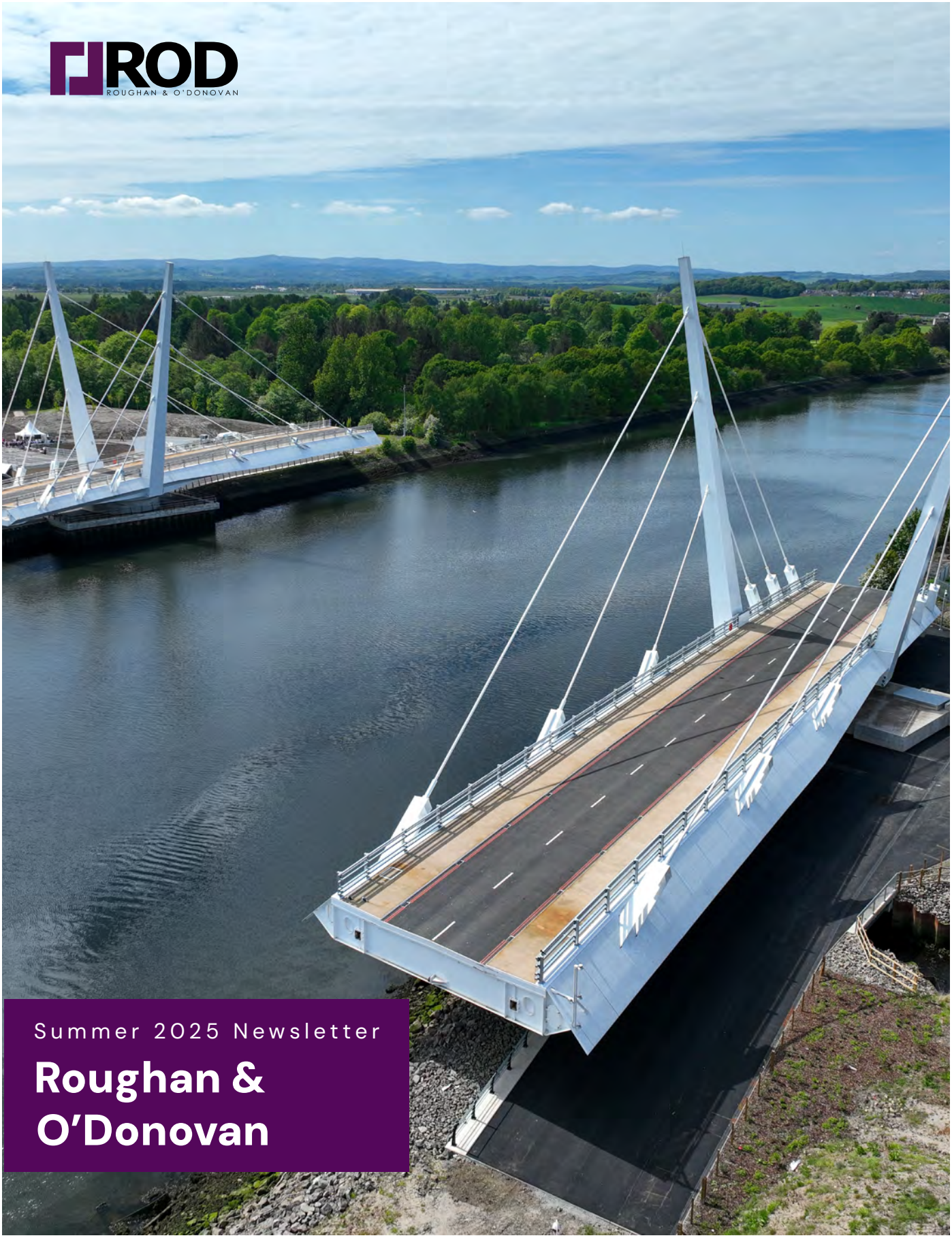

Summer 2025 Newsletter

Roughan & O'Donovan

Foreword

By Marc Jones

I am extremely honoured to have been appointed Managing Director of ROD and thank the board of directors for placing their trust in me. I look forward to the challenges ahead, building on our reputation for excellence and delivery of quality solutions for our clients. This first foreword has been a particularly difficult one to write following the passing of our dear friend, colleague and Chairman, Harry Meighan. Harry's early career was as a contractor in the UK, returning to Ireland in 1996 as structures agent for SIAC on the M1 Balbriggan bypass. At that time Harry's talents came to the attention of Joe O'Donovan, one of our founding directors, and by the spring of 1998 he had joined ROD as Contracts Manager. Over the years we have had the pleasure of getting to know his wife, Catherine, and their four sons: John, Joseph, Patrick and Rory. Our thoughts and deepest sympathies go to his family during this difficult time.

Harry's contracting background gave a uniqueness to our service offering and led to the formation of our Contract Administration Group. The group went from strength to strength under Harry's leadership and has contract specialists dedicated to performing the role of Employer's Representative / Project Manager. They also manage the activities of our site supervision staff. Succession planning has been a strategic objective since 2014 and the role of director with responsibility for the group now falls to Daire O Riagáin. Daire has been coached and mentored by Harry and Patrick Grennan over the last 15 years and will ensure that we continue to provide the level of precision and commitment to our clients synonymous with Harry's legacy.

Our article on pages 1 to 5 gives an insight into the man Harry was and the level of respect and standing held for him within our industry. Over his 27 years with ROD, Harry performed at the highest levels, becoming Managing Director and Chairman. During his tenure as MD, Harry's leadership brought us through the financial crash with a focus on maintaining employment and ensuring the long-term viability of the company. Since then and as Chairman, Harry was committed to the growth of the company with the opening of offices in North Dublin, Otley and Cork, always with a focus on maintaining high quality output.

Harry's mark is on everything we do at ROD; he was instrumental in the growth of an agile and resilient company with an ability to overcome challenges. Building on the legacy of our founding directors, his commitment to the development of people, strong leadership, the establishment of new business streams and continuous improvement are now part of the ROD DNA.

Reading an interview Harry gave for our 50-year anniversary book again, I am reminded of the measures we took during the years post financial crash, from our entry into the infrastructure market in the UK, commencing work on a new ITS work-stream, to the portfolio of international major bridge projects. With that in mind, it is particularly pleasing to read the articles on the opening of the Renfrew cable stayed swing bridge in Glasgow (pg 9), delivery of the sustainable transport bridge in Waterford (pg 13), and progress being made on the Narrow Water cross border bridge (pg 11). All are moveable bridges in sensitive environments that will connect and transform their respective communities and are a testament to the longstanding relationships we have with H&H. Their delivery is built on knowledge and experience gained over many years; it is hard to believe our first major cable stayed bridge in the UK, Northern Spire recently passed its 5-year maintenance period milestone (pg 17).

Climate change is the defining issue of our time and the delivery of sustainable infrastructure that addresses environmental challenges is a common theme across the projects described in this edition of the newsletter. From analysing the impact of high winds on cable supported bridges and progressing Enniscorthy flood relief scheme through public consultation (pg 20) to ecological mitigation preventing loss of biodiversity in Cherrywood, Co. Dublin (pg 22), our environmental and design teams are working seamlessly together to address challenges in a sustainable and responsible manner.

The maintenance and improvement of infrastructure networks to increase performance and service life also support climate impact reduction. The MCAAS article (pg 28) provides an insight into the measures that team is taking to quantify carbon savings and deliver optimal pavement management strategies.

Data science is a key feature of our service offering. Under our eMOS commission, the project team has been analysing data from traffic patterns, road sensors and satellite imagery to inform motorway operations. The Data Fusion and Analytics Evaluation project (pg 25) is developing new technologies to support faster and more accurate response to incidents on traffic networks. We are seeing rapid growth in the use of Artificial Intelligence in road engineering to inform data-driven decisions, predict potential network failures and enhance safety and efficiency. Our PIARC special project report on 'AI in the Road Sector' (pg 24) provides the first comprehensive study of AI's role in the planning, design, construction, operation and maintenance of road infrastructure and is aimed at supporting operators to achieve AI integration by 2030.

Road schemes that improve connectivity and safety provide a multitude of benefits including reduced travel times, fewer accidents, increased accessibility, and economic development. Such improvements also contribute to a better environment by reducing congestion and promoting more sustainable modes of transportation. Our articles on Coonagh Knockalisheen (pg 29) and the N13 (pg 30) describe the significant economic and social opportunities that can be realised by delivery of those schemes. Similarly, the N81 (pg 31) and N4 (pg 19) schemes, which are progressing through public consultation and route selection, will improve road safety and journey reliability.

The Buildings team continues to grow our portfolio of health projects, assisting with the delivery of critical infrastructure and contributing to goals in respect of healthy lives, mental health and well-being. The articles on St Joseph's (pg 35), St Colman's (pg 37) and Letterkenny CNU (pg 38) present an interesting cross section of projects from design to handover that will make a real difference to those communities.

Thinking back to Harry's commitment to the development of people and his quote that "memories will certainly be about the people rather than the projects", our teams are at the heart of everything we do. ROD membership of Europengineers has continued to provide opportunities for development under the trainee exchange programme (pg 23); we had a record number of interns in 2024/25 with both design and site placements (pg 16); and I am delighted that many have chosen to join the 2025 graduate programme (pg 39). We celebrated International Women's Day (pg 41) and International Women in Engineering Day with a variety of events culminating in a series of presentations given companywide which were an inspiration to us all.

Finally, we had a good awards season across people and projects (pg 6). It is great to see our contribution to some exceptional projects acknowledged by our peers and equally pleasing to see talent at an individual level recognised.

Welcome to the Summer 2025 Newsletter.

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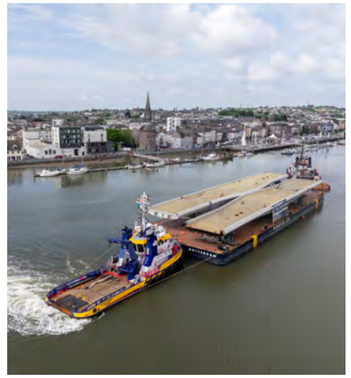

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News

Harry Meighan 1963 – 2025

BE Civil, HDip, CEng FIEI, MCIArb, FConsEI

We are deeply saddened by the loss of our Chairman, Harry Meighan, who passed away on Friday, 6th June 2025. Harry was a dear friend, an esteemed colleague and a gifted leader. His passion for engineering, commitment to quality and dedication to the development of the company and its people earned him the respect of the engineering community in Ireland and abroad.

Harry graduated with a degree in civil engineering from University College Dublin (UCD) in 1986 and spent the next 10 years working for contractors in the UK, principally Balfour Beatty. He returned to Ireland in 1996 to work for SIAC Construction as structures agent on the M1 Balbriggan Bypass. In 1998, Harry joined ROD, undertaking the contract administration function on projects at construction stage, a role that enabled him to develop lasting relationships with local authority clients; the National Road Authority (NRA)/ Transport Infrastructure Ireland (TII); and contractors. Over the following decade, he applied his calm demeanour, his skills in contract law and engineering, and his sense of fairness to supporting the delivery of numerous infrastructure projects around Ireland, from interurban motorways to one-off bridges – through this he leaves a wonderful legacy to Irish society. Harry also used his extensive experience in dispute resolution and client advocacy to contribute to the development of new forms of contract and to providing training to various public bodies. Meanwhile, he was generous with his time in giving us insightful procurement and contracts advice.

Harry became managing director of ROD in 2009 and led the company through the difficult years that followed. During this period, he demonstrated the forward-thinking approach that defined his term as managing director. In 2009, he was instrumental in ROD establishing a new research arm, Roughan & O'Donovan Innovative Solutions, with Professor Eugene O'Brien at UCD and Professor Alan O'Connor at Trinity College Dublin to advance our commitment to innovation and applied research. In 2011, Harry secured an invitation for ROD to join Europengineers, a

2011 Christmas 5 aside competition.

network of independent European engineering consultants brought together by a common desire to share industry best practice knowledge and foster collaboration between its member companies. ROD was the network's first Irish member, with the other eight members drawn from France (Setec), Germany (Schüßler- Plan), Greece (Salfo), Italy (Hydea), Spain (Pondio), Switzerland (Basler & Hofmann), the Netherlands (Aronsohn) and Bureau greisch (Belgium).

During the 2010s, Harry established our Contract Administration and Intelligent Transport Systems Groups, demonstrating his proactive and strategic approach to developing ROD, and creating new business pipelines that continue to thrive today. In 2011, Harry oversaw the creation of ROD's graduate development programme to share the experience of his generation of engineers with the younger members of our team through mentoring, structured knowledge sharing and cross-team rotations. His commitment to nurturing young professionals also extended to our trainee technician and chartership support programmes, both of which expanded during his time as managing director.

During the Covid-19 pandemic, Harry demonstrated his heartfelt concern for our team's well-being, sharing reassuring and encouraging memos with our staff during what was a deeply challenging time, and bringing our risk management, safety, HR, Future of Work, and employee representative groups together to chart a path forward for the company. He was one of the most consistent contributors to our social committee's 'Song of the Day' initiative (established during the pandemic to give our then fully remote team a sense of connection with one another) – his wide ranging love of music is shown in some of his requests, with his first request being "Hanging on the Glow" by Malojian and a more recent one being "Mr Soul" by Neil Young.

In 2021, Harry became chairman of the group companies and assumed responsibility for planning – in meticulous detail – ROD's 50th anniversary celebrations. He oversaw every aspect of our gala dinner in the Shelbourne Hotel from the menu and the invitations to the music and the entertainment. While illness prevented Harry from attending the event, his ROD family – keenly feeling his absence - raised a glass in his honour, expressing our gratitude to him with a rousing round of applause. As part of his commemoration of ROD's first 50 years, Harry oversaw development of a book that told the stories of ROD's founders, Derry Roughan and Joe O'Donovan, and charted the humble beginnings of the company, the highs and lows, and the projects that defined us. The book is a testament to Harry's deep respect for Derry and Joe as well as his desire to capture the people, the events and the work that shaped ROD so that future employees would know where we have come from and where we are going.

Harry was widely recognised as an influential figure in the engineering consultancy sector, both in Ireland and abroad. He volunteered on various industry committees and encouraged colleagues to do the same. Over the years, he served on the ACEI Executive, the ACEI Civils Committee, and the Engineers Ireland Dispute Resolution Board. He became Chairman of Europengineers from 2021 to 2024.

For the staff at ROD and the many engineers who developed successful careers under his guidance, Harry's sharp intellect, fairness, honesty and wry smile will always be remembered. Harry played a central role in our social events and activities. He was a keen participant in the social activities including the greyhound syndicate, the lotto syndicate, the football team in the Engineers League and later the annual Christmas charity football match for the John Harkin Memorial Cup. Harry was also fiercely proud of his Kilkenny roots, and on GOAL Jersey Day - one of his favourite work days of the year - he would don his black and amber jersey and remind the staff of Kilkenny's dominance. He also initiated our annual summer social at Leopardstown racecourse, an event which staff will always find synonymous with Harry for his dedication to social outlets in the workplace combined with his love of racing.

ROD 50 Commemorative Book

The following is an excerpt from Harry's interview presented in the ROD50 book.

50 Years of Roughan & O'Donovan:

Harry in his own words

What is your background and how did you come to join ROD?

In 1986, I graduated with a degree in civil engineering from University College Dublin (UCD), where Séamus MacGearailt incidentally was a classmate. Ireland was economically depressed at that time, and as there were no employment opportunities for graduate engineers, I emigrated to London. I spent the next 10 years working for contractors there, principally Balfour Beatty for six years. By the mid-1990s, things had started to improve in Ireland, and I returned with my wife, Catherine, and sons in December 1996 to work for SIAC Construction as structures agent on the M1 Balbriggan Bypass.

