

cascade

FINAL REPORT FOR CREATIVE IRELAND. FEBRUARY 2026

Clár Éire Ildánach
Creative Ireland
Programme

Creative
Climate Action

UCD DUBLIN

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Irish Towns

BALLINA
GREEN TOWN

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‘LANES, DRAINS AND WATERMAINS’ WALKING TOUR, BALLINA FRINGE FESTIVAL 2023

Photo Credit: Sarah Cotterill

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STORYMAPPING WORKSHOP, MARCH 2024

Photo Credit: Sarah Cotterill

EXECUTIVE SUMMARY

Many of the impacts of climate change in Ireland are linked with water. Predictions suggest we'll see more intense storms, more frequent river flooding, water quality deterioration and the potential for summer water shortages. Whilst these challenges are substantial, water itself is not the problem. Cascade sought to reframe water as a focus - not something to hide or control, but a resource to be valued, enjoyed, and celebrated. By placing water at the centre of design and decision-making, Cascade explored how creativity and collaboration can help towns adapt to the realities of a changing climate.

Laneways are a key part of Ireland's historic towns and cities. They are points of connection and pedestrian routes between busy streets, and offer retail and commercial opportunities. Yet many laneways are underperforming; perceived to be unsafe and characterised by poor lighting, poor drainage or littering. These long, narrow spaces, flanked by buildings that discharge through vents and water pipes, are often in poor condition, setting the tone for their current use or misuse. But laneways are perfectly positioned to transform how we manage rainfall.

Cascade, a two-year Creative Ireland climate action fund project, aimed to test how a creative and engaged approach to the design and remaking of these spaces could change not just their physical character, but also the social and cultural effects of collaborative placemaking. Using water as a focus, the project brought together a community, a multi-disciplinary artist, and experts in architecture and engineering to test this approach in the heritage quarter of Ballina, Co. Mayo.

Ballina is located on the banks of the salmon rich river Moy which flows into the Atlantic Ocean less than 10km away. Water has been an essential resource to the town, for food, trade and powering industries as well as offering amenity and recreational benefits. In towns like Ballina, water is central to both the challenges and opportunities faced. When heavy rain hits, it can overwhelm the combined drainage systems. Most of this infrastructure is hidden underground, out of sight, and often out of mind. Ballina has always thrived on its connection with water. By redesigning these narrow laneway spaces, rainwater can be managed better, drainage can be improved, and the laneways' role can be enhanced as safe, vibrant community spaces.

In the intricate laneways of Ballina's historic quarter, Cascade sought to develop a plan for a reimagined network of passages that celebrate water, adapt to the impacts of climate change and provide social and economic opportunities for the town.

The aims of Cascade were to:

- Reimagine laneways as connected trails of climate-resilient, cohesive spaces that celebrate water together.
- Strengthen community connections across generations.
- Inspire climate action through creativity and collaboration.

EXECUTIVE SUMMARY

The Cascade project built on the team's previous work in Ballina through the Creative Ireland Climate action project **Ripple**. During 2022, the project team worked with residents in the Greenhills Estate to understand, map and record their experience, perspectives, and knowledge about their neighbourhood green spaces, in relation to water and climate change. Together they created 'The Paradise Garden', an award-winning haven for wildlife, nature, and people, that reimagined a part of the estate that was identified as damp but full of potential to become a climate resilient and inclusive amenity. Read more about the Ripple project here.

Cascade successfully fostered broad community participation in shaping local climate solutions through creative engagement and co-design. Throughout the project's duration and the processes of storytelling, interactive trails, and hands-on workshops, the project encouraged people of all ages and abilities to imagine a more resilient and connected future for Ballina's laneways. Key achievements include the creation of storymapping trails featuring local voices through signs, quotes, and QR codes; participation in several local festivals and events; and co-design sessions that generated a diverse range of ideas for art, nature-based water systems, and community-driven interventions. Through these collaborative efforts, the team gathered a wealth of insights that are summarised in a co-designed masterplan for the town's laneways. A series of interventions were installed in one laneway, including a functional art piece "Ida", three rainwater planters, a green wall, seating, lighting and more, demonstrating how community-led water-sensitive design can be incorporated into the public realm. This demonstrator was developed through participatory 'making' workshops in summer 2025 and was officially opened, alongside an exhibition showcasing a negotiated plan for the town's heritage quarter, at the Ballina Fringe Festival in October 2025.

Cascade was one of 43 projects funded by Creative Ireland's Climate Action Fund II, which is supported by the Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media in collaboration with the Department of the Environment, Climate and Communications. The Cascade Project Team includes: Dr. Sarah Cotterill, Orla Murphy, Dr. Philip Crowe and Rebecca O'Malley from UCD Centre for Irish Towns; Senator Mark Duffy and Kevin Loftus from 'Ballina - Ireland's Greenest Town' and artist Dr. Ríonach Ní Néill.

The Cascade team would like to thank all of the residents of Ballina who participated in our events during 2024 and 2025, as well as our project partners Mayo County Council and the Mary Robinson Centre. Finally, we would like to thank Creative Ireland for supporting this project and in doing so, allowing us to further our ongoing participatory engagement with Ballina.



