of Expertise</b>	Kerry Slug survey Habitat mapping Plant and invertebrate identification Otter surveying Bat surveying Ecological Impact Assessment Appropriate Assessment
<b>Role in MKO &amp; Relevant Experience</b>	Stage 1 and Stage 2 Appropriate Assessment Reports and contributing to Environmental Impact Statements
<b>Personal Skills &amp; Achievements</b>	<ul style="list-style-type: none"> <li>• Lead author on one peer-reviewed scientific paper, and co-author on a further two</li> <li>• Previously held license to capture Kerry Slug</li> <li>• Presented at several national conferences</li> <li>• Safe Pass</li> <li>• Full driving license</li> </ul>



## CURRICULUM VITAE

### KATHRYN BLADE

*Kathryn Blade is a Landscape Architect with McCarthy Keville O'Sullivan Ltd. with 2 years' experience within private practice. Kathryn took up her position with McCarthy Keville O'Sullivan in July 2018. Kathryn's key strengths and expertise are Public Realm Design, Leisure and Residential Development, Landscape and Visual Impact Assessments and Landscape Masterplanning and Management.*



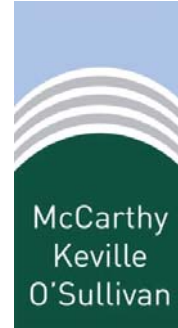
<b>Current Role</b>	Landscape Architect
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>BSc (Hons) Landscape Architecture, University College Dublin</li> </ul>
<b>Memberships</b>	<ul style="list-style-type: none"> <li>Licentiate Member, Landscape Institute (U.K.)</li> </ul>
<b>Years of Experience</b>	<ul style="list-style-type: none"> <li>2018 – Present. Landscape Architect, McCarthy Keville O'Sullivan Ltd.</li> <li>2018 – 2018. Graduate Landscape Architect, The Paul Hogarth Company, Belfast</li> <li>2017 – 2018. Graduate Landscape Architect, AECOM, Belfast</li> <li>2015 – 2016. Assistant Landscape Architect, AECOM, Belfast</li> </ul>
<b>Key Strengths &amp; Areas of Expertise</b>	<ul style="list-style-type: none"> <li>Specialist knowledge in Landscape and Visual Impact assessments for projects ranging from individual houses to large wind farms, landscape master-planning and management plans, strong computer-based expertise, drawing, design and graphics ability.</li> </ul>
<b>Role in MKO &amp; Relevant Experience</b>	<ul style="list-style-type: none"> <li>Since joining MKO Kathryn has been involved in projects such as energy infrastructure, extraction industry and residential projects. Within MKO Kathryn works as part of a large multi-disciplinary team to produce EIA Reports.</li> </ul>
<b>Personal Skills &amp; Achievements</b>	<ul style="list-style-type: none"> <li>Played a key role in the development of the greater Belfast area. She was part of the core team providing landscape master-planning and design services on a wide range of projects within the greater Belfast area as part of the urban villages initiative. The Urban Villages Initiative is a key action within the Northern Ireland Executive's Together: Building a United Community (TBUC) Strategy. It's designed to improve good relation outcomes and to help develop places where there has been a history of deprivation and community tension.</li> <li>Kathryn worked closely with all the members of the design team to create the masterplan for a mixed-use development in Bahrain. Initial phases of the masterplan have been brought from preliminary design to implementation on site. The scheme includes commercial streets, residential areas, parks, private and public beaches, play areas, hotels, shopping centre and cruise-ship terminal.</li> </ul>



## CURRICULUM VITAE

JOSEPH O'BRIEN

*Joseph O'Brien holds the position of CAD Technician with McCarthy Keville O'Sullivan Ltd. Since joining the company in June 2016. Prior to joining MKO, Joseph worked as a free-lance Modelmaker and CAD Technician. His previous experience included designing various models and props through CAD and then made them for various conventions such as Dublin Comic Con and Arcade Con.*