As was common in those days, the road was designed in-house by Fingal County Council, and the eight bridges were designed by four consultants, allocated two bridges each. ROD was the designer for the Naul Road and Rowan's Road overbridges, both of which were of voided post-tensioned deck construction (with the first full-scale grout trial beam in Ireland); had early use of GGBS (Ground Granulated Blast-furnace Slag); a controlled permeability formwork liner for all exposed surfaces; and a protective coating system.

The County Engineer in Fingal was the 'Engineer' for the overall project while Joe O'Donovan was the 'Engineer' for ROD's two bridges. We had monthly progress meetings with Joe, and the design queries, of which there were few, were dealt with by Pat Maher and Nigel O'Neill. I knew nothing of ROD when I returned to Ireland, but it quickly became apparent from my conversations with the likes of Rory O'Sullivan and Tom O'Connor of Fingal, Hank Fogarty and Michael Durkin of SIAC, and Tom Foley of Ascon that the company was highly respected for the quality of its design and detailing.

In late 1997/early 1998, Joe approached me about a position as contracts manager with ROD. By that time, the Irish economy was growing rapidly; the National Roads Authority (NRA) had been established since 1993; and the legwork put in by Joe, Derry Roughan, Garry Smyth and Shay Ryan to establish and maintain ROD during the lean years was starting to bear fruit. The move away from contracting to a fixed office base appealed to me, and I started working with ROD in March 1998, undertaking the contract administration function on projects at construction stage. The role involved multiple projects and a lot of travelling for progress meetings, but that enabled relationships to be built with many local authority clients; the NRA/Transport Infrastructure Ireland (TII); and several contractors, who later became clients.

ROD social event, Kayaking on the River Liffey.

Harry Pictured with his wife Catherine at Leopardstown Races.

What are your reflections on your own time as managing director?

There were seven board directors during my 12 years as managing director, and six when Richard Power retired in 2013. We worked well together, reaching unanimous agreement on every strategic action and initiative. The ownership model in ROD allows us to take a perspective on business, client and project matters that is not concerned with optimising shareholder value but directed towards securing the long-term viability and prosperity of the company. This principle guided us during the early years of my tenure, when we were working through the effects of the 2007-2008 financial crisis, which would continue to constrain the business until 2016. The Irish government, for instance, introduced the Financial Emergency Measures bill in 2009, and our public sector clients subsequently sought an 8% reduction in our contracted fees through what were termed the 'Bord Snip' letters.

We successfully resisted those cuts, but we had come from the heady heights of the Celtic Tiger years, and our internal cost base was unsustainable compared to revenues. When we decided to close the Galway office, which had been established in anticipation of the NRA advancing Atlantic Corridor projects that were shelved during the recession, we put in place a voluntary redundancy process. We also had a small number of involuntary redundancies, which were limited because all employees bought into the principle of accepting across-the-board salary cuts with a view to maintaining maximum employment numbers—in essence, employees put their colleagues above their own self-interest [Aside: - a principal resolution at the June 2009 shareholder strategy day was 'to provide employment for as many of the current design office staff as possible.'] These measures required extensive consultation with our employees, including through employee briefing days, and may well have been the seed for our employee consultation forum, which was established in March 2010 and continues to this day. We also set up a cost control group to look at every head of expenditure, and we developed what were essentially 'survival' business plans. Ultimately, we remained profitable throughout those post-recession years, albeit at a marginal level.

The other challenge during those years was to find new work, which was a main topic at the Shareholder Strategy Days. During the Celtic Tiger years, which also saw the NRA's roll out of the major inter-urban motorway network, a disproportionate percentage of company revenue was coming from NRA/TII funded projects. There was a need for us to diversify our client base, our sectors and our geographical base, and this continues to be a strategic objective to the present day.

Our lowest point in terms of turnover was 2013. Reviewing the revenues for that year: - Tony Dempsey had diversified fees from projects in Poland, Panama, Copenhagen, Malaysia, India (where he and Pankaj Kumar Das had invested a lot of personal time and effort in business development); Mark Kilcullen had projects in England, Scotland and Wales; Marc Jones was working on the A2 Shore Road in Belfast, which ultimately led on to the A6 projects and the current A5 ECI; Séamus's main projects were the Applegreen sites and the Dublin-Galway Cycleway; and Jim was project director for the NRA ITS Support Services, which was a new services stream for ROD.

With a leaner company, we concluded that there was a need for more cross-functional capability such that staff could migrate to a sector that was busy when their own team was quiet. There was only limited success with this strategy, but the policy was a forerunner of the Graduate Development (Rotation) Programme initiated in 2011, and which has proven to be a great success.

By 2015, market conditions were looking better, staff numbers had started to increase again, and we were confident enough to undertake a major refurbishment of our Arena House offices. By 2016, we began to consider the possibility of opening a north Dublin office, and two years later, on 24th September 2018, we opened our Northwood office. By 2017, we had started thinking about opening a

Harry pictured with European Engineers group.

UK office as a Brexit hedge, to foster diversification and to align with Jim's long-term plans. The office in Otley was subsequently opened in August 2019.

We categorise the first generation of shareholders from 1974 to 1981 as GEN1, and those appointed from 2000 to 2008 as GEN2. The transition to GEN2 was made considerably smoother by the continuing presence of GEN1 shareholders. Succession planning for GEN3 was on our strategy day agenda from 2014 following Richard's retirement in 2013, but the formal process didn't commence until 2019. Aonghus O'Keeffe, Barry Corrigan, Eoin Ó Catháin and Lewis Feely were the first wave of GEN3 appointed in 2020, followed by Daire Ó Riagáin in 2023. Again, there will be a managed transition period with GEN2 shareholders continuing in the business, and I hope this will set the company up for the next 20 years.

The Covid-19 pandemic was the last major challenge during my time as managing director and required us all to move to remote working in March 2020. Our Risk Management Group, Safety Group, HR team, Future of Work task group, Employee Representatives and Social Committee all contributed to managing the challenge, and everyone engaged and cooperated with the actions we took and the phased return to work. The experience precipitated the remote working policy launched in 2022, which has fundamentally changed the way we work and improved the work-life balance for employees.

Looking ahead to the future, what do you wish for the company?

My wishes for 10 years' time would be that the company is still trading independently and successfully; that the ROD UK company has grown and prospered; that the 'family-feel' of the company has been nurtured and sustained; that employees remain valued and are (generally) happy with ROD; that the third generation of ownership is directing the company and driving strategy; and that we have promoted and improved diversity at director level and across the management team.

Can you reflect on whether the founders would be proud of today's ROD, both in terms of our accomplishments and how they were achieved?

Garry Smyth and Shay Ryan, who were there from almost the very start, continue to attend our annual Christmas party and various other company events. I know both are proud of where the company is today, and I am confident that Derry and Joe would be equally so. I think they would be proud of our multidisciplinary services offering; the diversity of project types we undertake; our involvement with major projects and programmes; our expansion into the UK (and north Dublin); our standing as a consultant of choice for clients for complex projects; our development of specialist capabilities in research, environment, etc., while retaining the qualities and ethos they valued.

I believe our most enduring accomplishments have been won through hard work and dedication, professionalism, honesty and integrity, and our commitment to long-term relationships over short-term gain.

What stories do you have that speak to ROD's unique culture and brand?

There is something unique about ROD, but it is not easy to put it into words. Much of it comes back to the people, and I guess people always reflect the values they see in the company. My memories will certainly be about the people rather than the projects.

Harry is survived by his wife, Catherine, and four sons, John, Joseph, Patrick and Rory. He will be greatly missed by family, friends and colleagues alike.

ROD Celebrates Successful Awards Season 2025

Article by Roberta Keaney

ROD is celebrating a successful 2025 Awards Season, having secured awards at the ACEI. ACEC (USA), ICS, and IBDA awards.

Association of Consulting Engineers of Ireland

We were thrilled to receive three awards at the prestigious ACEI Engineering Excellence Awards, including two awards for the Clontarf to City Centre Project and one award for Herring Bridge in Great Yarmouth, UK. Announced during a dinner at the Intercontinental Hotel in Dublin on 28th March, the ACEI awards recognise projects that demonstrate a high degree of achievement, value and excellence in engineering design.

Clontarf to City Centre Project

Clontarf to City Centre Project

ROD won the 'Innovation' and 'Large Civil Project' awards for our work on the Clontarf to City Centre Project, a transformative scheme that not only enhances walking, cycling and public transport in Dublin city but also supports Ireland's broader transport and environmental objectives. The project team included Dublin City Council, Clonmel Enterprises Ltd, CSR Land Planning and Design, and Kevin Cleary & Associates.

Innovation award

In a citation accompanying the 'Innovation' award, the judges said:

> "Designers Roughan & O'Donovan Consulting Engineers have introduced features in this scheme that are new to the Dublin city streetscape and are a model for urban road and active travel facility design. These features include the introduction of continuous footpaths at junctions, fully segregated cycle tracks with island bus stops; maximum use of SuDS and of bioretention areas; vacuum excavation to maintain existing mature trees, and conservation of historic fabric along the route."

Large Civil Project

In a citation accompanying the 'Large Civil Project' award, the judges said:

> "The project has set a standard for urban road and active travel facility design in Ireland and for the implementation of the Bus-Connects programme. Into a complex network of over 20km combined length of pedestrian walkways, new and upgraded cycle lanes and upgraded bus lanes, the design of the scheme introduces multiple new modal segregation features, environmental enhancements and construction techniques."

Herring Bridge

Herring Bridge

ROD won the 'Overseas' award for our work on Herring Bridge, Great Yarmouth, a challenging movable bridge, marine and urban works project that has transformed travel across the town, connecting communities on either side of the harbour, easing traffic congestion, shortening journey times, and improving journey reliability. ROD was appointed by BAM-Farrans Joint Venture and the project team included Norfolk County Council, H&H and Lanpro.

In a citation accompanying the 'Overseas' award, the judges described Herring Bridge as

> "an infrastructure project that is of significance … of a size and scale not typical for these islands", adding that "its prominence [in the UK] greatly enhances the reputation of Irish engineering excellence."

American Council of Engineering Companies

Herring Bridge was also honoured at the ACEC New York Engineering Excellence Awards on Saturday, 5th April, where we, with our partners H&H, received the Platinum Award – Structural Systems. The ACEC New York Engineering Excellence

Awards celebrate engineering excellence, honouring projects worldwide that demonstrate innovation, creative problem-solving, and engineering's unique ability to improve our world. Judged by a panel of industry, government, and academic experts, the awards recognise outstanding projects across a range of categories, including studies, research, consulting services, building/technology systems, and structural systems.

ROD led the detailed design of the project behalf of BAM Farrans, a joint venture between BAM UK & Ireland and Farrans Construction. As ROD's design partner, H&H, provided global expertise in moveable bridges on the project. The ROD/H&H team is a highly sought after collaboration for its unmatched experience in designing competitive, highly constructible, kinetic structures.

Irish Concrete Society

The Dublin Port Tolka Estuary Greenway was highly commended at the Irish Concrete Society Awards on the 29th March. The commendation came in the Infrastructure Category, having been nominated by Kilsaran Concrete. The project was constructed by Kilwex and Wills Bros, having been designed by an ROD-led multi-disciplinary team including Darmody Architects, Austen Associates, TTT, Bright and O Reilly Hyland Tierney QS.

We were also delighted that ROD Graduate Engineer, Niall Hanratty, won the Sean de Courcy Student Award. The Sean de Courcy Student Award is given to the best final-year project on a concrete-related topic from the engineering faculties of higher education institutes in Ireland. It is named after the late Professor Sean de Courcy, a former chairperson of the Irish Concrete Society and a life-long educator at UCD.

Niall graduated with an ME in Structural Engineering and Architecture from UCD in 2024. His thesis, jointly supervised by Dr Ciaran McNally and Mehran Khan, explored the fresh-state property requirements for 3D printing concrete, which can be modified using admixtures in terms of concrete rheology - the mechanics of flowable materials.

Niall said:

> "I'm incredibly thankful to the Irish Concrete Society for this award and for an amazing evening. Working hands-on with an emerging method of construction was massively rewarding, and it has been amazing to see the positive response to the work being done in this area."

Irish Building and Design Awards

ROD won the coveted Engineering Project of the Year award at the IBDA, which were held in the Intercontinental Dublin on Friday, 4th April 2025. The award is in recognition of our work on Whitegates to Athlone Castle Cycleway, a technically complex but visually simple crossing of the River Shannon in Athlone town centre. The 104m long, two-span, steel girder bridge stands at a site of important historical and commercial interest, with the Church of Ss. Peter and Paul and the Luan Gallery on the west and the Radisson Blu Hotel and the marina on the east. Its crisp, minimalist design complements its urban surrounds, forming a cohesive visual palette along the river. The bridge is a vital link and the focal point of the EuroVelo Route 2 270km Galway to Dublin Cycleway project.

A warm reaction

Reflecting on the various successes, Marc Jones, managing director of ROD, said:

> "We're delighted that our contribution to these flagship projects has been recognised and we are exceptionally grateful to our respective clients, Dublin City Council, Dublin Port Company, Westmeath County Council and BAM Farrans JV, for giving us the opportunity to work on such unique projects and to develop solutions that maximise the performance and resilience of our transport networks while building stronger connections between communities. These awards are tribute to the passion and commitment of the entire project team, who successfully negotiated significant design and construction challenges to deliver projects of which we are all proud. We are also thrilled that the next generation of talent at ROD is being recognised and we congratulate Niall and the UCD team on his success in the Seán de Courcy Award."

Institution of Structural Engineers (IStructE)

ROD's Robert Corbally has been awarded the Joseph Kindregan Prize by the Institution of Structural Engineers (IStructE) Northern Ireland & Ireland Regional Group for the best presentation of 2024. The prize was named after Joseph Kindregan, the first president of the IStructE from Ireland, who presented Robert with his award at the regional hub annual dinner, held at the Anantara Marker Hotel, Dublin.

In his presentation, "A Machine Learning Approach for Drive-By Condition Monitoring of Bridges", Robert highlighted the challenges associated with monitoring and assessing ageing bridge stock and presented his research on the development of Artificial Intelligence (AI) and machine learning approaches to improve bridge condition monitoring. His presentation underscored the importance of embracing new technologies to ensure sustainable bridge maintenance practices into the future.

Award Ceremony Gallery

ACEI Award Images

1. Civil Category – Large Project

Pictured receiving the 'Civil Category - Large Project' award from ACEI President, Anne-Marie Conibear, are (L-R): Trevor McArdle, Clonmel Enterprises; Daire Ó Riagáin, ROD; Eoin Ó Catháin, ROD; Victor Coe, Dublin City Council; Joseph Mernagh, Dublin City Council; and Colm Gogan, ROD.

2. Overseas Award

Pictured receiving the Overseas award from ACEI President, Anne-Marie Conibear, are (L-R): Alasdair Henderson, BAM UK & Ireland; Tony Dempsey, ROD; Jonny Kerr, Farrans; and Aonghus O'Keeffe, ROD.

3. Innovation

Pictured receiving the Innovation award from ACEI President, Anne-Marie Conibear, are (L-R): Colm Gogan, Eoin Ó Catháin, and Daire Ó Riagáin, all ROD.

Irish Concrete Society

4. The Sean de Courcy Student Award

Niall Hanratty is pictured with Chair of the Irish Concrete Society, Robert Laird, and his supervisor, Dr Ciaran McNally.

Irish Building and Design Awards

5. Engineering Project of the Year

Pictured (L-R): Matthew Ryan, Phil Cooney, Darren Quigley, Mark Kilcullen, Pankaj Kumar Das and Rachel Harney, all ROD.