WORKSHOP ON PARTICIPATION AND LOCAL DEMOCRACY, JULY 2024

Photo Credit: Sarah Cotterill

INTRODUCTION

What if laneways, which are often overlooked and underused, became places that celebrate water, connect people, and help our towns adapt to climate change?

Many of the projected impacts of climate change in Ireland are intrinsically linked to water. Current climate models and national adaptation strategies indicate an increased likelihood of intense precipitation events, more frequent fluvial flooding, declining water quality, and heightened risk of seasonal water scarcity. While these challenges are significant, water itself is not the problem. Cascade sought to reframe water as an asset, exploring how to make it a focus within the urban environment and transform it into a shared, valued resource, in line with contemporary thinking on climate adaptation and blue–green infrastructure.

Laneways form an integral part of the historic fabric of Irish towns and cities. They function as connective pedestrian routes between primary streets and have the potential to support retail, cultural and commercial activity. However, many laneways currently underperform, often perceived as unsafe and characterised by poor lighting, inadequate drainage and persistent littering. These long, narrow spaces, typically bounded by building façades that vent services and discharge water, are frequently degraded, reinforcing patterns of neglect and limited use. During heavy rainfall, surface water runoff can overwhelm combined drainage systems, a vulnerability well documented in urban hydrology and climate resilience research. Much of this infrastructure remains concealed below ground and is largely overlooked.

Cascade aimed to test how a creative and engaged approach to the design and remaking of these spaces could change not just the physical character of these spaces, but also the social and cultural effects of collaborative placemaking. Using water as a central theme, the project brought together a community, a multi-disciplinary artist and experts in architecture and engineering, to test this approach in the heritage quarter of Ballina, Co. Mayo.

Ballina is located on the banks of the salmon rich river Moy which flows into the Atlantic Ocean less than 10km away. Water has been an essential resource to the town, for food, trade and powering industries as well as offering amenity and recreational benefits. The town and the community have an ambitious target to become ‘Ireland’s Greenest Town’ (shortlisted by the Irish Times, August 2025) with water identified as a key solution to making this a reality. Basing Cascade in Ballina allowed us to build on the momentum and enthusiasm discovered during Ripple to develop a deeper understanding of how climate change will affect underused **grey** spaces, as well as the green spaces explored during Ripple. Simultaneously, the project allowed us to further explore how creative engagement processes allow those in society who might not ordinarily take part in activities relating to climate issues or local decision-making to actively participate.

INTRODUCTION

Aims:

· Build on the experience of Ripple, to further demonstrate the potential of trans-disciplinary research on the revitalisation of Irish towns and the transition to a low carbon society.
· Meaningfully connect local communities with climate change through water systems and laneways in our towns.
· Bring generations together to collaborate and co-create interventions into water systems in public urban spaces.
· Consolidate a productive and mutually beneficial collaboration between UCD CfIT and Ballina Greenest Town.
· Develop a plan for the transformation of Ballina's laneways that acknowledges their importance as pedestrian routes, and as key conduits for the flow of water off roofs into the drainage system.

Intended Impacts:

· Shift in perceptions of water as a limited resource that provides a connection point to the climate emergency.
· An appreciation that laneways could enable the collection of that precious resource - instead of acting like wide drains - and purposefully use it / slow it down / store it.
· Greater understanding of how water has shaped a place physically, socially, culturally and ecologically.
· Greater intergenerational and social cohesion, with people brought together in constructive conversations and active participation.
· Consolidation and development of existing and new relationships.
· Demonstration of local and/or circular economy, (re)using what exists.
· New audiences engaged and participating in climate and community action.
· Communities inspired and empowered to make a difference.
· Communities imagining sustainable, inclusive and beautiful futures.

Process:

- **Storymapping**: Collecting stories and knowledge about water and laneways through walks, workshops, and creative mapping.
- **Co-design:** Testing creative solutions in the O'Horas laneway 'demonstrator' while gathering innovative ideas for the future.
- **Creating:** Developing a shared plan for Ballina's laneway.
- **Celebrating + Evaluating:** Showcasing the negotiated plan and O'Horas laneway demonstrator while reflecting on the impact of the project.
- Additionally, contributed interactive activities and exhibits to three successive Ballina Fringe Festivals (in October of 2023, 2024 and 2025), and Mayo Climate Action events (September 2024, May 2025) and Heritage Week (August 2024.).

EXAMPLE OF HISTORIC CONTENT FROM STORYMAPPING WORKSHOP, MARCH 2024

The Leading Journal Of The Irish Provinces

Western People

OUTSELLS THE COMBINED TOTALS OF ALL OTHER MAYO PAPERS - EACH WEEK

Vol. 107. BALLINA, WEDNESDAY, NOVEMBER 1st, 1989 PRICE 60p 60p Sterling in Britain

Floods Cause Havoc In Mayo

Damage Runs To Several Million Pounds

BY "WESTERN PEOPLE" REPORTERS

THE heaviest rain in living memory made it a black Bank Holiday weekend for Mayo with severe flooding causing people to evacuate their houses. Farmers had to move their livestock to high ground with some losses and several people had narrow escapes as they were trapped in rising water which submerged several thousand acres of land.