<b>Current Role</b>	CAD Technician
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>• BA Honors Level 8 Modelmaking, Design and Digital Effect, Institute of Art Design and Technology (IADT), Dun Laoghaire</li> <li>• City &amp; Guilds Level 3 2D &amp; 3D AutoCAD certificates</li> </ul>
<b>Years of Experience</b>	<ul style="list-style-type: none"> <li>• 5 years post graduate experience as a modelmaker, prop maker and Cad technician</li> </ul>
<b>Relevant Experience</b>	<ul style="list-style-type: none"> <li>• CAD Technician MKO (June 2016-present)</li> <li>• CAD Technician Simon J Kelly and Partners Architects (Work Experience April – May 2016)</li> <li>• Freelance Modelmaker and CAD Technician: Designed various models and props through CAD and then made them for various conventions for charity. (2009-2015)</li> </ul>
<b>Practical Skills and Aptitudes</b>	<p>Proficient</p> <ul style="list-style-type: none"> <li>• AutoCAD 2010-2016: 2D/3D drafting program</li> <li>• Making of replica Architectural miniatures, masks and props</li> <li>• Microsoft Word: written documents</li> <li>• Microsoft Power Point: presentation software</li> <li>• Adobe Photoshop: image editing and retouching program</li> <li>• Basic 3DS Max: 3D modelling and rendering software</li> <li>• Windows movie maker: digital video editing program</li> <li>• MapInfo Professional: graphic mapping &amp; analysis application</li> </ul>
<b>Management/ Supervision</b>	<ul style="list-style-type: none"> <li>• Responsible for making props for charity auctions at conventions such as Dublin Comic Con and Arcade Con (2009-2015)</li> <li>• Set assembler and dis-assembler for Dublin Comic Con (2010-2016)</li> </ul>
<b>Interpersonal &amp; Communication Skills</b>	<ul style="list-style-type: none"> <li>• Experience with working in groups for construction of props and sets</li> <li>• Experience in working with people from a variety of nationalities</li> <li>• Experience in making Architectural miniature elements for cityscape miniature with several people</li> </ul>
<b>Licenses Held</b>	<ul style="list-style-type: none"> <li>• City &amp; Guilds Level 3 2D &amp; 3D AutoCAD certificates</li> </ul>
<b>Physical / Other</b>	<ul style="list-style-type: none"> <li>• Performer in the Dublin St. Patrick's Day Parade</li> <li>• Costume Masquerade Judge at numerous conventions including Dublin Comic Con and Arcade Con</li> </ul>

**MICHAEL GILL**

B.A., B.A.I., M.Sc., Dip. Geol, P.Geo,  
MIEI, MCIWEM

DOB: 07/11/1974

22 Lower Main Street,  
Dungarvan,  
Co. Waterford.

Office: 058-44122 Mobile: 086-267 5989

[michael@hydroenvironmental.ie](mailto:michael@hydroenvironmental.ie)

Michael is a Civil Engineer and Hydrologist/Hydrogeologist with 18 years environmental and hydrology consultancy experience. Hydro-Engineering expertise includes:

- Wetland characterisation and impact assessments for Natura 2000 sites, including restoration options;
- Environmental impact assessments of numerous projects including landfills, quarries, gas pipelines, national infrastructure;
- Environmental assessments of numerous policies and plans including LAPs (Local Area Plans and SEAs);
- Wind Farms – EIA/EIS / peatland drainage and hydrology (65+ Ireland, 15+ N. Ireland);
- Hydrology, karst hydrogeology and Flood Risk Assessments;
- Drilling procurement management and supervision;
- Water resource assessment and development for regional and private schemes;
- Health and Safety roles including PSDP and PSCS;
- Source Protection Zone mapping for groundwater supplies;
- Hydrological and hydrogeological monitoring and modelling;
- Wastewater and environmental engineering;
- Assessment of river water quality and assimilative capacity assessments;
- Local Authority licensing of treated wastewater discharges;
- Subsoil hydrology, assessment of groundwater vulnerability and nutrient impact accounting;
- Design of stormwater, wastewater and constructed wetland systems including; Integrated Constructed Wetlands as advocated by the DoEHLG;
- Drainage systems and hydrology, including system design incorporating SuDS drainage features, water quality mitigations measures and flood attenuations and flood management systems; and,
- Providing expert hydro-engineering evidence at oral hearings, legal cases, and arbitrations.

Michael holds an honours degree in Civil and Environmental Engineering from Trinity College Dublin, as well as a research M.Sc. in Wetland Hydrology also from TCD. Michael also holds a diploma in Geology from University College Cork and a second M.Sc. in Applied Hydrogeology, from Newcastle University. Michael is a member of International Association of Hydrogeologists (IAH) and was a member of the conference sub-committee from 2003 until 2009. He is also a Member of Engineers Ireland (MIEI), a Member of the Chartered Institute of Water and Environmental Management (CIWEM) and a professional member of Institute of Geologists (IGI).

Previous project collaborators have included local authorities, private developers, environmental consultants, architects and civil engineering consultants requiring specialist hydrological and hydrogeological expertise. More frequently now we (as the hydro-consultants) form an integral part of the preparation of EIAR and AA/NIS and LAP/SEA documents with direct liaison with ecologists and planners. Michael is also an appointed Hydrogeologist on the IW Hydrogeology Framework, and we are currently undertaking 22 groundwater related projects located in the Southeast of Ireland.



## David Broderick

BSc, H. Dip Env Eng, MSc

DOB: 11/10/1978

22 Lower Main Street,

Dungarvan,

Co. Waterford.