Institution of Structural Engineers

6. Joseph Kindregan Prize

Pictured (L-R): Yasmin Becker (CEO of IStructE), Robert Corbally and Joseph Kindregan (Former IStructE President)

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Summer 2025 | ROD Bridges

Renfrew Bridge Closed

Renfrew Bridge in Glasgow Opens to Traffic

Article by Inês Roque Domingues

ROD is proud to announce that the Renfrew Bridge – the first opening road bridge across the River Clyde in Scotland – was officially opened on 9th May 2025. The completion of the bridge marks the culmination of the Clyde Waterfront and Renfrew Riverside regeneration project, a £117m scheme to transform the waterfront and improve access to jobs, education, hospitals, and leisure pursuits. By revitalising the waterfront and creating direct links to Scotland's Advanced Manufacturing Innovation District (AMIDS), the project aims to stimulate long-term economic and social benefits in the region.

The 184m long, double-leaf, cable-stayed swing bridge is one of the largest of its kind in the world. It spans over the River Clyde with a 12.3m wide bridge section that carries pedestrians, cyclists, and vehicles. The bridge connects Renfrew to Clydebank and Yoker, improving links between the two communities, and maintains navigational for large vessels through its eye-catching double-swing opening mechanism.

ROD collaborated with design lead, Hardesty & Hanover (H&H) on the design of the swing spans and movable elements of the bridge, combining European expertise in the design of the forward spans of movable bridges and over 125 years of design experience in counterweight and mechanical, electrical, instrumentation, control, and automation (MEICA) design in the USA. The double swing bridge is 130m pivot to pivot with an asymmetric or "bobtail" arrangement of 65m forward spans and 27m back spans. The steel superstructures spans are gear-driven, hydraulically powered, and open to a 110° angle. The pivots feature 6.7m-diameter slewing bearings.

The forward steel superstructure is supported by cable-stays anchored to steel pylons and a counterweighted back span.

The design-build team was led by the construction and civil engineering company, GRAHAM Group. Hollandia Infra - Iemants Joint-Venture (HIJV) fabricated the bridge's superstructure in steel yards in the Netherlands and Belgium and transported it by barge across the English Channel and Irish Sea to site. This was a challenging operation that required close collaboration between all parties. Other project team members included Ramboll, AMEY, Hycom Engineering and Fairfield Control Systems.

The bridge's simple and clean appearance belies its complex design. The main challenge for the project team involved combining the inherent flexibility of a cable-stay bridge with the control of motion requirements for a movable bridge. Ensuring each movable leaf perfectly met with the other when closing was crucial. The implementation of thoroughly developed geometry control procedures was vital to ensuring delivery of a high-quality structure. The visual appeal of the bridge was enhanced by the use of fascia plates, which play an important role in maintaining the aerodynamic stability of the bridge. Data derived from wind tunnel tests performed by the design team informed the development of these features.

The bridge was jointly funded by the UK and Scottish governments, with Renfrewshire Council as the owner. Renfrewshire Council leader Iain Nicolson said:

"I'm delighted to see the opening of the new Renfrew Bridge as we successfully complete this transformational project which will enhance the local economy, attract new investment and developments to the riverside, and create thousands of new job opportunities for local people."

Renfrew Bridge Closed

Narrow Water Bridge out of the Ground

Article by Daniel Coleman

R173 Omeath to Newry southern tie-in roundabout constructed

Aerial image showing South Abutment and in-river marine pilling works

Taoiseach Micheál Martin and Minister for Housing, Local Government and Heritage James Browne visited the construction site of the Narrow Water Bridge in Omeath, Co Louth on 12th June to view the substantial progress achieved on the project over the past 12 months. Since the official ground-breaking ceremony to mark the commencement of construction works on the bridge in June 2024 - also attended by An Taoiseach, the bridge foundation work has been completed ahead of schedule. Meeting this major project milestone within a year of the award of the construction contract represents a significant achievement for the ROD project team and the contractor, BAM Ireland, and demonstrates the team's firm commitment to the successful delivery of the scheme.

Notable factors in the project's progress have been swift and decisive decision making; effective collaboration with the contractor and responsiveness to their needs; and the dedicated support of our head office design team, who worked closely with the site team to ensure technical challenges were promptly addressed.

ROD's involvement in the scheme dates back to 2007. We have taken the project from environmental assessment and planning through detailed design and construction contract procurement, and we are now administering and supervising the works through the construction and handover phases. ROD is being supported by Hardesty & Hanover (H&H) on the moveable bridge and by OBFA Architects and JN & G Traynor & Partners on the control building. When complete, Narrow Water Bridge will improve cross-border transit and will be at the heart of a range of greenways, active travel and outdoor activity amenities planned for the Carlingford Lough area. The 195m two-span cable-stayed crossing will connect the A2 Newry to Warrenpoint dual carriageway with the R173 at Omeath. It will cater for pedestrian, cycle, and vehicular access and will open, as required, to allow navigational movements along the Newry River to access Victoria Lock and the Albert Basin in Newry.

Taoiseach Micheál Martin said:

> "I am delighted to return to the site of the Narrow Water Bridge, which is now under construction and a true embodiment of the Government's Shared Island Initiative. This bridge is a tangible symbol of our vision and commitment to deepening connections across this island. Once complete, the bridge will enhance connectivity, unlock new opportunities for tourism and active travel, and support long-term economic development across the Carlingford Lough region, strengthening the ties that are so important for our shared future."

Pictured L-R: Daire Ó Riagáin, Aoife O'Sullivan and An Taoiseach , Micheál Martin

Thomas McEvoy, Deputy Chief Executive of Louth County Council, added:

> "The Narrow Water Bridge project demonstrates what can be achieved through meaningful cross-border collaboration and long-term planning. Louth County Council is exceptionally proud to lead on the delivery of such a landmark project, and we are pleased with the progress to date and grateful for the continued support of our partners and stakeholders across both jurisdictions."

The event featured a presentation from the project team and a guided site walk on the southern embankment, offering a close-up view of the works. Senior Engineer with Louth County Council John O'Hagan provided an update on construction, confirming that the bridge's steel deck sections – which are being fabricated offsite to minimise disruption to the surrounding environment - will arrive from Belgium in two stages. He said:

> "In the first instance, you will see the fixed span coming in. That is due in around the end of Q1 2026. They will float up the river in three sections and then be put in place over a matter of months. In terms of the remainder of the bridge on the opening section, that will come in in March 2027. Again, it will float up the river but this time to Warrenpoint and then come down the A2 dual carriageway to be sat in place."

The bridge is expected to be completed in late 2027 and is being fully funded by the Shared Island Initiative.

Southern approach to Narrow Water Bridge

South Abutment - almost ready to receive the pylon & deck structural steelwork that is being fabricated off-site

Bascule (North) Abutment cofferdam structure comprising an innovative Ruukki pile system - these piles will be integrated with the permanent works

Waterford City's Sustainable Transport Bridge nears Completion

Article by Christian Smith

Drone footage of the arrival of the steel superstructure

The construction of Waterford's Sustainable Transport Bridge across the River Suir is in its final phases. The substructure and intermediary temporary piers to support the 207m long superstructure's four prefabricated steel sections were completed in the first quarter of 2025. Victor Buyck Steel Construction (VBSC) completed the superstructure sections at its yard in Ghent, Belgium, in late 2024, following which the bridge was painted and its movable bascule span mechanical, electrical, instrumentation and control components (MEICA) were installed by Qualter Hall (QH) in early 2025.

The transportation of the superstructure sections by sea and their installation on-site in Waterford posed a significant engineering and logistical challenge. Close coordination between the ROD-H&H Hardesty & Hanover design team and BAM and its specialist subcontractors, VBSC, QH and Hebo Maritiemservice (experts in transportation and lifting operations) was required to ensure the structural integrity and stability of the bridge sections at all stages.

Two flat-top pontoons (c. 70m x 23m – length x beam) with push tugs were used to transport the prefabricated sections (the heaviest of which is 563 tonnes) from the fabrication yard's dock in Ghent northward through the city's intricate network of canals to the open sea just east of Antwerp. From there, 3000HP tugs pulled the pontoons (maximum deadweight tonnage of 2400 tonnes) the remaining 1000km journey to Frank Cassin Wharf in Waterford (just downriver of the bridge site) via the English Channel and Celtic

Drone Image of the arrival of the bridge in situ.

sea. Weather conditions were closely monitored during transportation to ensure the maximum wave height and wind speed (a moderate swell and a strong breeze respectively) were not exceeded, as this could have caused the load to displace or the pontoons to become unstable.

The erection of the four prefabricated steel sections on the bridge substructure and temporary piers supports (two sections on the north and south side of the River Suir's central navigation channel) was completed using an 800-tonne floating, sheerleg crane specifically purposed for heavy lifting operations in maritime conditions. Adjustments of the bridge sections for line and level was subsequently completed using a coordinated system of temporary hydraulic jacks, allowing the sections to be precisely aligned and then joined by temporary bolted splices prior to completing the permanent welded deck connections. Integral reinforced concrete connections between the steel deck and the reinforced concrete substructure piers and bearings at the abutments were used to make the permanent connection of the deck to the supports.

Testing and commissioning of the double-leaf bascule MEICA will take place in the third quarter of 2025. The installation of the secondary bridge components (parapets, lighting, surface finishes, street furniture, pedestrian barrier gates etc.) and the vessel collision protection structures will continue for the remainder of 2025, along with the removal of the temporary in-river support works.

Sheerleg Crane lifting the sections into place.

Waterford City Public Infrastructure Project Flood Defences

Article by Rachel Harney

Waterford North Quays Flood Defences

In January 2025, construction work commenced on the installation of the remaining c. 500m of sheet pile flood defence walls to the east of Plunkett Railway Station. The defence walls will integrate with the flood defences already constructed and incorporated as part of the completed Strategic Development Zone (SDZ) access bridges and new transport hub in Ferrybank. The sheet pile works form part of an approximately 2.1km long, integrated flood defence and drainage system, developed as part of the Waterford City Public Infrastructure Project, that will protect Iarnród Éireann's existing and new railway infrastructure.

Plunkett station's rail lines and platforms have a history of flooding, resulting in rail closures on a biannual basis over the past 16 years. Flooding to the railway corridor occurs when the tidal River Suir either overtops or flows through openings in the existing low river walls. The resultant temporary closures of the railway cause disruption to passenger and freight services and loss of business for retail in the city centre. The frequency of flooding is anticipated to increase as a result of climate change.

The project flood defences consist of:

- c. 1,000m of sheet pile flood defence walls / barriers to the east of Plunkett Station;
- c. 350m of underground flood defence trenches (slurry cut-off walls), remediation works to existing flood walls and demountable flood defence barriers in the vicinity of Plunkett Station;
- c. 750m of sheet pile flood defence walls to the west of Plunkett Station; and
- trackside drainage and associated pumping stations.

BAM and an Iarnród Éireann-appointed contractor will complete the flood defence and trackside drainage works respectively, with the works expected to be completed by the Q4 2026. ROD has completed the detailed design of the integrated flood defences and drainage, with specialist subconsultant Nicholas O'Dwyer undertaking the design of the pumping stations. The design team provided drainage, geotechnical, structural, hydrogeological, archaeological and environmental services in the development of the integrated flood defence and drainage solution.

When completed, the development will facilitate the upgrade of Iarnród Éireann's track signalling, electrical and telecommunications system and the realignment of its tracks to connect with the new transport hub. With the flood defence design providing protection against a 1 in 200-year combined tidal / fluvial flood event (with allowance for climate change), the completed works will future-proof the railway network, ensuring service continuity even during severe weather events in the future.

A Student Placement with a Difference: Life on the Waterford City Public Infrastructure Project Site

Article by Roberta Keaney

Pictured on site, Anthony O'Connor

Anthony O'Connor first heard about ROD as a fourth-year engineering student at University College Dublin (UCD). It was October 2023, and he was listening to one of our directors, Eoin Ó Catháin, deliver a lunchtime presentation to students. The presentation sparked his interest, and after doing a little research, he discovered ROD was the lead designer on the Waterford City Public Infrastructure Project, a major urban regeneration project just 20 minutes from his family home. In that moment, Anthony decided that when the opportunity arose he would apply for a student placement at ROD.

Three weeks later, Anthony was speaking to prospective employers at a careers fair organised by UCD's Civil Engineering Society. Seeing the ROD stand at the event, he approached Eoin and enquired about the possibility of securing a seven-month student placement onsite in Waterford. Anthony explained that he wanted to be involved in a project that was changing the landscape of his home city and the opportunity to see all the infrastructure improvements it was delivering 'from the inside' would be a gamechanger for a young engineer.

Persistence pays off

Placing a student on a project site was not something ROD had done before but, impressed by Anthony's level of interest in both the company and the project, Eoin suggested to the Board that ROD should try to accommodate the request. Over the next few months, Anthony kept in touch, sending emails, making phone calls and laying out his previous work experience, which included working as a labourer for a company that built and erected farm sheds in 2021, spending the summer of 2022 in the design office of Malone O'Regan in Waterford, and shadowing one of Malone O'Regan's site engineers for two weeks in the summer of 2023. His persistence paid off and, following appropriate health and safety training and an induction, Anthony became the first student at ROD to spend his entire placement onsite.

The value of site experience

Anthony started with ROD in June and finished his placement in December. During that time, he says his confidence grew enormously: "I developed a better understanding of how roads, bridges and buildings are built; the sequencing of construction works; and the roles and responsibilities of the people working on a site. Anthony knew little about engineering contracts prior to his placement, but he now understands their significance, describing them as the 'first point of reference' when questions arise on a project site.

One of the highlights of the placement for Anthony was seeing the workers on the River Suir Sustainable Transport Bridge in the cofferdam, within the river, fixing substantial amounts of steel to form the bridge piers. Every day brought a new learning opportunity, from seeing the structural shell of the transport hub come together and watching road bridges being constructed on the access infrastructure scheme to monitoring ground investigations for the flood defence scheme and seeing first hand the practical implications moving a line on a drawing in a design office has for workers onsite.

The importance of seeing problems before they arise so they don't impact the programme was one of the key takeaways from the experience for Anthony. He was also impressed by the skills demonstrated by our clerk of works, resident engineers and senior resident engineers in developing a good working relationship with the contractor and ensuring the work conducted onsite met the required standards in terms of quality.

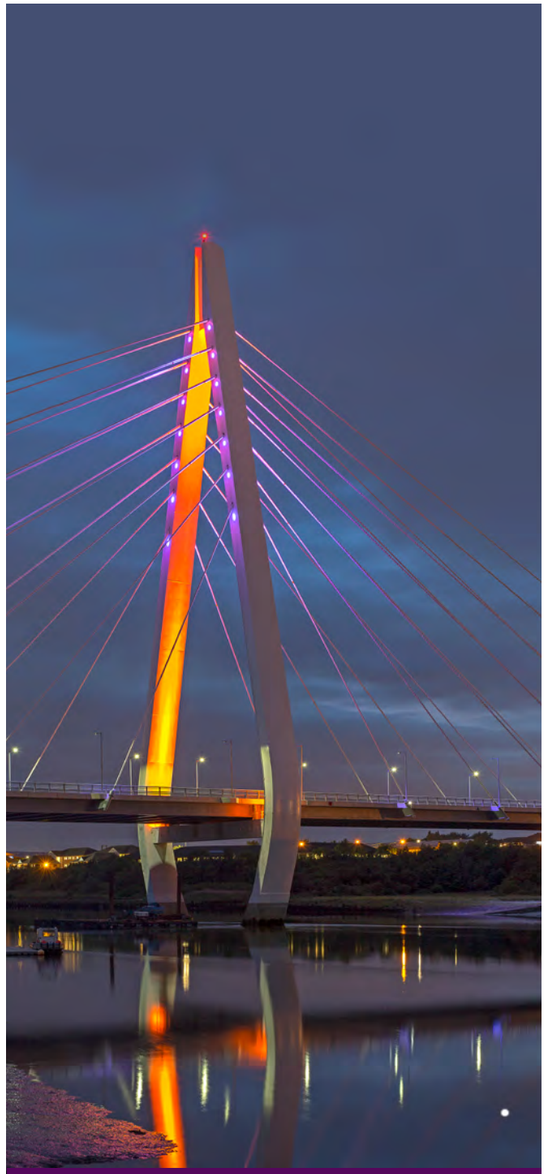
Northern Spire Bridge Cable Stay System Passes Maintenance and Adjustment Period Milestone

Article by Christian Smith

We are delighted to confirm that the Northern Spire Bridge in Sunderland has passed its five-year maintenance and adjustment period milestone without any observed issues or any requirement to retrofit dampers. The bridge has been tested by several significant storms, most notably Storm Éowyn, which hit the UK and Ireland in January 2025, bringing with it wind gusts in excess of 100mph (160km/h) and making it the most powerful windstorm in over a decade.