Early assessment put damage in the county at several million pounds and Minister for State, Mr. Sean Calleary, had called on his colleague, Environment Minister, Padraig Flynn, to declare parts of Crossmolina and Ballina disaster areas.

First indication of the chaos which was to follow was provided in Erris on Friday afternoon when the Owneduff River between Ballycroy and Bangor Erris burst its banks following continuous rain. The main road between Ballycroy and Bangor was completely flooded and one man who tried to rescue his sheep had to be pulled from the fast-flowing waters. Anthony Conway of Logduff described the flooding as the worst in living memory. At Shanamontragh Bridge, six miles from Bangor, the river is normally twenty-five feet wide but at 4.30 on Friday it had swollen to three-quarters of a mile.

Crossmolina tonight (Tuesday), at 9 p.m. to review the extent of the damage in the locality.

BALLINA HIT

In Ballina town there was widespread flooding in several areas, particularly Bachelors Walk, Arbuckle Row, Arran Place, Dillon Tce., Humbert St., Circular Rd., Corcoran Tce., Marian Crescent and Killala Road. On Saturday morning a thirty-seven yards stretch of the river wall at Bachelors Walk collapsed under pressure. Later Council workmen laid sand bags at the spot. One resident in the Humbert Street area was removed in a dinghy from her flooded house by Ballina Fire Brigade personnel who were on duty throughout Saturday, backed up by County Council staff, Gardai and Order of Malta units. Several streets were closed to traffic. The Mayo senior

frightening possibilities because in business premises, private houses and other property the total loss would run to enormous sums.

"I will be raising the situation in the Dail and will be pressing very strongly for some form of compensation," he said.

Deputy Higgins said he would also be calling for an investigation into a number of factors which, it was claimed, contributed in some way to the flooding.

Increased afforestation with better drainage in mountaineous areas put under trees and the recent plugging of the Deel River were contributory factors according to many people.

In addition, he felt action was needed on the road leading to Rakestreet to divert water. "In the coming weeks the question of compensation and of action to try to prevent a reoccurence will have to be addressed," he said.



Top: A woman is rescued from a house in Humbert Street, Ballina, on Saturday morning by members of Ballina Fire Brigade, while — below — Crossmolina residents take to the dinghy at 4.30 on Saturday morning as water overflowed from the River Deel. Pics: Henry Wills and David Farrell.



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SUMMARY OF TEAM AND KEY PARTICIPANTS

The core team involved in Cascade included:



Dr Sarah Cotterill,
Assistant Professor, UCD School of Civil Engineering, Cascade Lead Investigator



Orla Murphy,
Assistant Professor, UCD School of Architecture, Planning and Environmental Policy



Dr Philip Crowe,
Assistant Professor, UCD School of Architecture, Planning and Environmental Policy

Co-directors of UCD Centre for Irish Towns



Rebecca O'Malley,
UCD School of Civil Engineering
Cascade Project Coordinator



Senator Mark Duffy



Kevin Loftus, **architect**
Co-founder of ACT Studio

Co-founders of Ballina - Ireland's Greenest Town



Dr Ríonach Ní Néill,
Stiúrthóir ealaíne | artistic director, Ciotóg

Key Partners and Participants:

- Abhainn Studio
- ACT Studio
- AGS Scaffolding
- Alan Rudden Studio
- Alice Dixon - Artist / Facilitator
- Anne and Blair Feeney
- Anne Marie and Mark Forbes
- Ballina Community Clean Up
- Ballina Seamless Gutters
- Barry and Lidia McLoughlin
- BRÍDÍN- musician
- Daniel Phillips – PATIO
- Emma Donoghue - Artist
- Gorman Health and Safety
- GreenScene Landscaping
- JC Fascia (Painting Services)
- KGSS Geospatial Solutions
- Mary Robinson Centre
- Mayo County Council
- Moyne College, Ballina
- Nessa Music
- Paddy Bloomer
- Residents of Ballina
- Rory, Maria and Jane Quinn
- Seamless Aluminium
- Soroptimist International Ballina
- St Mary's Girls Secondary School, Ballina
- St Muredach's Boys Secondary School, Ballina
- Tarco Pressings

KEY OUTCOMES

1. **A climate-resilient laneway demonstrator was co-designed and delivered with the local community.** O'Hora's Lane was transformed through deep cleaning, painting, installation of a rainwater-fed green wall (designed by award-winning garden designer Alan Rudden), custom rainwater planters with integrated seating and sound features, solar lighting, mirrors, and wildlife-friendly elements. The transformation addressed climate adaptation, placemaking, and public safety concerns.

2. **A co-designed and community-negotiated plan for Ballina's laneways was developed and shared.** Over 30 ideas for laneway improvement across four sites were gathered through community input and exhibited during Ballina Fringe Festival 2025. The final plan is aligned with the New European Bauhaus principles of participatory processes, multi-level engagement and a transdisciplinary approach, and its core values of sustainability, beauty and inclusion. It serves as a foundation for future funding applications.

3. **Community members actively shaped the vision for urban climate adaptation.** Through SIX facilitated public workshops, FIVE festival activities, voting exercises, exhibitions and surveys, the project supported bottom-up engagement with over **315** residents directly influencing project direction and priorities.