Office: 058-44122 Mobile: 086-7843522

[david@hydroenvironmental.ie](mailto:david@hydroenvironmental.ie)

David Broderick is a hydrogeologist with 13 years experience which includes both the public and private sectors. Key areas of expertise are as follows:

- Wetland characterisation and impact assessments for Natura 2000 sites, including restoration options;
- Blanket bog and raised bog hydrology;
- Environmental Impact Assessments of numerous projects including landfills, quarries, gas pipelines, national infrastructure;
- Wind Farms – EIA/EIS / peatland drainage and hydrology (25+ Ireland, 10+ N. Ireland);
- Water resource assessment and development for regional and private schemes;
- Source Protection Zone mapping for groundwater supplies;
- Hydrological and hydrogeological monitoring and modelling;
- Assessment of river water quality and assimilative capacity assessments;
- Quarry dewatering and Environmental Impact Assessments;
- Hydrological and hydrogeological monitoring and modelling
- Design of stormwater, wastewater and constructed wetland systems including; Integrated Constructed Wetlands as advocated by the DoEHLG; and,
- Drainage systems and flood risk assessments, including system design incorporating SuDS drainage features, water quality mitigations measures and flood attenuations and flood management systems.

David holds a B.Sc. in Environmental Science, University of Wales, Aberystwyth (2001), as well as a H. Dip. Environmental Engineering, Trinity College Dublin (2004). David also completed a M.Sc. in Hydrogeology at University of Leeds (2006). David is a member of International Association of Hydrogeologists (IAH).

Previous project collaborators have included local authorities, drinks and food sector, private developers, environmental consultants, architects and civil engineering consultants requiring specialist hydrological and hydrogeological expertise. David has also formed an integral part of the preparation of EIS and AA/NIS and LAP/SEA documents with direct liaison with ecologists and planners.

**LEO WILLIAMS** BA BAI MAI AMIOA  
Acoustic Consultant

**EDUCATION**

BA, BAI (Mechanical & Manufacturing Engineering)	Trinity College Dublin 2013
MAI (Mechanical & Manufacturing Engineering)	Trinity College Dublin 2014
IOA Diploma in Acoustics & Noise Control	Institute of Acoustics 2016

**MEMBERSHIP OF PROFESSIONAL ORGANISATIONS**

Associate Member of the Institute of Acoustics

**KEY SKILLS**

- *Over 3 years' experience in the field of environmental noise monitoring, specializing in wind farm developments*
- *Maintenance and installation of equipment used in extended, outdoor monitoring*
- *Training in and detailed knowledge of acoustic proprietary software packages for acoustic modelling and room acoustic assessments*
- *Detailed knowledge of acoustic proprietary software packages for operational and environmental noise prediction*

**CAREER SUMMARY**

**AWN Consulting, Acoustic Technician, July 2014 to July 2017**

**AWN Consulting, Acoustic Consultant, July 2017 to date**

Working as an Acoustic Consultant in AWN, Leo typically deals in attended and unattended baseline noise surveys and management and maintenance of extended outdoor monitoring for wind farm developments. Other projects include 3D modelling of architectural spaces for the assessment of room acoustics, the performing of Sound Insulation testing and inward noise impacts of road and rail schemes on proposed developments, planning applications and compliance monitoring.

**PROJECT EXPERIENCE**

- Kill Hill Windfarm, Co. Tipperary – Extensive long-term monitoring set up for windfarm development.
- National Children's Hospital, Co. Dublin – Noise monitoring for development of Construction Noise Management Planning and façade design.
- Rapid Build Schools Project – Sound insulation testing and room acoustic calculations.

- Crockandun Windfarm, Co. Tyrone – Extensive long-term monitoring set up for windfarm development, including baseline and commissioning surveys and coordination of shutdown periods.
- UCD Centre for Future Learning, Dublin – Environmental noise surveys to inform façade design, room acoustic modelling for complex and specialist spaces.
- Omagh Hospital - Site inspection, sound insulation testing and room acoustics survey.
- Comreg Office Fit-out, Dublin – Site inspection, sound insulation testing and room acoustics survey.
- DCU Student Hub - 3D acoustic modelling of performance and teaching spaces and acoustic treatment advice.
- RCSI Auditorium, Dublin – 3D acoustic modelling of auditorium space and acoustic treatment advice.

**JENNIFER HARMON** BSc MIOA  
Senior Acoustic Consultant

**EDUCATION**

BSc (Environmental Science)  
Diploma in Area Studies  
Diploma in Acoustics and Noise Control

University of Ulster 1999  
Universidade Nova de Lisboa 1999  
Institute of Acoustics 2001

**MEMBERSHIP OF PROFESSIONAL ORGANISATIONS**

MIOA, Member of the Institute of Acoustics

**KEY SKILLS**

- 16 years experience in the fields of environmental noise and vibration consultancy.
- *Monitoring, prediction and assessment of noise impact from various road, rail, industrial and commercial projects nationwide*
- *Expert Witness for noise Oral Hearings, arbitrations and court hearings*
- *Detailed knowledge of acoustic standards and proprietary software packages.*
- EMS auditing

**CAREER SUMMARY**

**AWN Consulting, Senior Acoustic Consultant, April 2007 to date**

Working as a Senior Acoustic Consultant in AWN, Jennifer typically deals in prediction and assessment of environmental noise from transport (road, rail & air) industrial, commercial, and residential developments. Other projects include inward noise impacts of road and rail schemes on proposed developments, planning applications and compliance monitoring.