The 336m-long bridge crossing comprises a 24m-wide steel and concrete composite deck, which includes a 240m cable-supported span over the River Wear. The cable-stayed span (stays comprising a parallel strand system) is supported by a 100m-high A-frame pylon of steel/concrete composite construction. When the bridge opened to traffic in July 2018, it brought four years of design and construction collaboration between the project's design joint venture team of ROD and Buro Happold and construction joint venture team of Farrans and Victor Buyck Steel Construction to an end. However, it also marked the beginning of the five-year period during which the contractor, Farrans, and ROD, as its specialist cable-stay designer, were required to undertake the review, inspection and any adjustment, damping or re-tensioning of the cable-stay system components deemed necessary by Sunderland City Council's maintenance teams (based on their observations during the period).

Situations likely to give rise to the requirement for the adjustment, damping or re-tensioning of cable-stay system components include unexpected deflections of the structure or cables or unpredicted cable oscillations (e.g. due to vortex shedding, rain-wind induced vibrations, parametric excitation etc.). To mitigate the potential for such cable oscillations, extensive wind studies and wind tunnel testing were conducted on the bridge geometry at the design stage. As a result of this work, the stays were equipped with a special encasing designed to mitigate rain-wind-induced vibrations, cable-stay dampers were installed on some of the cable-stays at the design stage, and future provision was made in the lower-stay anchorages for external viscous or friction dampers to alleviate oscillations if they were observed in service.



Northern Spire Bridge night view.

ROD's Weekend Away in Bundoran

Article by Clodagh Rea

Pictured L-R: Svitlana Putanenko, Kate Ballance, Havin Arslan Gursoy, Zara Craig, Niall Heffernan, Niall Hanratty, Jane Stafford, Rebecca Glynn, Emeline LaFortune.

On Friday 25th April, over 20 members of our team left Dublin behind and headed to Bundoran in Co. Donegal for a weekend break organised by our Social Committee. Bundoran is renowned for its stunning coastal scenery and the diversity of its outdoor activities, which made it the perfect location for our team to relax, unwind and recharge after a busy first quarter.

We arrived late on Friday evening, and although it had been a long drive, we weren't quite ready for bed, choosing instead to enjoy a few drinks in Maddens Bridge Bar in the town centre. The next morning, several of our team were up bright and early to take part in the Bundoran Parkrun, a 5K community run/walk that took them along the cliffs of Rougey, offering spectacular views of the Atlantic Ocean.

Not to be outdone by the early risers, some of the rest signed up for horse riding lessons and, after learning the basics, saddled up for a guided trek through the local countryside. An afternoon of paddleboarding was next on the agenda, and while there were a few wobbles and some unintended dips in the water, it an enjoyable experience that allowed us to make the most of the fine weather. Our day ended with a guided walking tour, where we learned about the history of Bundoran and followed the trail of the Spanish Armada, a fleet shipwrecked off the northwest coast over 400 years ago.

It was then time to regroup for dinner, where we swapped stories about the day's activities and rested our tired legs. From there, we headed to the local pubs and clubs – an absolute 'must' after coming all that way!

A big thank you to everyone who helped organise what was a wonderful trip and to all the team who joined in the fun. Looking forward to the next one – wherever that may be...

Pictured L-R: Clodagh Rea, Maha Riad, Nemone Van Der Bliake, Ben Gallery, Gareth Mitchell.

Pictured L-R: Maha Riad, Svitlana Putanenko, Niall Heffernan, Rebecca Glynn, Louise-Marie Lanaud, Zara Craig, Kate Ballance, Gareth Mitchell.

Huseyin Berk Gursoy, Louise-Marie Lanaud, Aoife O'Sullivan, Samira Islam, Aishwarya Katyal, Craig Smart.

Preferred Option for N4 Mullingar to Longford (Roosky) Project Announced

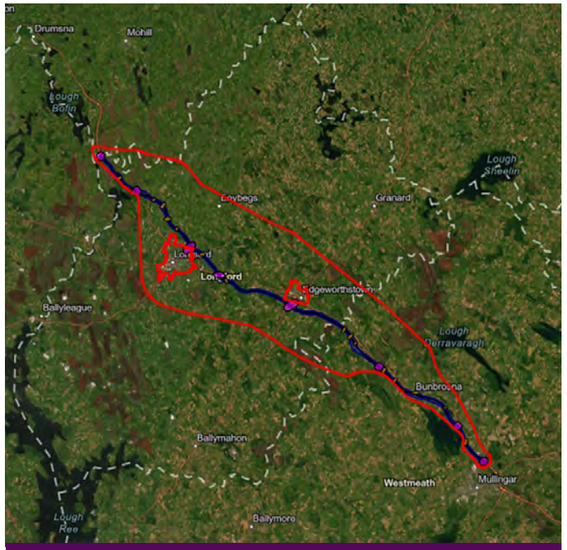
Article by Claire Cable

Planned Delivery of the phase 3 Design and Environmental Evaluation Process

In February 2025, Westmeath County Council, in conjunction with Longford County Council and supported by Transport Infrastructure Ireland (TII), announced the Preferred Option for the N4 Mullingar to Longford (Roosky) project. The route corridor is based on the Emerging Preferred Route Corridor for the project, presented at a public consultation held in Longford, Mullingar and Edgeworthstown last July. The ROD-AECOM project team received 154 submissions as part of the public consultation process, which helped to identify potential opportunities and constraints within the emerging preferred route corridor, further informing the indicative junction and sideroad strategy and confirming the preferred option.

Following the selection of the preferred option, the project is being taken forward to the design and environmental evaluation phase. This will involve further design development and the preparation of an Environmental Impact Assessment Report and Screening for Appropriate Assessment. The project team has been engaging with residents, landowners and property owners within the study area, and will undertake a range of engineering and environmental site surveys to further inform the design process. These will include geotechnical investigations, topographical/LiDAR surveys and ecological surveys. Once the site surveys have been completed, the initial design can be progressed. When the design has reached a level of maturity to allow informed discussions to take place, the project team will consult with directly impacted landowners in relation to its impact on their land and property. Thereafter, feedback will be considered, and, where appropriate and feasible, amendments will be made before finalising the design.

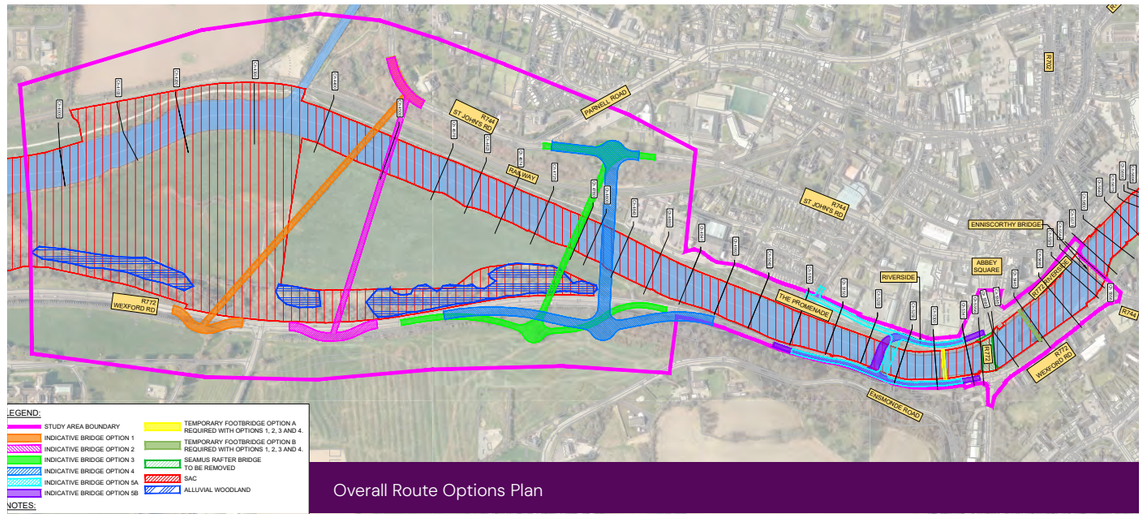
The project will address the largest unimproved section of the N4 Dublin–Sligo route, a 52km section of single carriageway road that passes through or close to several towns and villages, including Ballinalack, Rathowen, Edgeworthstown, Longford and Newtownforbes. This section of the N4 accounts for approximately 25% of the overall N4 national primary route between Dublin and Sligo. The road carries up to 17,500 vehicles per day and features more than 500 at-grade junctions and private accesses. It continues to see high collision statistics, with over 200 personal injury collisions reported between 2008 and 2023. Of these collisions, 20 resulted in fatalities and 35 resulted in serious injuries. Over 50% of the collisions resulting in fatal or serious injury occurred in the last six years, from 2018 to 2023, demonstrating an upward trend. The improved road will lead to a significant improvement in road safety, as well as improving journey time and reliability, and relieving towns along the route of unnecessary through traffic.



An interactive map of the PO and the environmental constraints is available to view on the project website: n4mullingartolongford.ie/latest-news/

Enniscorthy Flood Relief Scheme Moves Another Step Forward

Article by Jade Schanen



Overall Route Options Plan

A public consultation on Phase 1 of the Enniscorthy Flood Relief Scheme took place in the Riverside Park Hotel & Leisure Club, Enniscorthy, on Tuesday, 13th May 2025. Hosted by ROD's project team and representatives from Wexford County Council and the Office of Public Works (OPW), the event brought local residents, businesses, stakeholders, and interested parties together to share their views in relation to the options being considered for Phase 1, including the Emerging Preferred Option. It followed a previous public exhibition, held in 2019, at which the outline of the scheme was presented.

Phase 1 of the scheme aims to reduce the severity of flooding experienced in Enniscorthy town, which poses a significant health and safety risk, causes significant property damage, and disrupts the regular flow of traffic and commercial activity through the town. Enniscorthy has a long history of flooding along the banks of the River Slaney, with extreme floods documented in 1924, 1947, 1965, 2000, 2015, 2018 and, most recently, in 2021. As can be seen from the dates, the frequency of the severe flooding events appears to be increasing.

The proposed development involves the removal of the existing Seamus Rafter Bridge in the town centre, which significantly obstructs water flow in the river during flood conditions, and the construction of separate new road and pedestrian bridges to replace it. Phase 2 of the scheme involves the construction of the remaining flood relief defence works required for the town.

A preliminary options assessment was completed on six options for replacement bridges to determine the feasibility of each against the core project objectives. Five options were considered feasible and brought forward for multi-criteria analysis. The multi-criteria analysis to identify an emerging preferred option was based on the Department of Transport's Transport Appraisal Framework. The five feasible options were displayed at the public consultation and attendees were encouraged to share their views on them to help inform the identification and selection of the Preferred Option to be taken forward to planning. The materials presented at the event were also made available on the project website www.enniscorthyfrs.ie during the consultation period, which ran from 13th May 2025 to 10th June 2025.

The project team is using the information gathered at the public consultation and from the submissions received to complete the Options Assessments Study and to inform the preferred option. That preferred option will then be taken forward to the design and environmental evaluation stage before being submitted for statutory planning approval.

Cherrywood Regional Attenuation Pond Reaches Substantial Completion Infrastructure Project Site

Article by Ciaran McGee

Cherrywood Regional Attenuation Pond 5A

In early 2025, the Cherrywood Regional Attenuation Pond 5A scheme reached substantial completion, providing a critical piece of stormwater management infrastructure to facilitate future development within the 360ha Cherrywood Strategic Development Zone (SDZ) in south Dublin. The scheme will provide the final stage of treatment to surface water runoff from the upstream catchment, reduce flood risk on the receiving water environment and enhance biodiversity in the Cherrywood area.

The project involved the construction of a sediment forebay pond, regional attenuation pond and approximately 320m of greenway at Cherrywood. It included:

- extensive earthworks;
- drainage installations;
- decommissioning of an existing attenuation pond;
- diversions of high voltage ESB underground cables and Uisce Éireann watermains;
- installation of public lighting;
- pavement construction;
- installation of kerbs, footways, signage and markings; and
- landscaping works.

ROD was appointed by Dún Laoghaire Rathdown County Council in 2020 to review and update the detailed design, prepare contract documents, oversee the procurement of a contractor and provide contract administration and site supervision services during the construction and handover stages of the scheme. ROD also acted as Project Supervisor for the Design Process and provided head office engineering and ecology support during construction.

Work began on site in July 2024, with Clonmel Enterprises Ltd appointed as the contractor and Project Supervisor for the Construction Stage. ROD Managing Director Marc Jones led the design and construction teams, supported by Ciaran McGee as project engineer, Liam Kilcullen as resident engineer and Maddy van der Poel as project ecologist. Close cooperation between the project team and the contractor was key to the successful delivery of the scheme within the eight-month construction programme.

The project team faced several challenges in delivering the scheme, including:

- diversion of approximately 220m of existing high voltage ESB underground cables and 25m of existing 315mm diameter watermain;
- protection of approximately 125m of an existing 20-inch diameter asbestos trunk watermain that crosses the site;
- installation of approximately 95m of 525mm diameter stormwater pipe within an existing urban road containing a high density of utilities and services;
- management of incoming flows to the existing pond during the decommissioning phase; and
- monitoring, protection and translocation of several habitats and amphibians during the construction stage.

With the scheme substantially complete, the stormwater network and greenway now provides the necessary infrastructure to accommodate development within the catchment as well as pedestrian and cyclist facilities which will ultimately link with complementary greenway and linear park schemes in Cherrywood and Brides Glen.

Ecological Mitigation To Prevent Loss of Biodiversity in Cherrywood

Article by Maddy Van De Poel

As part of our work for on the Cherrywood SDZ, it was necessary to remove an existing attenuation pond and construct a new pond. During site surveys, our ecological team identified two rare species adjacent to the existing pond: bee orchid (Ophrys apifera) and blue fleabane (Erigeron acer). As these species are associated with low nutrient and well drained soil, their presence indicated ecologically valuable soil. Mitigation was therefore required to protect not only the bee orchids and fleabanes, but also the soil in which they were established (thus avoiding their permanent loss).

During construction, our ecologists worked closely with the contractor, Clonmel Enterprises Ltd, to excavate individual bee orchids and the surrounding topsoil, which contains the local seedbank for blue fleabane and the nutrients essential for the plants' successful establishment elsewhere on the site. The plants and soil were then translocated to a receptor area within the site but away from new development. Retaining the soil and storing it onsite was important because replicating it artificially can be difficult, as it takes time and a specific maintenance routine to achieve a low-nutrient profile. Over the summer season, our team will continue to monitor the receptor site and to assess the plants and the surrounding soil to check for signs of growth, health and proper development.

Bee orchid

N58 Foxford Transport Project

Article by Gemma Rothwell

ROD-AECOM has been appointed by Mayo County Council, in conjunction with TII, to the N58 Foxford Transport Project. The project is one of several road schemes in the west of Ireland for which ROD is currently delivering engineering services. These include the N26 Ballina Bypass Phase 1 and the N5 Ballaghaderreen to Scramoge Project.