4. **A network of collaborators and cross-sector partnerships was established.** Relationships were formed with business owners, local artists, designers, contractors, and Mayo County Council. These partnerships enabled co-funding, maintenance agreements and potential long-term adoption of interventions.

5. **Ripple effects of engagement extended to wider public audiences.** The project connected with the public through FIVE major events including 1.5 °C Festival, Mary Robinson Climate Conference, and Ballina Fringe Festival (2023–2025). These touchpoints broadened reach and inspired additional conversations about urban climate action.

6. **Creative media deepened public understanding and extended project reach.** SEVEN short films were produced, including an overview of the project and films addressing specific challenges and proposed solutions. These materials increased accessibility and visibility online and in the project exhibition.

7. **New knowledge, attitudes, and behaviours around climate resilience were fostered.** Public engagement highlighted the importance of water, heritage, and biodiversity in urban resilience. Workshops and media outputs encouraged system thinking and attitudinal shifts among participants.

8. **Built community capacity and inspired future climate action.** The project's emphasis on co-creation and creativity enabled residents to build practical skills, confidence, and agency. The co-designed plan serves as a legacy document and advocacy tool for ongoing community-led action.

1.5 °C YOUTH FESTIVAL, SEPTEMBER 2024

Photo Credit: Rebecca O'Malley



KEY OUTPUTS

1. **Delivered 10 workshops** including SIX public-facing community focused workshops and FOUR team design-led sessions. The public workshops involved storymapping, co-design, review and development of design and making phases, as shown in the project timeline.

2. **Organised THREE public events as part of Ballina Fringe Festival (2023–2025),** showcasing community input, laneway transformations, and proposed solutions.

3**. Participated in TWO local climate-focused festivals -** the Mary Robinson Centre's 1.5 °C Festival and the Mary Robinson Climate Conference.

4. **Contributed Cascade events to Heritage Week 2024 and Climate Action Week 2025,** engaging local communities in heritage and climate action activities.

5. **Cascade featured in the annual Irish Historic Towns Atlas (IHTA) Seminar at the Royal Irish Academy** under the theme "Water, Towns and Topography," In his presentation "Connecting Communities to Climate Change down the Historic Laneways of an Irish Town" Dr Philip Crowe, Co-Director of the UCD Centre for Irish Towns (CfIT), explored Ballina's historic lanes and how heritage, community and climate action are intrinsically intertwined.

6. **Produced SEVEN short videos,** including:
   - 1 animated explainer film
   - 4 short animated films addressing laneway-specific challenges
   - 1 documentary film on the O'Hora's Lane demonstrator
   - 1 animated video on the negotiated plan

7. **Transformed O'Hora's Lane into a 'Laneway Demonstrator',** including:
   - Deep cleaning and painting
   - Installation of green wall and rain-fed planters
   - Functional artwork 'Ida' - a sculptural downpipe that pays tribute to the history of the town, and in particular, one of the founders of the Ballina branch of Cumann na mBan.
   - Solar lighting, seating and sound elements.
   - A laneway launch event to celebrate the completion of the demonstrator installation.

8**. Participated in Project Dandelion's Interwoven initiative** by creating a 'Cascade' patch for a quilt that represented Ireland at COP30 in Brazil (Irish Times, November 2025).

KEY OUTPUTS (continued)

9. **Developed a Negotiated Plan** featuring over 30 community-sourced ideas for Ballina's laneways. This was showcased in the gallery space of Ballina Civic Offices during the 2025 Ballina Fringe Festival (9 - 14th October 2025). A printed double-sided A1 map explaining the community-sourced ideas was produced as a handout to encourage further feedback beyond the festival. This was shared locally in Ballina and available online for feedback and continued engagement.

10. **Invited stakeholder and public opinion on the project,** demonstrator and negotiated plan through four key phases of community consultation:
    - Initial public survey during storymapping phase (30 responses received)
    - Public voting phase to select demonstrator ideas (187 participants)
    - Final feedback on negotiated plan (six responses)
    - Six no. of semi-structured interviews with key stakeholders in the local authority and laneway businesses.

11. **Established and documented partnerships with:**
    - Business owners and residents on target laneways
    - Designers and contractors
    - Mayo County Council
    - Community organisations

12. **Facilitated a broad cross-section of the community to work together** who might not normally collaborate on addressing climate change issues. The project fostered intergenerational collaboration, notably between secondary school students and local authority stakeholders during a co-design workshop.

13. **Leveraged co-funding and in-kind support from Mayo County Council** (for powerwashing prior to installation, green wall upkeep and permanent lighting upgrade).

14. **Online engagement** including:
- 915 website views with 586 unique visitors.
- 465 Instagram followers, with strong and consistent engagement with 55 'posts' and 215 'stories' throughout the project. Between 5 August and 2 November 2025, our posts generated 64,702 views and reached 7,861 individual accounts. The top-performing post received 12,969 views, reflecting the growing interest and resonance of our project with the public online.