Recent noise monitoring and modelling projects include ESB HQ redevelopment, Diageo Brew House extension, DART Underground, NRA Service areas, Bray Dublin Road realignment EIS, M7 Widening, Sallins Bypass, Ringaskiddy Waste to Energy Facility, N17 Tobbercurry Bypass, LUAS A1 & B1 line extensions, Weston Aerodrome expansion, various residential and commercial EIS developments. Jennifer has provided expert evidence for noise at over 30 oral hearing and arbitration projects throughout Ireland.

**RPS Group, Senior Consultant, 2001– 2007**

Senior Consultant within RPS with responsibility for all major noise related projects. Jennifer prepared several EIS projects relating to transport projects including, N6 GCOB, N6 DGL, Waterford Outer Ring Road, N18 Gort to Crusheen, Monkstown Ring Road, Carland Road Realignment (NI), Courtlough Interchange, Kildare Route Project. Other EIS projects included various industrial, commercial and residential schemes.



## **AD Analytical, Environmental Consultant 2000 – 2001**

Working as an environmental consultant within AD Analytical, Jennifer was involved in several compliance monitoring projects for noise, air, water and dust for various EPA licensed clients in addition to environmental awareness training.

### **PROJECT EXPERIENCE**

Lead acoustic consultant, involving baseline surveys, development of industrial site noise models, impact assessment and mitigation measures on the following key projects:

- Diageo Brew House
- Ringaskiddy Waste to Energy, Co. Cork
- College Proteins, Co. Meath
- IDA Biopharma facility, Dundalk, Co. Louth
- Pfizer MAB facility, Ringaskiddy, Co. Cork
- Shannon LNG EIS, Co. Kerry
- Atlas site Extension, Portlaoise
- Aughinish Alumina Site Extension. Co. Limerick

Lead acoustic consultant, involving comprehensive 3D noise modelling of transport systems, and impact assessments for the following key projects:

- M7 Osberstown Interchange and Sallins Bypass EIS
- M7 Johnstown to Newbridge Widening EIS
- N4 Collooney to Castlebaldwin EIS
- DART Underground EIS
- Navan Rail Line EIS
- M17 Tuam to Galway EIS
- N11 Enniscorthy Bypass EIS
- N17 Tobercurry Bypass EIS
- N18 Gort to Crusheen EIS
- Kildare Route Project EIS

Acoustic specialist for the following miscellaneous projects involving noise and/or vibration monitoring, impact assessments and specification of remedial measures:

- Liffey Flood Defence – Noise and vibration assessment relating to increase the height of the Liffey Wall. Focus on vibration sensitive building along works area.
- Mallow Flood Defence Noise and vibration assessment. Focus on construction noise and vibration impacts associated with proposed flood defence works.
- ESB Headquarters Redevelopment EIS
- Athlone European Chinese Technical Hub – noise and vibration impact assessment for EIS
- LUAS B1 line extension – Detail design of track noise and vibration mitigation
- NRA Motorway Service Areas (M20, N8, N6, M11) – noise and vibration impact assessment and mitigation design

# ANNETTE QUINN MA, MIAI

*Tobar Archaeological Services, Saleen, Midleton, Co. Cork 021-4652305*  
[annette@tobararchaeology.ie](mailto:annette@tobararchaeology.ie)

## **Professional Profile**

- Co-Director of Tobar Archaeological Services (2003-present).
  - Licensed by the Department of Culture, Heritage and the Gaeltacht to undertake excavations in Ireland
  - Previous employment in University College Cork as consultant archaeologist 1998-2003.
  - Institute of Archaeologists of Ireland (IAI) (Full Member of Professional Institute)
  - Fully trained First Aider (PHECC – occupational first aid)
- 
- Archaeological Assessments
  - Archaeological Test Excavations
  - EIAR/EIS
  - Archaeological Monitoring
  - Project Management
  - Full Scale Excavation and Site Resolution
  - Building Surveys and Conservation
  - Artefact Identification

## **Education**

**BA Degree** in Archaeology and Geography, University College Cork 1993-1996

**Masters Degree** in Archaeology 1996-1998

## **Sample Work History (Please see Company Profile for detailed list)**

PROJECT	CLIENT	DATES
Project archaeologist and Director of excavations at Boyle Abbey, National Monument Co. Roscommon. Large-scale multi-discipline conservation project carried out under Ministerial Consent.	Office of Public Works / National Monuments Service.	2006-2018
Laos Kilkenny 110/400kV Reinforcement Project – preparation of Archaeology and Cultural Heritage chapter of EIS.  Presentation of witness statement at Oral Hearing.	Eirgrid / AOS Planning Ltd. / ESBI	2011-2013