ROD-AECOM first examined the possibilities for a bypass of Foxford over a decade ago, as part of the N5/N26/N58 Turlough to Bohola project. ROD's Project Director Barry Corrigan conducted environmental studies for the earlier study and is familiar with the challenges the project poses, not least the ecological and environmental constraints posed by the need for all possible route options to cross the River Moy Special Area of Conservation (SAC), which supports various nationally rare and protected species.

Developing a scheme with a positive business case will be vital to progressing the project to construction. Without doubt, the congestion relief the scheme will deliver in the town will be broadly welcomed. However, the recent decision to reduce speed limits on national secondary roads from 100km/h to 80km/h erodes the travel time benefits of such bypass projects. Clearly demonstrating that the safety and environmental benefits of the projects outweigh the costs of the land acquisition, significant structures and potentially challenging ground conditions is therefore a key focus for our team.

From Dublin to Mannheim: My Trainee Exchange Programme Experience at Schüßler-Plan

Article by Seán Bartlett

In 2024, Europengineers, of which ROD is the Irish member, introduced a trainee exchange programme to provide engineering graduates within its eight member companies an opportunity to gain international experience with one of the other members. Seán Bartlett, design engineer at ROD, was the first ROD staff member to avail of the programme.

"I first heard about the Europengineers trainee programme when I was mid-way through my two-year graduate programme at ROD. The idea of spending six months working abroad, gaining new experiences and improving my language skills appealed to me, and I made a mental note to speak to our CPD Director, Ed Warren, about it when I finished the graduate programme. When we spoke, Ed was enthusiastic about the traineeship, describing it as a great learning opportunity for a recent graduate and highlighting the range of supports available to trainees, including accommodation, language classes and free public transport. Knowing that such an opportunity might not come my way again, particularly while I am still young and have no dependants, I made up my mind to apply.

My application was successful, and I began my traineeship with Schüßler-Plan last August. I spent my six months at the company's Mannheim office in southwest Germany. Mannheim is known for its extraordinary urban architecture, but it is also a city full of culture and art. It lies at the convergence of the Rivers Rhine and Neckar and has 300,000 inhabitants. My apartment was right in the city centre, but since German cities are denser and higher than Irish cities, I was within 20 minutes of the countryside, where there was a nice forest that I particularly enjoyed visiting.

Everyone at Schüßler-Plan was very welcoming, which made it easy for me to fit in. My colleagues became my friends, and I also grew quite fond of the company dog, Shane - a beautiful animal with big, brown eyes. While the working week is slightly longer in Germany (39 hours rather than 37.5 hours), I have to disagree with the stereotype of Germans as serious, strict followers of timetables. On the contrary, my colleagues exemplified a good life-work balance, and leant heavily on flexitime to ensure one did not suffer at the expense of the other. In the run up to Christmas, I enjoyed the benefits of flexitime myself, nipping out of the office to buy Christmas gifts when the shops were quieter.

At Schüßler-Plan, all of my work, including email communication, was through German. In my first few weeks there, my German was a bit rusty but, thankfully, my colleagues were happy to communicate with me in English. As part of my traineeship, I attended German classes at the Goethe-Institut in Mannheim for 2.5 hours twice a week. I was in a class with seven adult professionals who had recently moved to Germany. The classes were a huge help, particularly as I am dyslexic, which makes learning languages more challenging. In fact, when I think back to my secondary school days, my younger self would never have imagined that I would one day work through a second language.

While I was settling into the company, I was tasked with familiarising myself with SOFiSTiK, a software package used for analysis, design and detailing. ROD's bridges team uses the software for its work, but it was new to me, so I spent my first two to three weeks watching online tutorials to bring me up to speed. My first project at Schussler-Plan involved the upgrade of a local rail line to allow passenger trains to run at 250km/hr instead of 120km/hr. I remember my manager on the project remarking that the current trains were really only suited to carrying freight, not people. I didn't have the heart to tell him that in Ireland a speed of 120km/hr would be considered quite good.

My first site visit was to an elevated rail line in Mannheim's twin city, Ludwigshafen, which is only a 20-minute journey on the Straßenbahn across the River Rhine. I remember looking out the window before I left the office and, as it wasn't raining, I left my coat behind. In Ireland, I associate wearing a coat with rain, but it is a mistake I won't make again in Germany. I was almost frozen examining the rail line. Notwithstanding the cold, the site visit was really interesting, particularly seeing the post-tensioning on the bridge. The concrete had yet to be poured for the next span, and so the ducting for the tendon was still visible. I remember thinking it was the cleanest site I had ever been on. Admittedly, in that respect, I found Germans to be very stereotypically German!"

ROD Publishes Report on Artificial Intelligence in the Road Sector

Article by Robert Corbally

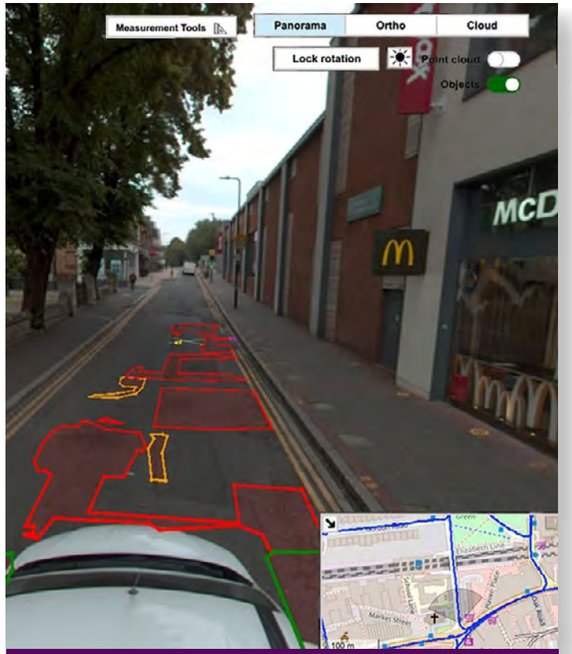
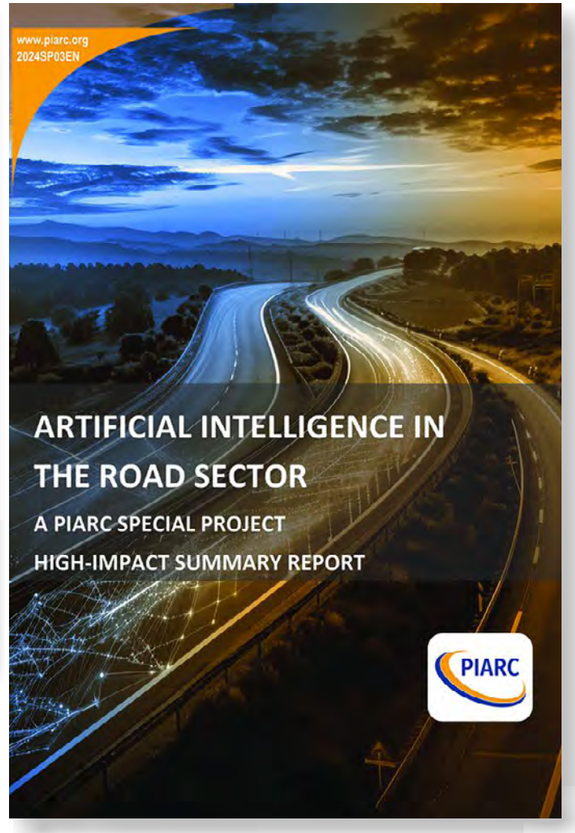


Image courtesy of EyeVi Technologies

Computer vision and AI predictive analytics have been used to enhance infrastructure inspection capabilities resulting in improved asset management, predictive maintenance and budgeting in the road sector.

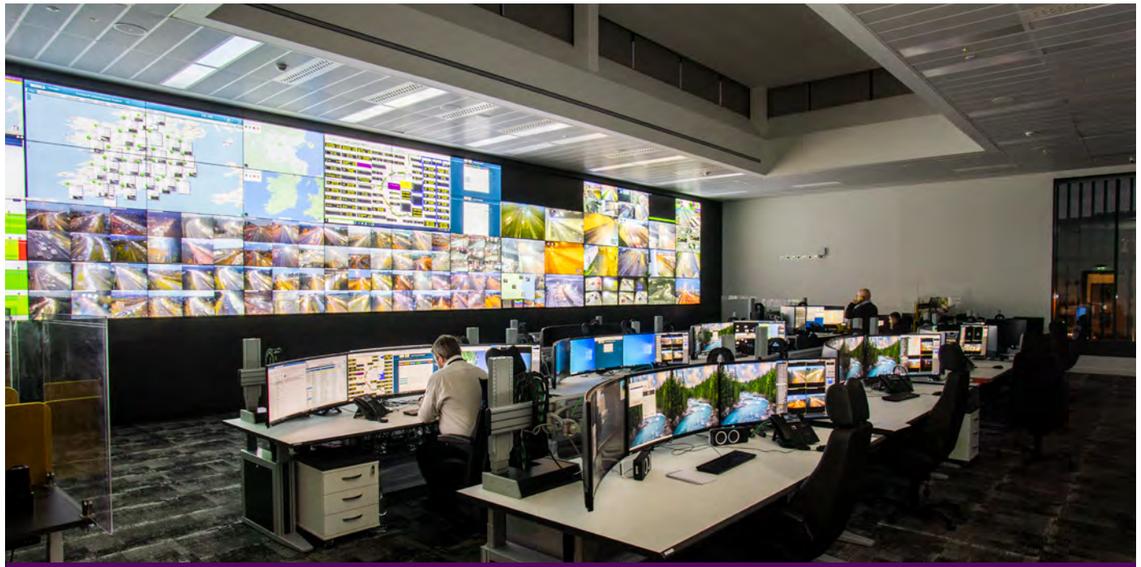


ROD is delighted to announce the publication of a new PIARC (World Road Association) industry report on the use of Artificial Intelligence (AI) in the roads sector. Developed by our research and innovation group, the report represents the first comprehensive study of AI's role in road infrastructure planning, design, construction, operation, and maintenance - now and in the future. It highlights the potential benefits, challenges and risks associated with AI adoption and provides tailored recommendations to help road administrations and operators navigate the transition to effective AI integration by 2030.

The report aims to guide countries at varying stages of AI maturity towards safer, more efficient and more sustainable road transport systems. It is a 'must-read' for road administrations and operators considering the adoption of AI for their activities in the transportation sector. Our study findings are presented in two complementary documents: a full-length report, offering in-depth technical analysis, and a high-impact summary, designed to communicate key findings and recommendations to senior decision-makers.
The report is available to download from the PIARC website: www.piarc.org/en/

Data Fusion and Analytics Evaluation

Article by Srijith Unni

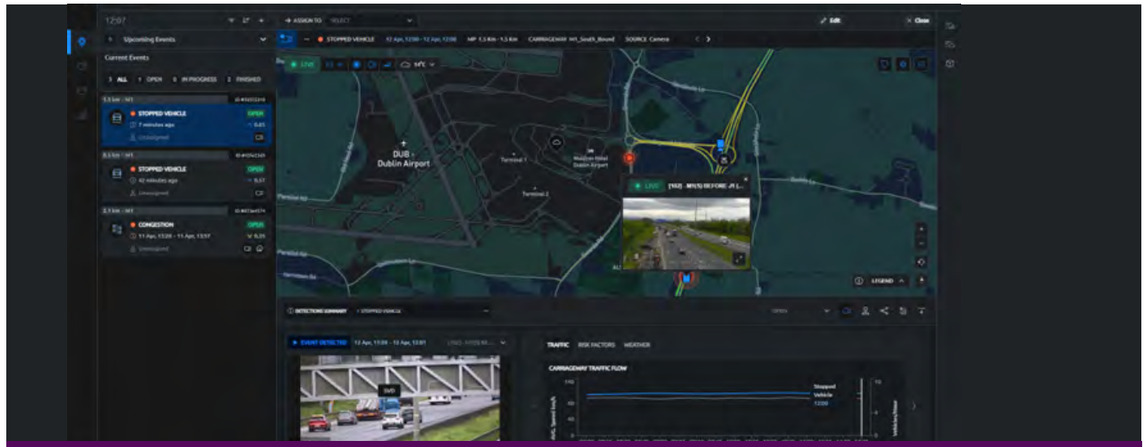


Motorway Operations Control Centre

As part of the enhancing Motorway Operation Services(eMOS) programme, Transport Infrastructure Ireland (TII) has been exploring ways to leverage its extensive repository of historical and real-time data to enhance the operational environment for motorway operations. In 2023/2024, TII piloted the Data Fusion and Analytics Evaluation (DFAE) project in collaboration with ROD-AECOM and specialist technology subconsultants. The aim of the pilot was to deploy an AI-driven fusion platform on two distinct sections of the motorway network to establish whether it could support faster and more accurate operational responses to incidents on the M50. The M1 and M6 were selected as the sites for the pilot.

Operators based in the Motorway Operations Control Centre (MOCC) rely on manual decision-making when responding to incidents on the network, primarily using calls from incident support units (ISU) and members of the public; CCTV cameras for visual confirmation; the Network Intelligence and Management System (NIMS); and third parties monitoring live traffic conditions. The AI software platform uses data fusion and AI algorithms to recognise patterns from historical and third-party data sources, such as Waze, TomTom, and HERE mapping, and fuses them with data from Intelligent Transport Systems (ITS) equipment, such as CCTV and traffic detector loops in the road, to deliver a detailed, real-time overview of incidents on the network and provide critical information to support faster and more accurate operational responses. If the DFAE project is successful, it could reduce the MOCC operators' reliance on manual event verification, improving detection and classification of road incidents and reducing response times.

The initial pilot phase included conducting a live study on the M1/M50 and the M6/N6 corridors. The M1/M50 corridor has reasonably good ITS infrastructure, including CCTV cameras and inductive traffic counting loops. The M6/N6 corridor has more limited ITS coverage - no CCTV cameras for example - reducing the situational awareness for operators. Covering a length of 70km, the study aimed to assess whether TII could extract greater value from its existing data sources and the potential of deep data fusion using these assets. It commenced in November 2023, with a six-month initial setup and integration phase during which ROD performed



AI software package in operation

studies on requirement gathering and defining specifications. Technical integration of the data feeds was performed on the AI software, and initial testing and calibration were performed to prepare the platform for learning and evaluation.

In May 2024, ROD conducted a month-long learning process that involved using the AI software remotely and in the MOCC. This gave the project team an opportunity to better understand the workings of the platform, the different alert types, and how to establish confidence in them. It also enabled ROD to provide feedback on interface usability and the refinement of algorithms and alerting rules.

During a June to August 2024 evaluation period, ROD team members were based in the MOCC control room, where they collaborated closely with operators and shadowed them while using the AI software platform. The focus was on evaluating whether the AI software could:

- streamline large volumes of data into operationally digestible information flows;
- improve detection of safety-related events;
- reduce response times to incidents; and
- support validation for future ITS and data source investments.

The evaluation process involved verifying the alerts using CCTV (M1) or requesting the ISU to investigate (M6/N6). The alerts were closely monitored and responded to, as an operator would in similar circumstances. If an alerted event was in the blind spot of a particular CCTV camera, an operator would turn the camera to validate the existence of the incident and respond accordingly. If the ISU investigated and found validity in the incident, it would immediately be confirmed back to the control room and responded to.