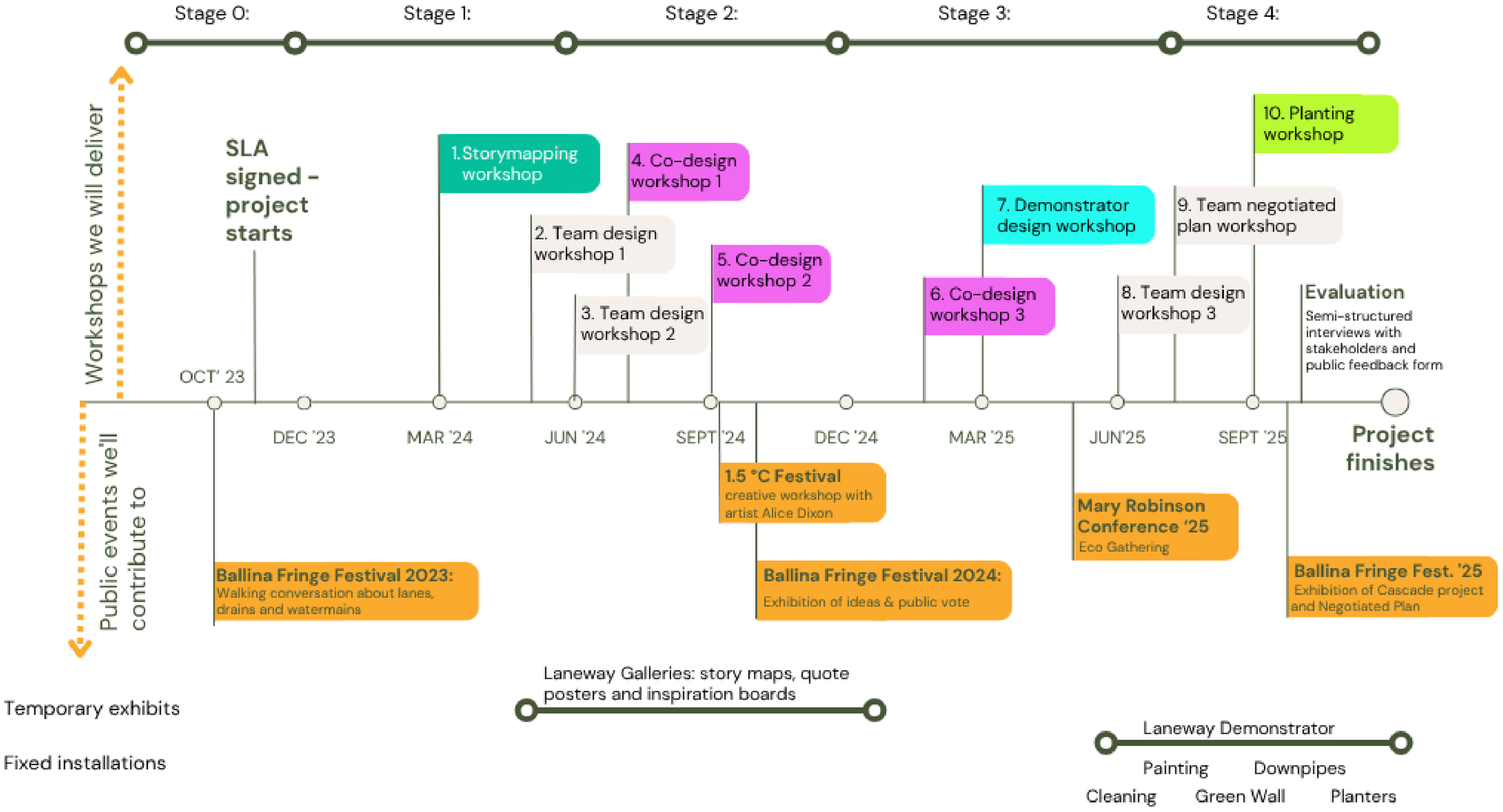
15. Received coverage in local, regional and national press. Cascade will be featured in RTE's Nationwide in 2026 following filming during the laneway launch and Fringe Festival Exhibition.



CO-DESIGN WORKSHOP, FEBRUARY 2025

Photo Credit: Rebecca O'Malley

TIMELINE OF ON SITE ACTIVITIES



PROCESS

Our process built on established capacity in Ballina and within our project team, by implementing a modified methodology that was successfully trialled in the Creative Ireland-funded Ripple project. This involved:

Stage Zero: Project Set Up

- Recruitment of a Project Coordinator, operation planning, ethical approval, risk assessment, graphic design and communications set up.
- Team co-curation of a walking tour for Ballina Fringe Festival 2023. This ‘walking conversation about lanes, drains and watermains’ drew attention to water, puddles and runoff as well as the history of the town.

Stage 1: Storymapping

- This stage sought to reframe the value of water, explore personal use of and connections with the laneways, and map the impacts of rainfall on the town’s lanes.
- Information was gathered through a facilitated public workshop which used storytelling techniques to gather stories and concerns about water and the laneways.
- The second part of the workshop involved the physical surveying and mapping of a laneway (Kathleen Lynn Lane), inviting participants to pay attention to and identify the impact of climate change on laneways; and to consider the potential of this laneway to be a beautiful public space of connection that simultaneously manages and celebrates water.