Guide to Heritage Bridges and Houses of County Cork – project archaeologist in the preparation of a guide to heritage bridges in Cork County.	Heritage Unit of Cork County Council	2013 and 2014
Clashavoon-Dunmanway 110kV Overhead line Project – preparation of Archaeology and Cultural Heritage chapter of EIS.  Presentation of witness statement at Oral Hearing.	Eirgrid / AOS Planning Ltd. / ESBI	2011-2012
East Kerry North West Cork Project – preparation of Archaeology and Cultural Heritage chapter.	Eirgrid / AOS Planning Ltd. / ESBI	2012
Architectural Services Contract, N7 Nenagh - Limerick High Quality Dual Carriageway	RPS Consulting Engineers/Limerick County Council	2006-2007
	<b>Sample projects undertaken prior to establishment of Tobar Archaeological Services</b>	
Excavations for the N8 Rathcormac/Fermoy Bypass	ACS for NRA/Cork County Council	2003
Archeological Features at Risk Project – assessed rates of destruction of archaeological monuments in Counties Sligo, Tipperary, Carlow and Meath.	Archaeological Services Unit for The Heritage Council	2002
Forestry and Archaeology Guidelines – Assisted in preparation of these sectoral guidelines.	Archaeological Services Unit for The Forestry Service	2001/2

### ***Recent Publications***

The Heritage Bridges of County Cork, Cork County Council, 2013.

The Heritage Houses of County Cork, Cork County Council, 2014.

Quinn, A 2013 'Mondaniel 3 - undefended rural farmstead' , in Hanley, K. & Hurley M.F (eds) 2013, Generations: The Archaeology of Five National Road Schemes, Vol 2, The National Road Authority, Dublin 4, pp 252-257.

Quinn, A 2013 'Mondaniel 3 - Two Mid 17th century limekilns', in Hanley, K. & Hurley M.F (eds) 2013, Generations: The Archaeology of Five National Road Schemes, Vol 2, The National Road Authority, Dublin 4, pp 272-276

Quinn, A 2013 'Rathealy 3 Temporary Settlement Site', in Hanley, K. & Hurley M.F (eds) 2013, Generations: The Archaeology of Five National Road Schemes, Vol 1, The National Road Authority, Dublin 4

### ***Health and Safety***

In possession of current Safe Pass card – Valid until May 2022



# MIRIAM CARROLL MA, MIAI

Tobar Archaeological Services, Saleen, Midleton, Co. Cork 021-4652305  
[miriam@tobararchaeology.ie](mailto:miriam@tobararchaeology.ie)

## Professional Profile

- Co-Director of Tobar Archaeological Services (2003-present)
  - Licensed by the Department of Culture, Heritage and the Gaeltacht to undertake excavations in Ireland
  - Previous employment in University College Cork as consultant archaeologist 1998-2003.
  - Institute of Archaeologists of Ireland (IAI) (Full Member of professional Institute)
- 
- Archaeological Assessments
  - Archaeological Test Excavations
  - EIS/EIA
  - Archaeological Monitoring
  - Project Management
  - Full Scale Excavation and Site Resolution
  - Building Surveys and Conservation
  - Artefact Identification

## Education

**BA Degree** in Archaeology and English, **University College Cork 1993-1996**

**Masters Degree** in Archaeology **University College Cork 1996-98**

## Sample Work History

Director of Archaeological Excavation of a large earthen enclosure at proposed Fota Wildlife Park Extension. Project archaeologists, presentation of findings to Board of Directors.	Fota Wildlife Park	December 2013-2014
Project archaeologist for monitoring and excavation at Barranafaddock Wind Farm, Co. Waterford.	Element Power (Ireland), Ltd	February-April 2014
Project archaeologist for Site Investigations contract of Bandon Flood Relief Scheme	IGSL for OPW and Cork County Council	2013
Bandon Town Wall Conservation, Management and Interpretation Plan – compiled CMIP for Bandon Town Wall	Cork County Council for Bandon Heritage Group	2012-2013

(National Monument) in collaboration with Carrig Conservation.		
Bandon Sewerage Scheme (2012) - Project archaeologists for this scheme including testing across the suspected line of town wall under Ministerial Consent and preparation of impact assessment reports.	SIAC Construction Ltd., for Cork County Council	2012
Salthill-Screeb 110kV overhead line project – preparation of Archaeology and Cultural Heritage Chapter.  Presentation of witness statement at Oral Hearing.	Eirgrid/ AOS Planning / ESBI	2010
Laois-Kilkenny 110/400kV Reinforcement Project.  Presentation of witness statement at Oral Hearing.	Eirgrid/ AOS Planning / ESBI	2013
	<b>Sample projects undertaken prior to establishment of Tobar Archaeological Services</b>	
Archeological Features at Risk Project – assessed rates of destruction of archaeological monuments in Counties Sligo, Tipperary, Carlow and Meath.	Archaeological Services Unit for The Heritage Council	2002
Forestry and Archaeology Guidelines – Assisted in preparation of these sectoral guidelines.	Archaeological Services Unit for The Forestry Service	2001/2

### ***Recent Publications***

The Heritage Bridges of County Cork, Cork County Council, 2013.