Data from the alerts on the AI software (live alerts as well as retroactively addressed alerts from weekends) were constantly collected to determine:

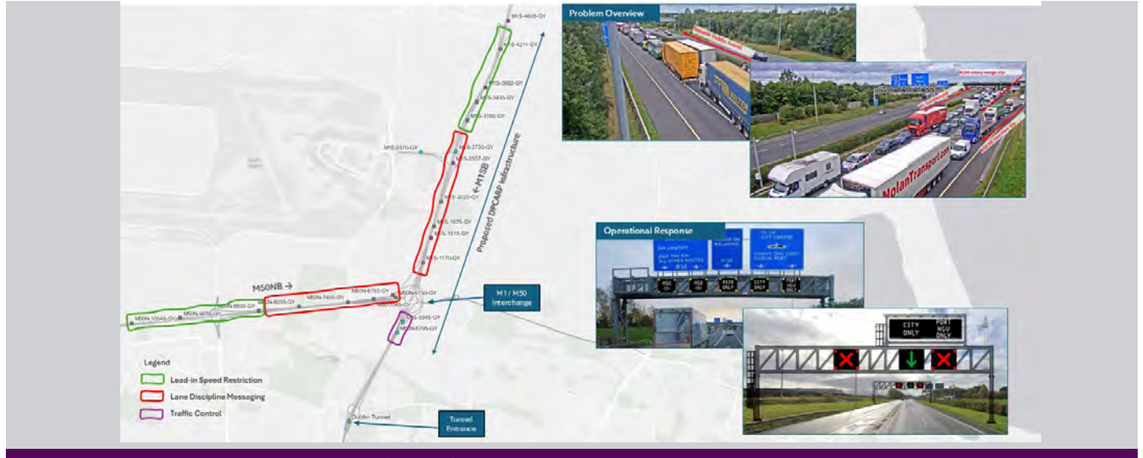
- the validity of the alert (true/ false detections);
- how accurately the location of the alert was determined;
- how quickly the alert was created; and
- whether ROD informed the control room about an incident validated from the alert or whether they were already aware of it etc.

The evaluation period findings indicated that the AI software significantly enhanced alert refinement for operators, with 65% true alerts, 11% requiring action from the operators, and an overall improvement in detection times. 47% of events were identified faster than the existing process of identifying incidents, with 65% faster detection times on the M6/N6 section specifically. The AI software was also able to detect one additional event per day across the 70km stretch than would otherwise be detected and that required action from the operators.

The next phase of the project involves operators integrating the AI software into control room operations and providing regular feedback, including general system performance insights, aimed at supporting the continuous improvement of the AI software's data fusion capabilities and event detection accuracy.

Dublin Port and City Access Resilience Project

Article by Patrick Kelleher



Dublin Port & City Access Resilience Project (DPCARP)

The Dublin Tunnel, which forms part of the M50 motorway, plays a key role in protecting access to the city centre by diverting heavy goods vehicles (HGVs) to and from Dublin Port away from local roads. In the immediate aftermath of an incident in the tunnel, traffic metering is introduced to regulate traffic flow within the tunnel and to restrict access. While the incident is being managed, the approaching motorways and surrounding local roads can become heavily congested, significantly limiting access to the city centre.

In line with its objective of maintaining a safe, resilient and available transport network, Transport Infrastructure Ireland (TII), in conjunction with ROD-AECOM, is working to develop a series of traffic management strategies aimed at reducing the impact of unplanned tunnel closures. A joint operational review of tunnel metering identified that HGV queues can extend up to and beyond the M50/M1 junction. When this happens, the queue from the tunnel prevents traffic from the north (M1) accessing the M50 and hence the rest of the national motorway network, significantly compromising the transit of freight around the country.

To help address these operational challenges, the Dublin Port and City Access Resilience Project (DPCARP) was established as part of the enhancing Motorway Operation Services (eMOS) programme. Extending from Junction 3 (Swords South) on the M1 southbound to the M1/M50 interchange, and the M50 northbound approach from Junction 4 (Ballymun), DPCARP will deliver an intelligent transport systems (ITS) solution that aims to minimise traffic disruption through the implementation of traffic management strategies. These strategies include stopping and releasing traffic at the M1/M50 interchange to keep the junction merges clear, directing traffic into appropriate lanes, organising HGVs into an orderly queue while they are waiting for tunnel access, and keeping traffic moving into the city.

The project is being delivered on a phased basis with the ongoing advanced civil and structural works to be completed this summer. Works include the construction of five ITS gantries and the retrofit of eight existing ITS infrastructure sites. The subsequent phase, to be delivered by Swarco UK & Ireland, involves the deployment of 41 lane control signals (LCS); six variable message signs (VMS); and six slip road signals (SRS) under the M50 Traffic Flow Optimisation (MTFO) ITS Deployment contract. Following the completion of this phase, operators in the Motorway Operations Control Centre will be able to display messages on overhead lane control signals to inform drivers on how to respond to traffic ahead in a manner that maintains access to the city centre and the M50 while the incident in the tunnel is being cleared.

MCAAS Pavement Renewal Services

Article by Edward Warren

M20 Patrickswell, Co. Limerick, Ireland

ROD has been providing a range of services to TII on the Motorway Contract Audit and Advisory Services (MCAAS) Region West Contract since May 2021. One of these services is the development of designs for road pavement renewals. Road pavements represent a considerable asset investment and a significant maintenance responsibility for road authorities. They are the most exposed element of the road and are subject to deterioration from traffic loading, weather, drainage and movements in the underlying supporting structures and earthworks.

In 2024, our pavement design and site supervision teams supported the successful delivery of several pavement renewal projects for TII, including pavement resurfacing of the M6 Junction 2 to 3 westbound and M20 Junction 2 to 4. Our services on these projects included preparation of design proposals through the Pavement Asset Repair & Renewal (PARR) process set out in TII's AM-PAV-06049 standard, which aims to maintain the overall asset value for minimum lifecycle cost by ensuring optimal management of the pavement. Once the PARR proposals were approved by TII, we developed design and tender documents for the procurement of the renewal works through the TII High Speed Pavement Framework.

The M6 Junction 2 to 3 included renewal of the Hot Rolled Asphalt (HRA) surface course of trafficked lanes over approximately 14.5km, with the hard shoulder pavement retained. The latter provided carbon savings by reducing overall pavement quantities, reducing haulage trips and minimising waste material. Warm mix Stone Mastic Asphalt (SMA) surface course was specified for the pavement renewal on M20 Junction 2 to 4. Warm mix asphalt is produced at lower temperatures than traditionally manufactured hot mix asphalt, reducing energy consumption and carbon emissions. Both trafficked lanes were resurfaced for approximately 9.7km in each direction, with the hard shoulder pavement retained again with the attendant benefits.

In 2024, ROD provided support services to TII and its maintenance contractor Colas for a pavement preservation trial on the N4 between Collooney and Sligo. It aims to optimise life cycle costs and emissions with targeted preservation of the existing pavement surface. Using the TII Carbon Tool, we quantified the carbon savings of the pavement preservation system compared to conventional mill and replace methods. Our assessment highlighted the effectiveness of the pavement preservation system in reducing carbon emissions and extending road pavement life with reduced environmental impact, making it a favourable option for consideration in future pavement preservation projects.

Our 2025 pavement renewal projects will incorporate the 'CO2 Performance Ladder', which will act as both a green procurement instrument and a carbon management system. Having been successfully piloted by TII in 2024, this initiative is expected to be expanded to other TII High Speed Pavement Framework call-offs, and will help tenderers embed green procurement into their organisation and provide a framework to make significant carbon reductions in projects. The CO2 Performance Ladder was developed in the Netherlands, where it has been successfully used in recent years, and is compliant with EU procurement legislation.

Works gets underway on Coonagh to Knockalisheen Distributor Road

Article by Emily Alfred

Aerial view of Coonagh to Knockalisheen Distributor Road

On 15th January 2025, the contract for the completion of the Coonagh to Knockalisheen Distributor Road Scheme was executed by Limerick City and County Council and Wills Brothers Ltd. This marked a major milestone in the delivery of the €31m project, which will unlock significant economic and social opportunities for Moyross and the wider area. Since then, Wills have hit the ground running on the project, progressing a significant portion of the earthworks, including the construction of embankments and verges to accommodate new footways and cycleways. Site clearance is also underway on a part of the site earmarked for the future development of a hospital at Ballygrennan, highlighting the project's vital role in enabling broader infrastructure development within the area.

The scheme is located on the northwestern outskirts of Limerick City and will link the Coonagh Roundabout with the Knockalisheen Road close to the Limerick/Clare county boundary. It consists of a 2.1km dual carriageway, with cycleways and footways on both sides; complementary improvement works to existing roads; utility diversions; sewer system improvements; and landscaping. It is being delivered in phases, with the first section between Coonagh and Knockalisheen scheduled to open after the first 12 months, and the rest of the scheme on track for completion within 24 months.

ROD, in partnership with MRG Consulting Engineers, brought the scheme from initial constraints study through route selection and preliminary design to planning, detailed design and tender. An Environmental Impact Assessment and Oral Hearing were required at planning stage. ROD is now supporting Limerick City and County Council with site supervision and contract administration during construction, close out and review.

The road scheme forms a central pillar of the Limerick Regeneration Framework Implementation Plan, which prioritises enhanced connectivity and access as critical tools for socio-economic uplift in historically disadvantaged communities. When complete, it will enhance the quality of life of local communities by providing them with better access to essential services, employment and educational facilities; open up the entire Moyross estate with a new entrance and exit; and support the long-term regeneration of north Limerick.

ROD-AECOM reappointed to N13 Bridgend to County Boundary Improvement Project

Article by Richard Spencer

ROD-AECOM is delighted to have been appointed by Donegal County Council to undertake Phases 3 and 4 services for the N13 Bridgend to County Boundary (TEN-T) Route Improvement Project. We were previously engaged as technical advisors on the project and carried out the option selection studies leading to the Emerging Preferred Option in 2023. I led the project through the earlier phases and will continue to lead the project through the preliminary design (Phase 3) and statutory process (Phase 4).

The scheme comprises a 1.2km length of the TEN-T Comprehensive Road Network in County Donegal and aims to safeguard the operational effectiveness of the strategically important border crossing between Donegal and Derry, which provides vital access to employment, education, retail, commercial and health services and international markets via ports and airports. It will also enhance the quality of life of people living in Bridgend village, which sits on the border crossing and is bisected by the N13/A2 transboundary route, by removing congestion, improving air quality and reducing noise.

The project presents several challenges, not least the proximity of several industrial and commercial premises to the proposed route. Innovative solutions may be required to minimise impacts on their operations and on the buildings themselves. The removal of significant traffic volumes (up to 19,000 vehicles daily) from the centre of Bridgend village provides an opportunity to retrofit significant active travel provision within the village, improving connectivity to the local school, businesses and community facilities for residents. The project will also provide linkages to the proposed North West Greenway Network, Route 1 of which runs from Derry via Pennyburn and the Bridgend border to Buncrana and Letterkenny via Tooban junction.

N13 Bridgend to County Boundary

Second Public Consultation for N81 Route Improvement Works in Co Wicklow

Article by Rebecca Bailey

N81 Hangman' s bend to the North.

The second in-person, non-statutory public consultation for the N81 Route Improvement Works in Co Wicklow took place on 30th January 2025 in Baltinglass, Co Wicklow. The N81 Whitestown Lower (Section 1) Project and the N81 Hangman's Bend Scheme and Tuckmill (Section 2) Project aim to address road deficiencies contributing to the poor road safety record on two sections of the N81 over the past 15 years, from the Castleruddery Junction to the south to the Ballylion Junction to the north and from Raheen Junction to the south to Hangman's Bend to the north. The scheme is being advanced by Wicklow County Council in conjunction with Kildare National Roads Office, TII and the Department of Transport.

As lead consultant on the scheme, ROD is progressing the two sections from consideration of options, including on-line and off-line options, and selection of preferred improvement options through to statutory processes.

During the previous first non-statutory public consultation, which ran from 27th March to 26th April 2024, the public and interested stakeholders were invited to make submissions on the route options developed for the scheme. The identified route options for each location were displayed, with the key constraints within the study areas highlighted. These included features of ecological significance, such as the River Slaney Special Area of Conservation (SAC); cultural heritage sites in the vicinity of the scheme; Eldon Bridge; homeowners; landowners; and local businesses. The feedback gathered during the submission period was reviewed and used by the design team to inform the selection of the Emerging Preferred Option for each project.

At the launch of the second non-statutory public consultation on 30th January 2025, representatives from Kildare National Roads Office and Wicklow County Council joined ROD's project team to present the project objectives, answer queries and give the local community an opportunity to voice concerns and/or identify potential opportunities for the Emerging Preferred Option. The route options displayed during the second non-statutory public consultation, which ran until the 27th February, have undergone detailed assessment in accordance with Project Manager's Manual for Minor National Road Projects, TII Project Appraisal Guidelines and the Department of Transport's Transport Assessment Framework (TAF). The surrounding community is generally receptive to the scheme, and the project team plans to work directly with affected landowners to provide appropriate accommodation and mitigation measures to minimise disruption.

The project has now moved forward to the next stage of the option selection process - confirmation of the preferred option for each project and completion of the Option Selection Report. The feedback received during the second public consultation period will guide the design process. This may involve further refinement of the options and/or further consultation with key stakeholders. The Preferred Options will then advance to PMG Phase 3 - Design and Environmental Evaluation. Affected landowners will be contacted to arrange site investigation surveys necessary to develop the preliminary design and conduct environmental evaluations.

New Ross to Waterford Greenway: A Scenic Journey Through Ireland's Southeast

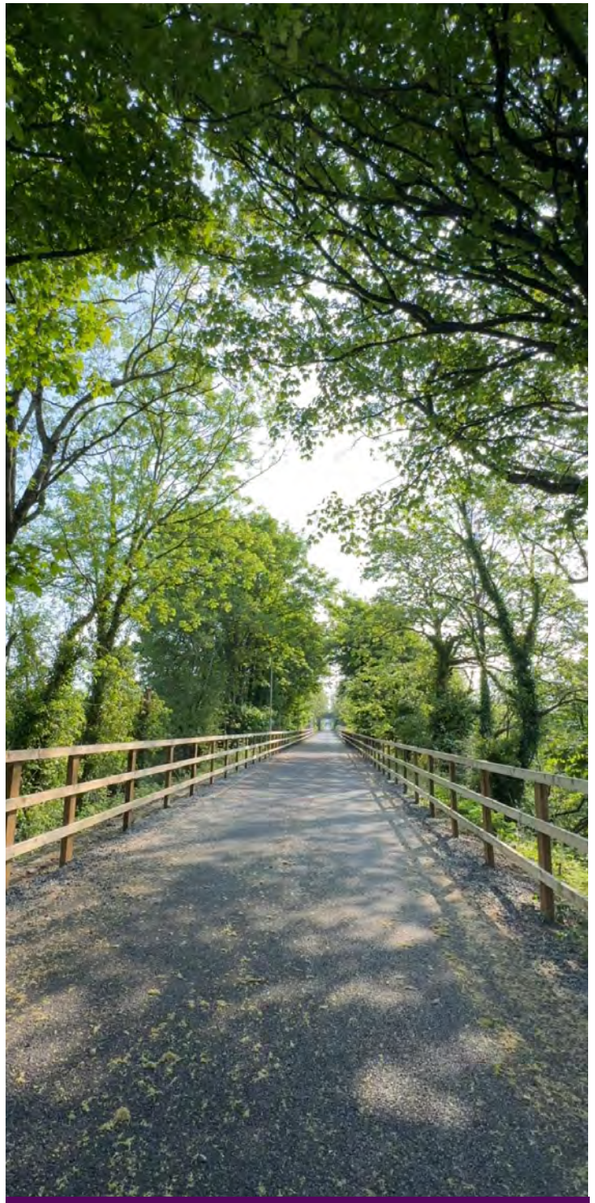
Article by Daire Ó Riagáin

The second section of the South East Greenway, a 24.5km off-road cycling and walking trail linking New Ross to Waterford, will be opened later this summer. This 6.7km section runs from Waterford North Quays to Sliabh Rua, also known as Red Mountain, and offers breathtaking views of the South Kilkenny countryside. The first section of the greenway, which runs over 6km from New Ross to Glenmore, will be opened later this summer.