Stage 2: Co-design

- This stage involved THREE public workshops and THREE team design-led sessions.
- Public workshops led to the generation of a long-list of public ideas to reimagine the laneways in Ballina as places for people, water and nature. These ideas drew on ideas from the storymaps, workshops and a ‘Laneway Gallery’ exhibit showcasing heritage & contemporary case-studies from across the globe where water management has been integrated into urban fabric. This ‘laneway gallery’ featured in Heritage Week 2024. .
- The ideas were exhibited in the Mary Robinson Centre in the Ballina Fringe Festival 2024 and projected onto the old mineral water building, then shortlisted and voted on.
- Team design-led sessions refined the community-sourced ideas into a developed design to go to tender, bringing together the team’s expertise in art, architecture and engineering.

PROCESS (continued)

Stage 3: Creating
The team engaged contractors to implement the developed design for one laneway including ACT, AGS Scaffolding, Alan Rudden Studio, Ballina Seamless Gutters, Daniel Phillips - PATIO, Gorman Health and Safety, GreenScene Landscaping, JC Fascia (Painting Services), Paddy Bloomer, Seamless Aluminium, and Tarco Pressings.

A planting workshop was facilitated, led by Richard McKenzie from GreenScene Landscaping, focusing on enhancing the laneway's sustainability and greenery. This was followed by a group discussion with building owners, laneway stakeholders, Mayo County Council, and key community groups on ongoing maintenance plans and potential future uses of the space.

Simultaneously, the 30 community-sourced ideas were developed into a negotiated design for Ballina's laneways with ACT Studio. The negotiated design celebrates water and the unique qualities and histories of place, strengthens connection across the town, and embraces inclusivity in the design of public space. The plan proposes practical, repeatable interventions that make better use of rainwater and underused laneway spaces. Cascade invited the community to imagine the full potential of their town's laneways. Installations in O'Horas Lane demonstrate what's possible, while this plan offers a shared vision for future transformation.

Stage 4: Celebrating + Evaluating
The impacts of the project were assessed through a questionnaire and tailored semi-structured interviews with key stakeholders carried out in October 2025. These evaluation methods sought to: (i) understand how the project engaged the public, (ii) gauge attitudinal change to water as a precious resource that, when valued and managed, can contribute to the enjoyment of public space and (iii) gather feedback on the solutions proposed in the negotiated plan ahead of future funding applications.



‘LANES, DRAINS AND WATERMAINS’ WALKING TOUR, BALLINA FRINGE FESTIVAL 2023

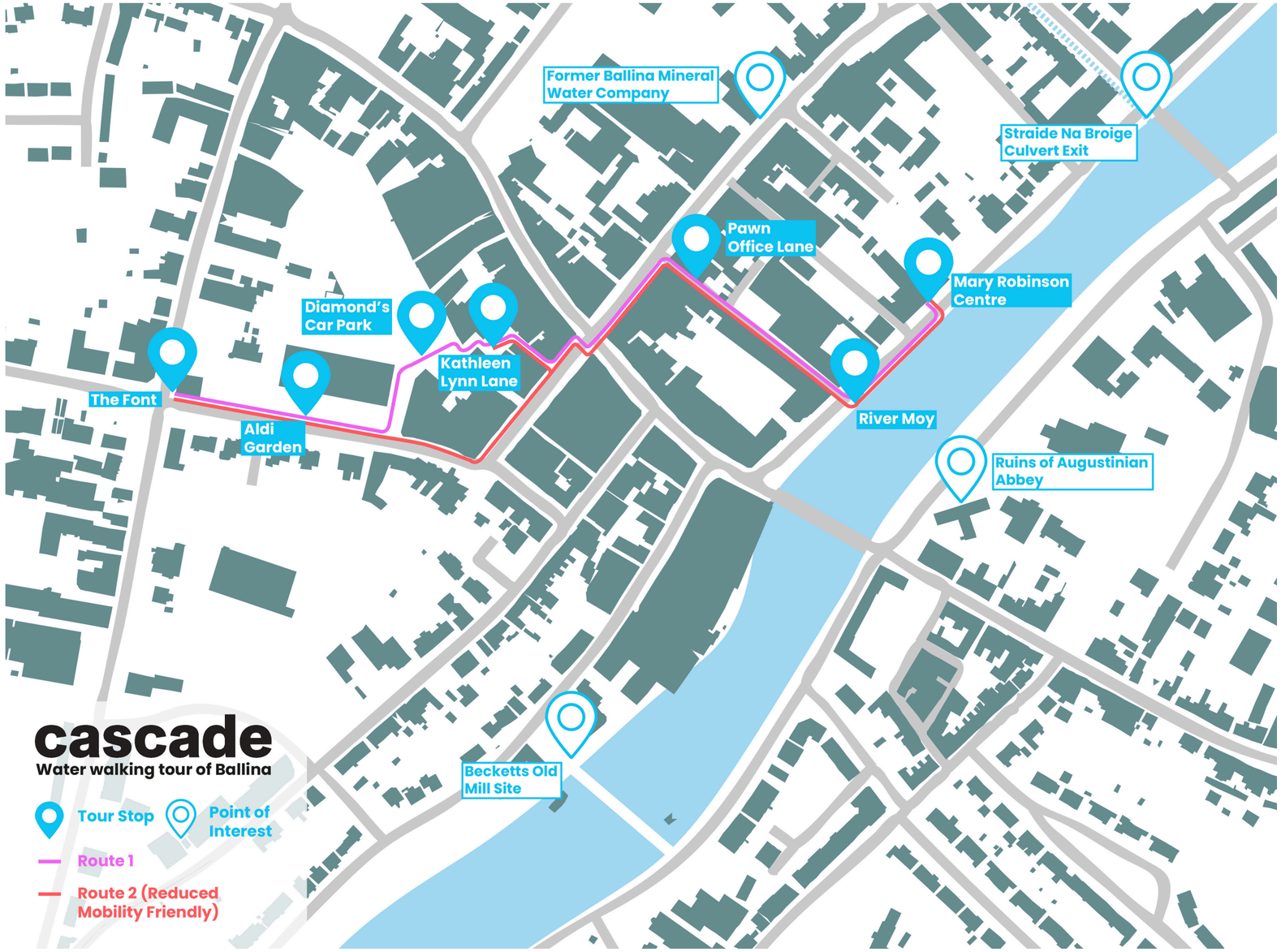
Photo Credits (clockwise from left): Kevin Loftus, Sarah Cotterill, Orla Murphy, Mark Duffy