The Heritage Houses of County Cork, Cork County Council, 2014.

### ***Health and Safety***

In possession of current Safe Pass card – Valid until May 2022

**Máiréad Ní Challanáin, BA**  
**(Archaeology), MsC (Human Osteology)**

**Curriculum Vitae**

**SOLAS Safe Pass Card**  
**Full driving licence 2008**

**Personal Information**

**Name: Máiréad Ní Challanáin**

**Address: 5 Somerton Road,  
Ballinlough  
Cork**

**Mobile: +353863287328**

**E-mail: mnic86@gmail.com**

**BABAO member as of June 2011**

**Education:**

**University of Edinburgh, 2008-2009**

MSc in Human Osteoarchaeology.

**University College Cork, 2004-2007**

Majored in Archaeology with a minor in Greek and Roman Civilisation.

**Second level: Christ King Secondary School, South Douglas Road, Cork**

## **Archaeological Experience:**

### **21 November 2017-6 April 2018: Maurice F. Hurley**

Archaeologist and finds assistant on excavation at the Beamish and Crawford Brewery site on South Main St, Cork.

### **14 August 2017-6 October 2017: EASE Archaeology**

Supervisor on Bronze Age settlement site on the Links of Noltland prehistoric complex in Orkney. Supervised volunteers during excavation of Bronze Age structures.

### **12 June 2016-14 June 2017: John Cronin and Associates**

Post-excavation analysis of disarticulated remains from a medieval church site. The remains were analysed and catalogued accordingly. A report detailing the results was also written.

### **15 November 2016- 11 August 2017: Maurice F. Hurley**

Archaeologist on Hiberno-Norse excavation at the Beamish and Crawford Brewery site on South Main St, Cork. Gained further experience in urban archaeology and undertook post-excavation work which consisted of cataloguing finds.

### **3 July 2017-14 July 2017: University College Cork**

Area supervisor on the Spike Island Archaeological Project. Supervised students in the excavation and post-excavation of the interior of one of the prison blocks.

### **20 June 2016-22 July 2016: University College Cork**

Site supervisor on the Spike Island Archaeological Project. Supervised students in the field during excavation of a former prison block. Conducted post-excavation work which included washing and cataloguing finds.

### **10 August 2015- 18 September 2015: EASE Archaeology**

Supervisor and osteoarchaeologist on Links of Noltland settlement site. Undertook excavation of Neolithic and Bronze Age settlement complex. Excavated and conducted preliminary analysis of two burials from the site.

### **29 June 2015-5 August 2015: University College Cork**

Area supervisor as part of the Spike Island Project. Supervised students in the field which involved the teaching of excavation and surveying methods. Also undertook post-excavation analysis as part of the project.

### **1 June 2015-24 June 2015: EASE Archaeology**

Supervisor on Links of Noltland Neolithic settlement site in Orkney.

### **11 November 2009 – 27 September 2014: EASE Archaeology**

Supervisor and osteoarchaeologist on the Links of Noltland Neolithic settlement site and Bronze Age cemetery/settlement site.

Analysed inhumed and cremated remains from Bronze Age cemetery on the scheduled Links of Noltland site and co-wrote osteological report as part of analysis. Also catalogued and processed artefacts as part of the post-excavation project.

## **Other Experience**

### **10 October 2016- 4 November 2016: Munster Archaeology**

Spent several weeks undertaking confidential work investigating clandestine burials for an independent commission in the west of Ireland. Also undertook testing of a possible cillín in Sheep's Head, Bantry during this time.

### **18 January 2016- 5 October 2016: Irish Archaeological Consultancy**

Site assistant on cemetery settlement site as part of the N61 improvement scheme in Ranelagh, Co.Roscommon.

### **18 October 2015-22 October 2015: Dan Noonan**

Site assistant on small excavation in Shanbally prior to the construction of a water treatment plant.

### **28 September-26 November 2015: Munster Archaeology**

Spent several weeks working for the Independent Commission for the Location of Victim Remains (ICLVR) in Co. Meath. Also undertook rescue excavation and analysis of several inhumations in Borris Great, Co. Laois during this time.

### **9 April 2015-20 May 2015: Valerie J. Keeley Ltd.**

Site assistant on a Post-Medieval urban site in Kilkenny city centre as part of the Kilkenny Central Access Scheme. Gained experience in urban archaeology.

### **5 November 2014-30 January 2015: York Osteoarchaeology**

Conducted osteological analysis of various skeletal assemblages ranging from the Neolithic to Anglo-Saxon period, including both inhumed and cremated remains. The analysis of these remains also involved the writing of osteological reports.

### **30 September 2014-31 October 2014: Tobar Archaeological Services**

Site assistant on Early Medieval and Bronze Age settlement site as part of a school development, Creggane, Buttevant, Co. Cork.