The South East Greenway follows the path of the disused Waterford to New Ross railway line and will provide an attractive amenity for locals and visitors, promote economic growth, enhance regional connectivity and encourage active travel. The project is a joint initiative of Wexford County Council, Kilkenny County Council, and Waterford County Council, with Wexford County Council as the sponsoring agency. It is being funded by TII.

ROD was appointed by Wexford County Council to provide construction and handover stage consulting engineering services for the scheme in October 2023. In addition, we undertook the PSDP role and provided head office design support during construction. The latter involved undertaking environmental surveys to ensure compliance with the Environmental Impact Assessment Report, the design of a concrete box culvert underbridge and two reinforced concrete retaining walls, and the refurbishment of five existing masonry arch bridges along the route.

Construction works began in November 2023, with Glas Civil Engineering Ltd as the contractor. The works included the extension of the existing Glenmore carpark to facilitate a greenway access point along the route. The project team faced several challenges during construction, including working within the constrained, linear nature of the railway line, dealing with access issues, protecting a live badger sett and ensuring minimal disruption to local communities and wildlife. Effective collaboration between the project team and the contractor was central to the successful completion of the scheme.



South East Greenway

5 minutes with
Iwona Formanowska

I grew up 100m from one of Poland's largest motorways. As a child, my parents would often tell me the story of how, when the motorway was being developed, our house was almost acquired as part of the Compulsory Purchase Order (CPO). This piece of family folklore fuelled my fascination with the motorway, and I marvelled at everything from its impressive scale to its many junctions, roundabouts and pedestrian crossings. As I got older, I learned to appreciate the role the motorway plays in moving people around the city and how important its layout is to ensuring the safety of those who use it. I quietly developed an interest in engineering, which led me to the University of Poland, where I earned a master's degree in civil engineering.

In 2005, I was part of the Polish influx to Ireland following Poland's entry into the EU the previous year. The move was incredibly difficult for me because I had absolutely no English at the time and, as a naturally chatty person, not being able to express myself or understand local radio and newspapers was a painful experience. The absence of language schools teaching beginners-level English to adults in Dublin made the task of learning the language even more challenging. I eventually found a school with an excellent and patient teacher and attended classes three days a week. It took three months of pushing myself really hard before I could put my first sentences together. I still remember the joy in my teacher's eyes when I was finally able to join in a class discussion, as he understood how much work it had taken for me to get to that point.

My first job in Ireland was as a CAD technician. After six months in the role, I knew I wanted to become a designer. When a position became available in the company's transportation team, the HR manager, who knew where my ambitions lay, offered me the job. I didn't have to be asked twice. And so began my career journey from technician to graduate engineer and then design engineer to senior engineer. Now a principal engineer, I feel my experience in these various positions has helped me to better understand my colleagues and team members. I've walked in their shoes, so I can appreciate the challenges they face.

I have been working with ROD for over nine years. During this time, I have been involved in several large road projects, including the A6 Randalstown to Castledawson ECI project in Northern Ireland, which connects Belfast and the North West. For the past seven years, I have been working on the Maynooth Eastern Ring Road (MERR) scheme, a peri-urban project in Maynooth in Co Kildare. The project requires the construction of approximately 1.5 km of Type 3 single carriageway, two new junctions on existing roads and a new bridge crossing the Royal Canal and Dublin to Sligo railway line. I started out as the lead road designer on the scheme, and, after gradually taking on more responsibilities, I became the project manager. An engineer doesn't always get the opportunity to see a project through from the very beginning, but I have been involved in the scheme from day one, overseeing its progress from concept and feasibility studies through preliminary design, planning and detailed design. We are now at the tender stage and expect construction to start in Q3 2025. Our project team has faced numerous challenges, from managing the complexities involved in designing a road to go above the Dublin-Sligo rail track and the Royal Canal to functioning through the COVID-19 pandemic, which hit just as we were starting to engage with landowners on the CPO process and heading into the first public consultation.

In addition to my role on MERR, I am working as the pavement task order leader on the Motorway Contracts Audit and Administration Services (MCAAS) project, where ROD is providing services to TII for motorway management and maintenance in the west region. Working on the MERR and MCAAS projects is a never-ending learning process, as every stage and every task order provides an opportunity to broaden my knowledge, to enhance my skills, and to face new challenges.

Over the years, I have learned how important communication is, not just within ROD's multidisciplinary teams, but when engaging with clients, partners, third-parties, subconsultants and landowners. Recent projects have also brought into my focus the wide range of approaches required when working with different generations, each with their own distinct needs, skills and views. Common to all, however, is the need for a clear understanding of the tasks and expectations. For me, the hard job is done if my team members feel they are part of a family, with everyone focused on achieving the project goal.

When you are an engineer, it can be difficult to switch off that part of your identity when you leave the office. Even when I am travelling, I am always looking at drainage solutions, pavement widths, and cycling facilities to see how things are done elsewhere. Some people call it an obsession; I call it a passion. When I get home from work, however, my two children provide a welcome distraction, as they keep me busy, running around after them and ferrying them to and from their various activities. Making time for myself is not always easy but I enjoy pulling on my coat at the end of the day and heading out to my garden. I am very fond of gardening and enjoy checking on my plants, feeding and watering them. More recently, I have become an obsessive reader of the Brontë sisters. I always enjoyed Charlotte's Jane Eyre, but I am now reading some of their lesser-known works, including Anne's The Tenant of the Wildfell Hall. I am also a proud "new Dubliner" and, even though I have lived here for the past twenty years, I am still amazed at how easy it is to access the mountains, the sea, and the multitude of international events in the city.

ROD's UK office extension

Article by Colette Holt

In 2019, ROD signed a five-year lease on the top floor of Wharfebank Mill, a refurbished woollen mill in Otley, a thriving market town just 10 miles from Leeds in Northern England. The office accommodated 18 staff and included a boardroom equipped for video conferencing and a small kitchenette.

By June 2022, our UK team was growing in number, so we extended our footprint within the building to accommodate an additional nine desks and an acoustic pod. Fast forward to February 2025, and we have expanded our workspace once again, knocking through an adjoining office to create space for 34 staff, a second boardroom and a modern canteen for our team. The office is light, airy and fully air conditioned, with stunning views of the River Wharfe.

The new office is much brighter and airier, and allows more room for each discipline to grow its team. The enhanced conference facilities offer far greater flexibility, and the ROD Board enjoyed the expanded large meeting room for its May meeting. The lessons learnt in the office redevelopment will be brought to bear for our imminent headquarters move from Arena House in Sandyford after 25 years.

New Facilities Planned at St. Joseph's Hospital in Limerick City

Article by Seán Kennedy

CAMHS Image (Courtesy of Coady Architects)

In 2022, the Health Service Executive (HSE) engaged ROD (working with Coady Architects) to provide civil and structural engineering services for a Child and Adolescent Mental Health Services (CAMHS) facility and a primary care centre on the grounds of St Joseph's Hospital in Limerick city. Limerick City and County Council granted planning permission for the CAMHS facility in October 2024, and the project is expected to be issued for tender in the third quarter of 2025. When complete, it will provide acute mental health treatment to children and adolescents at home or in the day hospital. A separate planning application for the primary care centre was submitted to the council in March 2025, and a decision is expected in May 2025. The centre is expected to become a new administrative hub for the health service locally.

CAMHS facility

This purpose-built, two-storey building will accommodate CAMHS teams based in the west of Ireland and cater for the expanding needs of the service's medical and professional staff. The facility will feature a north-facing central atrium connecting two linked blocks either side of a central courtyard to the south. Its orientation will enable therapy rooms to be positioned away from the public-facing side of the building. Our structural solution consists of a precast wideslab design, with load bearing, masonry spine walls. Associated civils works include several sustainable urban drainage systems (SuDS) measures, such as bio-retention areas and soft landscaping features, to slow the flow of surface water from footway and parking areas and to provide an attractive external environment for residents and visitors.

Primary care centre

Located adjacent the CAMHS facility, this three-storey building will accommodate two primary care teams based in Limerick as well as consulting rooms, a BreastCheck clinic, a doctor's surgery and associated administrative offices. The development features a western entrance plaza with a double height atrium directing visitors to the reception area. Two central courtyards provide distinctive features for the building through each floor, including a roof terrace on the third floor for staff use. Our structural solution consists of a reinforced concrete (RC) frame, with precast hollowcore floors to allow for future expansion - both internally and vertically. The entrance plaza features a second-floor overhang accommodated by larger RC beams. Associated SuDS measures designed to reduce surface water discharge from the site to below greenfield run-off rates include swales surrounding carpark areas which in turn lead to bio-retention areas located in larger verge areas, all cascading to a soakaway contained under the carpark.

Housing Development Completed in Tramore, Co Waterford

Article by Andrew Thomson

An Garraun, housing development in Tramore, Co Waterford.

ROD is pleased to announce the recent completion of a 52-unit housing development, known as An Garraun, in Tramore, Co Waterford. The scheme comprises a mix of A-rated, semi-detached units, bungalows, terraces and apartments. It provides much-needed social housing in the area, particularly for elderly individuals and families. ROD provided civil engineering and site works design from concept through to completion.

The scheme is located on a steeply sloping site to the rear of Tramore Racecourse. We worked closely with EML Architects and PHM Consulting to develop an efficient, usable design that minimised cut and fill on the site. The civil design incorporated two innovative home-zone spaces at the end of each road to provide shared surfaces allowing level access to the nearest units. The home-zone also serves as a shared space for safe play.

During the works, a previously constructed – but failed - attenuation tank was discovered, and ROD worked closely with the design team, client and main contractor, Nevin Construction, to ensure it didn't impact the overall scheme.

Construction Underway on 95-Bed Community Nursing Unit at St Colman's Hospital, Wicklow

Article by Mark Tucker

In March 2025, construction got underway on a 95-bed community nursing unit (CNU) at St Colman's Hospital in Rathdrum, Co Wicklow. The project will deliver a critical piece of healthcare infrastructure for older people living in Wicklow, enabling them to live independently in their own communities for as long as possible. It is due to be completed in late 2027.

The c.€45m scheme comprises a mix of single, double and three-storey circulation new build accommodation blocks. The project is being delivered in a single phase, with ROD providing civil and structural engineering design services on the development. Our design team partners include Wejchert Architects, Hayes Higgins Partnership (M&E) and Turner & Townsend (QS). The contractor is Conack Construction.

The project involves a multi-storey, reinforced concrete extension to the existing hospital. The solution consists of two blocks, two storeys in height, with a link corridor joining the extension to the existing building. The blocks were designed as two separate structures, with a movement joint separating them.

The site is located on the outskirts of Rathdrum. It is bounded to the southwest by the Ballinderry Road, to the northeast by Union Lane and to the northwest by grassed farmland. The site topography presented numerous engineering challenges for the design team, but chief among them was a level difference of approximately 22 metres from the northwesternmost point to the boundary wall along Union Lane. The sloping site necessitated a substantial cut and fill exercise in addition to significant retaining structures. The foundations consist of strip and pad footings on lean mix concrete down to the underlying bedrock of weathered mudstone (at approximately 3.0m below ground level). The presence of mudstone required specific measures to be undertaken during construction to ensure containment of pyrite in the underlying rock layer, including limiting the time the bedrock was exposed to the air by the immediate placing of lean mix in the excavated trench. Additional structures, including entrance canopies and balconies, will be built on steelwork frames.

A federated model of the new facility was created at design stage to help coordinate the design across the architectural, mechanical and electrical teams. This was subsequently provided to the contractor. Once the project has reached completion, the model will be handed over to the client for the future maintainer of the facility to use.

A new access road will circle the development to the south. Separate foul and surface water drainage systems will service the development and replace the existing combined sewer for the campus. Surface water will be attenuated within the site using a soakaway located within a landscaped area to the south. Site clearance and drainage works are complete, and the excavation and placing of lean mix for the foundations is progressing.

Excavation to formation level. Block 1 and Block2

Site Overview

Topping out marks major milestone in Letterkenny CNU project

Article by Andrew Thomson

Image courtesy of Boyle Construction Ltd

In April 2025, Letterkenny's new 110-bed Community Nursing Unit (CNU) was topped out, marking a significant milestone for the project and for healthcare provision in Co Donegal. With the structural form now complete, the main contractor, Boyle Construction, will advance the civils construction, including the external drainage, car parks, fitting out and services for the building. The aim is to reach completion and handover in the second quarter of 2026.

The CNU is part of an overall programme for the development of healthcare infrastructure in Donegal. It comprises a mix of long and short-stay beds for rehabilitation and dementia care uses, with associated on-site facilities, including dining rooms, kitchenettes, family overnight rooms, etc. It also includes a purpose-built rehabilitation centre, providing physiotherapy, occupational therapy and allied health professional space.

ROD brought the scheme through detailed design, with the support of our design partners, MCA Architects, Semple & McKillop Ltd (M&E), FCC Fire Cert Ltd, ORS (PSDP) and AECOM (QS). The scheme design reflects our aim of delivering a modern and efficient healthcare facility that addresses the need for patient privacy and dignity while providing a safe and secure environment for healthcare professionals to undertake their duties.

The structural solution adopted reflects the complexity of the site constraints, architectural layout and architectural features. As the lower ground floor level is a partial basement, reinforced concrete retaining walls were used. Where walls align from ground floor to roof, precast slabs bear on blockwork walls. Where the layout of the lower ground floor does not align with the floors above, reinforced concrete transfer beams were designed to transfer loads down to foundations. To cater for several stepped elevations, reinforced concrete beams and slabs extend beyond the floor below to support the external walls of the floors above on a cantilever.

As the area surrounding the proposed development has experienced historic flood events, sustainable urban drainage systems (SuDS) measures on site have been designed to cater for a 1 in 1,000-year storm event. These measures will reduce the flow from the site to greenfield runoff rates, minimising the impact on the network further downstream.

New Recruits

Cathal Ó Gréagóir

Cathal joined our student placement programme in January. The placement forms part of an ME in Civil, Structural and Environmental Engineering he is undertaking at UCD. Cathal is building experience in our environmental team, working on a wide range of projects, including the Barnesmore Gap Greenway; N4 Mullingar to Longford (Roosky) Project; N81 Whitestown Lower to Tuckmill; and West Cork Greenways. He has a keen interest in videography and video editing and enjoys hiking and swimming. he likes to travel and play hurling.

Alan Healy

Alan joined ROD as an accountant in April. Originally from Mayo, he spent the past six years working in London before taking a career break last September to travel through Asia. Alan subsequently decided to move home to Ireland, basing himself in Dublin, where he had worked from 2012 to 2017. In his spare time, he enjoys sports (football, rugby, GAA); keeping fit; and reading (mostly history and biographies).

Niall Heffernan

Niall joined our student placement programme in January. His eight-month placement forms part of a BEng in Civil Engineering he is undertaking at Technological University of the Shannon (TUS), Athlone. Niall is gaining experience in our transportation group, working on a variety of projects, including Busconnects Dublin; Tullamore Hospice; the N81 Options Report; and Gorey Main Street Transportation Assessment. In his spare time, he enjoys all sports, especially GAA and golf.

Rebecca Glynn

Rebecca joined our student placement programme in January. Her placement forms part of an ME in Structural Engineering with Architecture she is undertaking at UCD. Rebecca has been placed in our buildings team and is involved in a variety of projects, including Athy Community Nursing Unit (CNU), Merlin Park CNU and Tullamore Hospice. In her spare time, she enjoys going to the gym, reading and shopping.