BALLINA FRINGE FESTIVAL 2023



WALKING TOUR MAP PRODUCED BY KEVIN LOFTUS

Three interactive walking tours were delivered (including an accessible route) over two weekends during the Ballina Fringe Festival 2023. This walking conversation about Ballina's lanes, drains and watermains introduced attendees to where water comes from, where it's going and how it shapes the way we use our towns. Participants were given audio headsets, chalk and umbrellas for interactive elements of the route. They were invited to identify water and wastewater infrastructure where they saw it with pavement chalk and to share their own knowledge or stories of the water system along the route. The route included:

- 'The Font' (a.k.a the Vaughan Jackson Memorial Fountain) which provided much-needed drinking water for horses pulling carts in what was, then, a thriving market town;
- an overview of the surface water attenuation system installed in Aldi's car park - designed to capture a 1 in 100 year storm event with a 20% increase for climate change;
- the drinking water fountain in Kathleen Lynn Lane which supplies water from Lough Conn, the largest surface water supply in the Mayo and Sligo area;
- a brief history of the toilet and how people used to live in lanes in Pawn Office Lane;
- a quick overview of the main drainage schemes in Ballina which became operational in 1984;
- a pit stop at the mural which depicts fishermen in the River Moy (one of the most prolific salmon rivers in the country) and a discussion around the impact of climate change and runoff on the river's health, and
- the flood resilience measures installed at the Mary Robinson Centre to future proof it.

Ballina Storm Effects

CATHEDRAL CLOCK STRUCK BY LIGHTNING

NORTHERN CLOCK FACE SHATTERED

BOATS BLOWN FROM THEIR WINTER QUARTERS

The thunder and lightning which shook the town late on Thursday night, and wrought panic amongst many of the inhabitants, proved that their fears were not entirely unfounded when reports were received that a flash of lightning had struck Ballina Cathedral. Although the flash limited its destructiveness to the northern clock face and the ring of chiselled stone surrounding it, there is ample evidence that if the structure had been of different material the destruction would have been far more extensive.

The whole length of skirting-board from the bottom of the staircase to the bell-loft appears to have been affected, for in places it is completely torn from the wall along the stairs and all around the place is littered with mortar, knocked from the wall as a result of the vibration.

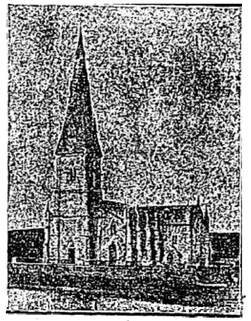
WHERE THE LIGHTNING STRUCK

Evidently the lightning struck the edifice on a place slightly above the damaged clock face, as an internal window screening thereabouts has been torn away. Though made of iron, part of it has been reduced to chips. No further damage is apparent above this window. The rest of the damage, which is comparatively negligible, apart from the clock face, was inflicted on the building from this spot downwards. The most notable effect the lightning wrought on the inside of the building was, perhaps, the severance of the connection rod from the hammer which strikes the time. The rod was severed just beside the damaged clock in the bell loft. Consequently the clock has been put out of action. No further damage of any importance can be seen except that a metal door on a switchbox on the bottom floor has been mingled and shattered. Slates from the roof of the north transept have also fallen whether from the lightning or the storm is not known.

People on their way to Mass this (Friday) morning examined the damage, and the sexton, Mr. Pat Casey, displayed great courtesy in showing everyone the damaged portion of the building. He was the first man to make the discovery when the broken connection rod hit him on the face in the darkness of the early morning when ringing the Angelus.

The remaining faces of the clock show that it stopped at 2.50 a.m. At that time there were heavy reverberations of thunder and flashes of lightning.

No other damage is reported.



ST. MUREDACH'S CATHEDRAL

an exciting time on Friday morning when a fierce storm accompanied the tide, which rose some two feet above normal level, even for a spring tide. The result was that many boats on the shore laid up above high water level were blown adrift. The motor cruiser "Ranger," a ten-ton vessel laid up in its winter quarters on trestles in front of "The Anchorage," and which was afloat in the abnormal tide was blown from its moorings, where it was secured by three heavy ropes, which snapped, and drifted up-river as far as the Ice House where Mr. Peter Hennigan, who is in charge of it secured it, and with difficulty brought it back to the vicinity of its dock when the wind abated.