### **14 April 2014-9 May 2014: Onsite Archaeology**

Site assistant on prehistoric site for housing development in Bridlington, Yorkshire

### **18 November 2013-11 April 2014: Tobar Archaeological Services**

Site assistant on various projects including a medieval enclosure and fulacht fia.

### **5 December 2012 – 13 March 2013: GUARD Archaeology Ltd.**

Site assistant on Early Medieval site in Selkirk, and osteoarchaeologist on Bronze Age cremation cemetery as part of A75 Dunragit by-pass.

### **.21 January 2008 - 20 June 2008: EACHTRA Archaeological Projects**

Site assistant on the N18 Oranmore-Gort route, Co.Galway. Gained experience in excavating and recording human remains.

### **8 October 2007 – 7 December 2007: Headland Archaeology Ltd.**

Site assistant on the N9-N11 bypass in Co.Carlow.

### **3-7 April 2006: 2<sup>nd</sup> Year Training Excavation**

Training excavation in Toureen Peakaun, Co. Tipperary

**21 January 2002-1 February 2002: Sheila Lane and Associates**

Two weeks on possible Hiberno-Norse site on South Main St, Cork City as part of 4th Year work experience.

**Referees:**

**Miriam Carroll, Tobar Archaeological Services**

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**Hazel Moore, EASE Archaeology**

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**Dr. Kathleen McSweeney, Dissertation supervisor**

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*Personal Details*

<i>Nationality</i>	Scottish
<i>Date of Birth</i>	24 July 1965
<i>Education</i>	BEng (hons) Transportation Engineering, Napier University, Edinburgh
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*Professional Background*

Alan has 27 years of experience in the fields of transport planning and traffic engineering. In 2007 Alan set up his own private consultancy based in the west of Ireland. Prior to that Alan was employed by Colin Buchanan and Partners, with whom he was involved in numerous high profile projects throughout Ireland, the UK and overseas, varying in scale from regional Planning Land use and Transportation Studies to detailed junction design and traffic analysis for large scale development projects.

Alan has excellent written and oral communication skills and is equally adept at working as a manager of a team, or on his own. Over the years Alan has gained significant experience with many transport modelling packages (including SATURN, TRIPS, TRANSYT, Paramics, Commuter, OSCADY, ARCADY and PICADY) and highway design Software, including Autodesk AutoCad Civil 3D and Autotrack.

**ALAN LIPSCOMBE TRAFFIC AND TRANSPORT CONSULTANTS Ltd - SAMPLE OF OTHER WORK TO DATE**  
(January 2008 to present day)

**Design of new signalised junction and other access options for proposed major re-cycling plant (Mr Binman) in Limerick City, and preparation of Traffic and Transport Assessment for planning application (2014 to 2017)** – An assessment of the traffic impact of a proposed Mr Binman Waste facility, located on the R510 Dock Road in Limerick City was undertaken. The study included the preliminary design of a new signalised junction on the R510 Dock Road and other options to provide access to the proposed facility. Key to the assessment was a requirement from TII to identify (by means of detailed junction modelling) any detrimental impact that the proposed development and proposed access options may have on the M18 access roundabout. The application was granted planning permission by Limerick City and County Council in January 2017.

The preparation of the traffic sections for EIS's for 15 **Wind Farm Developments and 5 Solar Farm** proposals throughout Ireland on behalf of McCarthy Keville O'Sullivan. The assessments included detailed modelling of the largest delivery vehicles using Autotrack, the identification of remedial measures required on the proposed delivery route, the determination of the likely traffic impact during both the construction and operational phases of each schemes, through to the presentation of evidence at An Bord Pleanala oral hearing

**Design of new signalised junction and preparation of Traffic and Transport Assessment for a major new residential development (380 dwellings) located in Trim Town Centre, County Meath (2015 to 2017)** – The proposed development is located on the R154 in the east side of Trim and involved the design and junction capacity tests for the conversion of an existing priority junction to a signalised junction. A Traffic and Transport Assessment was prepared, which included an assessment of the impact of the proposed development of the existing R154 / R160 roundabout in Trim Town Centre. The development was granted planning permission by Meath County Council and subsequently An Bord Pleanala in March 2017.

**Parnell Street / O'Connell Square traffic and pedestrian assessment, Clare County Council (2016)** – Undertook an assessment of the impacts of options for this area of Ennis town centre on behalf of Clare County Council, involving various levels of pedestrianisation. The study utilised a comprehensive data set of pedestrian and traffic counts collated for the study with junction models prepared to determine the likely impacts.

**Assessment of Junctions 12 and 13 of the M18 in Ennis, Clare County Council (2016)** – Commissioned to advise Clare County Council of the likely impacts on Junctions 12 and 13 of the M18 with respect to the development of various sites located on the east side of Ennis. The assessment formed part of a submission made by Clare County Council to Transport Infrastructure Ireland (TII).