Amy Lawrence

Amy joined our student placement programme in January and is based in our Leeds office, where she is working with our bridges and transportation teams. Her eight-month placement forms part of an ME in Structural Engineering with Architecture she is undertaking at UCD. Amy is no stranger to ROD, having completed a summer placement with our buildings group in Dublin in 2024. After completing her degree, she hopes to pursue a career in structural engineering. In her spare time, Amy enjoys reading, cooking and taking long train rides through the countryside.

Marjan Sohrabi

Marjan joined our UK team as a design engineer last December. She holds an MSc in Transport Planning and the Environment from the University of Leeds and an MSc in Civil and Structural Engineering from Shahid Bahonar University of Kerman, Iran. Prior to joining ROD, Marjan worked for Transport for Greater Manchester (TfGM). In her free time, Marjan enjoys hiking and exploring nature and new places. She has a passion for baking and loves making decorated cakes.

Lee Allsopp

Lee joined our UK team as a senior engineer last December. He has over 30 years' experience in the highways sector, initially working for two local authorities, then a joint venture working for National Highways as the client, and then AtkinsRéalis, where he spent over two years prior to joining ROD. Lee's background is in designing traffic signs, road markings, and pavement and vehicle restraint system schemes. He is also experienced in supervising schemes on site. In his spare time, Lee likes to read and watch movies. He is also a DIY enthusiast.

Thomas Guido Ortega

Thomas joined our transportation team as a graduate transport planner in March. He is a graduate of Stockholm University, where he earned an MS in Environmental Management and Physical Planning, and the University of Glasgow, where he gained a BSc in Environmental Science and Sustainability. Originally from Argentina, Thomas enjoys football and padel and actively roots for Boca Juniors. His favourite music genre is Argentinian folk.

Ernest Mukanga

Ernest joined ROD Transportation in Woodford Engineer in May 2025. Ernest has over a decade of industry experience in Civil, structural and geotechnical engineering, having worked extensively on infrastructure projects across South Africa and Zimbabwe.

As well as having a BSc Honours Degree in Civil Engineering from the University of Zimbabwe, he has strong project management skills, technical versatility and hands-on site experience make him a valuable addition to the team.

Ernest enjoys playing volleyball, hiking and exploring new cultures. He is also actively involved in community initiatives and value teamwork both in and out of office

Katie McLoughlin

Katie joined our transportation team as a senior traffic modeller in January. She loves restructuring data and visualising model outputs. After completing a BEng in Civil Engineering at the University of Queensland, Australia, Katie came to Dublin "for a month" in 2016 and never left. When she isn't absorbed in transport networks, Katie plays the mandolin and enjoys art and baking.

Suzie Golding-Lynch

Suzie joined our UK team as a bid manager in February. She has worked in business development and bid management for nearly 25 years, occupying a variety of roles, from business development manager for an international cost management firm to country manager for the Welsh Government in Qatar to vice chair of the Qatar British Business Forum, the country's largest expat networking group. Suzie's childhood in Saudi Arabia inspired a love of travel and, after graduating from the University of Aberdeen with a degree in Celtic Civilisation & History, she lived in Australia, Qatar and Canada. Suzie moved to North Yorkshire in 2023, where her life outside work is primarily focused on her husband, two sons and dog.

Cathal Ryan

Cathal joined ROD as an assistant project manager with the Motorway Contracts Audit and Administration Services (MCAAS) team in March. Prior to joining ROD, he worked on various civil projects in Ireland and the UK. Cathal is originally from Limerick and enjoys hurling, golf, cycling and walking/hiking.

Ramin Ghiasi

Ramin joined our intelligent transport systems (ITS) team as a research engineer in January. He holds a PhD in Civil Engineering from the University of Sistan and Baluchestan, Iran, and combines five years' industry experience with three years' experience as a postdoctoral researcher at UCD. His research interests included the application of artificial intelligence (AI) in civil infrastructure systems and structural health monitoring. When not working, Ramin enjoys spending quality time with family and friends, playing sports and watching movies.

Liam O'Sullivan

Liam joined ROD on a six-month student placement in January. His placement forms part of an MAI in Civil, Structural and Environmental Engineering he is undertaking at Trinity College Dublin (TCD). Liam is gaining experience in our bridges group, working with our design team in Sandyford and our site team on the Leinster Bridges routine maintenance inspections. In his free time, he enjoys playing hurling, attending sporting events and meeting friends.

ROD Marks International Women's Day 2025

Article by Roberta Keaney

ROD was delighted to mark International Women's Day by lending our support for the United Nation's International Women's Day theme for 2025: "For ALL Women and Girls: Rights. Equality. Empowerment." The theme calls for action that can unlock equal rights, power and opportunities for all and a future where no one is left behind. Central to this vision is empowering the next generation, particularly young women and adolescent girls, as catalysts for lasting change.

During the week, several of our team members attended conferences, seminars and talks aimed at encouraging them to continue pushing boundaries in their personal and professional lives. Victoria da Silva Pereira and Iwona Formanowska attended the Women in Project Management Summit 2025, where they listened to nine speakers from various industries and backgrounds sharing their experiences of working in project management. The speakers covered their preferred methods and tools as well as the specific challenges and issues they face as women - while encouraging the audience members with the mantra 'the sky is the limit'. Cristina Olgado Azpiazu attended a Why Design International Women's Day seminar hosted by the Institute of Designers of Ireland, which showcased the work of Irish women breaking barriers and redefining the landscape of design. The speakers covered a wide range of topics from Human-Centred Design in the Health Service Executive to Liveable Public Spaces to User Experience Design. Finally, Chloe Rodrigues and Aishwarya Katyal joined Ashwin Mohan and Aymen Rzigui at a UCD Urban Design Masterclass, where Kay Hughes, former Design Director at HS2, gave a great presentation drawing on the many projects she has been part of - such as the London 2012 Olympics - to demonstrate how she was prepared to go outside her comfort zone, work in different countries and adopt various architectural strategies, to achieve the best project outcomes. We look forward to seeing the knowledge acquired at these various events being shared across our teams and helping to shape the future of ROD.

Victoria da Silva Pereira and Iwona Formanowska pictured at the Women in Project Management Summit 2025 in Dublin.

ROD Celebrates Engineers Week 2025

Article by Fatima Quadri

Pictured L-R: Niall Hanratty, Clodagh Rea, Fatima Quadri, Ramin Ghiasi, Zara Craig, Aoife O'Sullivan, Samira Islam.

Five days, four schools, 400 children. Engineers Week 2025 was busy for ROD! But it was also brilliant because it gave our student and graduate engineers an opportunity to talk about their passion for engineering in a way that will, hopefully, leave a lasting impression on the children they met. Over the course of the week, we visited Scoil San Treasa, Mount Merrion; St. Raphaela's Primary School, Stillorgan; Cnoc Liamhna Gaelscoil, Knocklyon; and St. Mary's Boys' National School, Booterstown. Our aim was to open the students' eyes to the engineering hiding in plain sight around them and to encourage them to see science, technology, engineering and maths as cool and interesting subjects that can lead to exciting and rewarding careers.

We started each day with a talk on what engineering is and how scientists, technicians, engineers and mathematicians have shaped the world around us. While some students were familiar with engineers like Thomas Edison, others had never given any thought to the engineering - or the women and men - behind everyday things, from phones and cars to hospitals and schools.

To help the children connect the dots and see engineering in action, we first divided them into teams of four; then we set them the challenge of creating the tallest tower they could using lollipop sticks, pipe cleaners and straws - but one stable enough to hold as many toy cars as possible; and all within 30 minutes. Before the children began, we explained the importance of teamwork and creativity in engineering, and showed them how bracing works, how to identify the weak points in their towers and where to add reinforcement. And then they were off, throwing themselves into the task with great gusto.

When the time was up, the children stood back and admired their designs. The sense of pride in the classroom was palpable. In fact, it almost didn't matter to the children which team won; what counted was the fun they had in building their towers together. For our part, we were delighted to get the children talking, thinking and engaging with engineering. And who knows what brilliant future engineers we may have inspired with our enthusiasm for the profession. Roll on Engineers Week 2026.

Gallery

1. Tilly Skidmore

When ROD Graduate Engineer, Tilly Skidmore, was offered the opportunity to join our site team on the N5 Ballaghaderreen to Scramoge Road Project in Co Roscommon, she knew immediately it would be an unmissable experience. Over the next six months, Tilly hopes to develop a deeper understanding of the various elements involved in highway design, including earthworks, drainage, ducting, and pavements, and build on the knowledge she gained while working with our highways, bridges and geotechnical teams in our UK office. We wish her all the very best!

2. York Football Tournament

Our UK team played their hearts out in the Business Fives 'York Football Tournament' last February, making it all the way to the Europa League Final and helping to raise £3,500 in support of several worthy charities. Pictured (L-R): Bailey Thoresby, Usman Khan, Joe Egglestone, Nazeem Uddin, Sabeel Hussain, Madalin Bunda, Sharath Jayaramu.

3. UK Summer Social Event

On Monday, 19th May, our UK team enjoyed their first social event of the summer at Hollins Hall Hotel & Country Club in Leeds, where the entertainment included an archery challenge, a game of boules and a putting contest. Our directors, who were in Otley for a meeting of the board, were delighted to join in the fun, impressing everyone with their good-humoured competitiveness. When the games came to an end, it was time enjoy a delicious barbecue and some refreshments – the perfect way to spend a warm, summer evening. .

4. Elaine Cogley SETEC Exchange

ROD Graduate Engineer, Elaine Cogley, recently began a six-month internship in Paris with the French multidisciplinary engineering consultancy, Setec, one of eight members of the Europengineers network, of which ROD is part. Elaine is working with Terrasol (GROUPE SETEC), a geotechnical consultancy within the Setec group, where she has been getting involved in projects, carrying out independent checks for rock and slope stability, and gaining exposure to some of the software Terrasol produce and use, including Talren and K-Réa. We know it will be a great learning experience for her and wish her well in the City of Lights.

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5. ROD meeting with CIHT Chief Executive

In April, Chief Executive of the Chartered Institution of Highways & Transportation (CIHT), Sue Percy, took time out of her busy schedule of meetings with highways and transportation bodies, including Active Travel England, to catch up with ROD Director, Rob McCartney, and Principal Engineer, Michael Chung, in York. Rob was delighted to extend an invitation to Sue to visit ROD's award-winning active travel projects in Ireland, including the Clontarf to City Centre Project and the Tolka Estuary Greenway, while Michael, as former chair for the CIHT Yorkshire and the Humber region, was keen to discuss CIHT HQ's supports for the region.

6. Sandyford 5km

Congratulations to everyone who took part in this year's Sandyford 5k on Thursday evening. On a bright and sunny evening, 19 of us took on the 5km route around Sandyford Industrial Estate. The event, which caters for all abilities, provides an opportunity to get out and about and take part in a 5k run/jog/walk along with many other companies from the Sandyford Business District.

ROD's fastest men's team came out on top again this year and took the top team prize – firmly establishing ourselves as the fastest 5k runners in Sandyford. The team consisted of John Bell, Charlie Johnson, Paul Kissane and Robert Corbally. Shout out to the women's team, of Rachel Harney, Victoria da Silva Pereira, Yana Bersunukayeva and Kate Ballance who finished in second place overall, only a fraction behind the winning team.

7. UK Summer Social Event

ROD was delighted to participate in the ITS Ireland 'Women in ITS' celebration, which took place in the Wayfinding Centre on 11th March 2025. The event brought women from across the ITS industry together to discuss diversity, inclusion, and accessibility - subjects very appropriate to the setting, given the centre's focus on making public transport more accessible for everyone. As vice-chair of ITS Ireland, ROD's Ciaran Carey welcomed everyone to the event while our colleagues Maha Riad and Geethu Bennyson contributed to what was a lively and interesting discussion.

8. Daffodil Day

On Friday, 28th March, ROD was delighted to host an in-person and virtual coffee morning to mark Daffodil Day, the Irish Cancer Society's annual initiative to fund life-saving research and support services for those affected by cancer across Ireland. Our staff were generous in their support of the fundraiser, raising €2,530 for this worthy charity. A special thank you to our site team on the N5 Ballaghaderreen to Scramoge Project for their kind contribution and to our colleague, Michelle Harvey, for inspiring us all to come together in support of this important cause.

ROD Delighted to Sponsor IABSE Future of Design Event

Article by Oliver Scales

On 10th April 2025, the Future of Design conference took place at the University of Leeds, with more than 40 enthusiastic students and young professionals in attendance. I had the opportunity to work as part of the organising committee ahead of the event, which was sponsored by ROD and featured a workshop hosted by ROD's Dr. Robert Corbally.

IABSE British Group Honorary Secretary, Mark Bulmer, welcomed the attendees to the event before introducing the first speaker of the day, Graham Thomas of Arup. Graham drew upon his 38 years' experience in the industry in his discussion on the value of good design, exploring the key drivers and enablers of good design, and using the A650 Bingley Relief Road in West Yorkshire, the Princes Quay Footbridge in Hull, and the TransPennine Route Upgrade Project as positive examples. Graham's talk was followed by an interactive presentation on the practical application of sustainability principles, delivered by James Rawlin of Arcadis. James began by asking the audience to define sustainability before discussing sustainable design and construction methodologies and offering examples of their successful application. The final presentation of the first session was delivered by Mercedes Ascaso of DLT Engineering, who showcased iconic bridge projects she has been involved in during her career to date, including 1915 Çanakkale Bridge in Turkey, Chacao Bridge in Chile and Queensferry Crossing in Scotland. Mercedes highlighted innovative and efficient deck-lifting methods used during their construction.

The morning concluded with the workshop hosted by Dr. Robert Corbally of ROD. Rob began the workshop by reminding the audience of several recent bridge failures around the world, before highlighting the challenges bridge owners face and exploring current monitoring and assessment techniques. He then split the attendees into groups and asked them to consider several different scenarios related to the prioritisation of bridge maintenance, bridge assessment and exceptional abnormal loading and how they – in the guise of bridge owners - would respond if confronted with the various scenarios. Each group then presented their ideas to the rest of the audience. Rob later demonstrated how structural health monitoring and probabilistic assessment have been used in the assessment of some well-known structures, including Humber Bridge in the UK and the Boyne Viaduct in Ireland. In the final part of the workshop, he provided an overview of his research into how artificial intelligence and modern technologies can be incorporated into the monitoring and assessment of bridges.

The afternoon session began with a presentation by Diego Padilla-Philipps of WSP, who shared his belief that the future of design lies in co-design. Diego challenged the delegates to consider what would happen if the principles of co-design were applied from the beginning of project – instead of following the traditional path whereby structural engineers must make an architect's ideas work efficiently. This was followed by a presentation by Anthea Schneider of Knight Architects, who spoke about her involvement in Network Rail's FLOW Footbridge, a user-orientated, fibre-reinforced polymer (FRP) modular footbridge being rolled out across the UK, and discussed the factors that influenced its design, such as safety, user experience, ease of construction and sustainability.

Anthea's presentation was followed by a panel discussion chaired by Prof. Nikolaos Nikitas of the University of Leeds, who brought two of the speakers from the earlier sessions, James Rawlin and Diego Padilla-Philipps, together with Junley Chan, Design Manager at J. Murphy & Sons Ltd and Dr. Souvama Boral, a Postdoctoral Research Associate in circular economy at the university, to explore 'the future of design' for clients, contractors and consultants. Additional opinions were raised by some of the other speakers from the earlier keynote sessions and workshop, further fuelling the debate and bringing the role of the academic researcher into focus.

The event concluded with a closing address from Mark Bulmer, who thanked the sponsors; the speakers; and the organising committee for delivering a valuable, thought-provoking event. He also announced Damien Poblete of AECOM as the winner of the paper competition, with his paper titled "When the AiP falls short of objectives, why follow it?". The speakers and attendees came together for an enjoyable networking event in one of the university's bars, where they shared their thoughts about the future of design.

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