**Ardaun Corridor, Galway City (2015 to 2016)** – Preparation of a microsimulation model to determine the impact of the development of the Ardaun Corridor on the east side of Galway, on behalf of Galway City Council's Transportation Unit. In addition to access options for the Ardaun Corridor the micro-simulation model included 2 existing linked signalised junctions in the Briar Hill / Parkmore area of Galway City.

**N59 Moycullen Bypass EIS in County Galway (2009 to 2010)** - Traffic modelling and production of traffic forecasts, including the development of a micro-simulation model using the software package Commuter, and a cost benefit analysis using COBA. Responsible for all traffic related input for the project, from model development to the presentation of evidence at an oral hearing.

**Ardderroo Wind Farm EIS and Oral Hearing, County Galway (2014 to 2015)** – Prepared the traffic and transport section of the EIS for a major Wind Farm development proposed in northwest County Galway. Assessment included detailed modelling of the geometric requirements of abnormally large loads and estimation of the impact of development generated traffic during the various construction stages. Presented evidence at An Bord Pleanála oral hearing.

**Bord na Mona Ovoid Manufacturing Facility EIS, Foynes Port, County Limerick (2014 to 2015)** – This EIS was prepared for Bord na Mona with respect to a proposed processing plant located in Foynes Port, County Limerick. Responsible for assessing the impact of the proposed development during both the construction and operational stages of the development. The application is still being considered by Limerick City and County Council at the Further Information stage, although there are no traffic or transport issues outstanding.

**Development Traffic Engineering Services** - Assisting a variety of private sector and semi-state Clients with development proposals in Counties Galway, Mayo, Clare, Limerick, Sligo, Tipperary and Cork. Services include site selection, highway design, highway capacity assessments, parking, service vehicle access analysis, and the preparation of traffic related documentation required as part of the planning process, including Traffic and Transport Assessments and Road Safety Audits.

**Travel Plans and assessments for NUI Galway** - Assisting the NUI Galway with the implementation of a Travel Plan aimed at reducing the reliance of the private car for staff and student trips to the campus. Initiatives designed and implemented include; a park & ride system, car sharing and car-pooling. Also provided transport input for the preparation of the campus Masterplan and prepared the transport assessments for various new developments on the campus.

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**COLIN BUCHANAN AND PARTNERS – Final position Associate Director and manager of Galway Office**  
(1989 to 2007)

Between 1997 and 2007 Alan was employed by Colin Buchanan and Partners as the manager of their Galway Office and head of their traffic and transport team, having moved there as the senior transportation engineer and modeller for the *Galway Land Use and Transportation Study*. After the completion of that study in 1999 Alan worked throughout the West of Ireland on a range of projects, including;



**N6 Galway City Outer Bypass** - Responsible for the development of the TRIPS and SATURN transportation models used from the initial constraints study to the preliminary design stage. Prepared traffic forecasts used in the oral hearing held by An Bord Pleanála.

**Limerick SRR11** - Prepared the detailed traffic forecasts for this proposed highway scheme, including a toll analysis for the River Shannon Tunnel

**Tuam Bypass** - Managed the development of the SATURN traffic model and the cost benefit analysis (COBA) from the constraints study to preliminary design.

**Limerick Planning Land Use and Transportation Study** – Managed the developed of the transportation models for this study on behalf of 4 local authorities.

**NUI Galway Development Projects** - Managed the transport element of various planning applications and transport initiatives for the University including the traffic assessment required for a new Engineering Building and the development of a parking strategy including a P&R facility.

**Tralee Transportation Model** – Managed the development of a transportation model for Tralee and its environs.

**Ennis Traffic Model** - Managed the development of a Paramics traffic model for Ennis Town Council and utilised the model to test various highway and development scenarios.

*Before moving to Ireland Alan was involved in a wide variety of transport-related studies for CBP throughout the UK, Malta and Indonesia. A sample of the projects is as follows:*

**Tyne and Wear Metro Study** - Responsible for determining the feasibility of various metro stations in Newcastle. The assessment involved the development of a modes split LOGIT model.

**Bristol Harbourside Development** - Utilised Avon County Council's TRIPS traffic model in order to produce future year traffic flows. Assessed the impact on the surrounding road network using TRANSYT, OSCADY, ARCADY and PICADY. Assisted in the design of highway remedial measures.

**London Bus Priority Network** - Part of a small team responsible for developing bus priority measures on congested routes in South East London.

**Valletta/Floriana Transport Study, Malta** - Responsible for organising and supervising a comprehensive program of transport surveys including junction counts, parking beat and OD surveys.

**Capitol Centre Traffic Impact Assessment, Jakarta** - Updated an existing QVIEW traffic model to predict future traffic patterns in the vicinity of the proposed development. Assessment of the development impact and design and evaluation of junction modification was carried out using TRANSYT.

**Speeding Driver Research Project** - Was the author of this research project undertaken for the Scottish Office. Subsequently presented a paper to a PTRC conference and various local authorities.

**Larnaca Transportation Study, Cyprus** - Used a TRIPS model to forecast the impact of several alternative road network proposals.