BALLINA FLOODS

As a result of the very heavy rainfall for the past few days extensive flooding has been caused on the south side of Ballina where the river Moy overflowed its banks and completely inundated fields on both sides of its banks in the townlands of Carrowcushlaun and Cloonislaun. The flood had not reached such a high level for the past four years. All cattle in pas-

Ballina Herald 29.11.1947

FLOODING IN BALLINA AND DISTRICT

Heavy showers which followed in the wake of the snowfall of last week have caused extensive flooding in many areas in North Mayo, and it is reported the unfavourable conditions have taken a large toll of livestock and sheep.

Mr. William McHale, Rehins, Ballina, was forced to leave his home on Friday evening, having to wade through the water which completely surrounded his house. He is at present living with relatives. As his house is situate near a bog and on low-lying ground, he has several times in the past been forced to vacate it. Between Rehins and Foxford the River Moy has overflowed its banks, inundating fields to a depth of four feet, and in some cases the water has spread to the Ballina-Foxford road. The aspect as one approaches Foxford is a panorama of huge lakes and mountain, and the Moy proper is scarcely recognisable.

In Ballina, where the older residents assert that the flood on the Moy is the highest ever, the river has spread into the Fair Green, Ardnaree, and the water comes thundering down over the Fishery Weirs in a manner suggestive of the Niagara Falls. On Sunday last many people were seen leaning over Ham's bridge watching the unaccustomed rush of waters. Towards the lower bridge they saw the flood had risen to about three feet from the top of the arches.

About twenty yards of the wall running by the boat house at Bacheler's Walk have been knocked down by the force of the swollen waters. Adjoining land is covered with about two feet of water.

The flood, although largely attributable to the showers, has also to a large extent been intensified by the flow of molten snow from the Ox Mountains on to the Moy. Although this is usually a period of comparative quiescence for farmers, their minor operations this year have been completely held up, and fears are entertained that the ploughing in the spring will be considerably delayed if the flooding does not subside quickly. So far travel and transport have not been affected, and only isolated instances have been reported where buses and other conveyances were compelled to detour to negotiate flooding on the roads.

Ballina Herald 15.01.1949

"RIVER, STAY AWAY FROM MY DOOR!"

Flooding in Ballina Houses

The residence of Mr. Robert Bourke, Humbert St., Ballina, presented a chaotic scene on Wednesday night last, when, following the heavy rainfall that day, the Brook St. river, which flows by Mr. Bourke's home, fed by the melting snow, increased considerably in volume, and overflowed into the yard at the front of the house and on to the ground floor of the house, which was covered to a depth of at least 2 ft. To cope with the flooding, drastic measures had to be taken. The small wall bridge at the house had to be broken down to allow the huge volume of water through, and gaps were opened in the sidewall. This relieved the flooding in the yard, but the residents were still bailing water from the ground floor on Thursday morning. Extensive damage was caused to linoleum, carpets, etc., in the house by the flooding, and it is expected it will be at least a week before the ground floor is completely dried out.

Flooding also occurred in many houses in Lord Edward Street.

—*—

BALLINA CATHEDRAL FUND NON-STOP DRAW

£10—Miss Cunningham, c/o J. Carney.

£5—Miss Margaret Monoghan, Knox Street.

£1—R. Hughes, B.E., Nephin Hotel; Mrs. Syron, Hill St.; John Shannon, c/o Tyler's; T. Jordan, Station Road; Mrs. McDermott, Corcoran Tce.; Alick Kelly junr., Emma Acton, Castle Road; Mrs. Cadden, Connolly St.

Ballina Herald 02.02.1952

Flood Damage in Ballina

WATER FIVE FEET DEEP IN SOME HOMES

"THE BROOK" OVERFLOWS ITS BANKS

FAMILIES "MAROONED":

STOPPAGES IN THREE GARAGES

Ballina's worst flooding in years occurred on Monday morning last, near the middle of the town. Three families were marooned in their homes, three garages had to suspend work temporarily, and Ballina Fire Brigade had to be called to the scene when the river at Humbert Street, known locally as "The Brook," overflowed its banks after a night of torrential rain. The floods ranging from five feet to a few inches in depth, spread into houses at Arran Place and Dillon Terrace, started when the flow of water along The Brook, swollen by heavy rains, and carrying weeds and debris along with it, piled up against the culvert at Messrs. Scanlons garage. Its exit to the river Moy, thus blocked, the river burst backwashed to flood the premises of Mr. R. Bourke in Humbert Street, and in a little over two hours disrupted early morning traffic and ruined several homes in its course.

The gardens of Nos. 1 and 2, Humbert Street, were set awash, and Messrs Scanlons garage was flooded for some inches. Two houses in Lower Pearse Street also felt the effect of the flood waters, as yards were washed over and kitchens damaged.

FIVE FEET DEEP

But the greatest damage inflicted by the flood came with its entry into Arran Place, where the houses of Messrs Trimble and Gerald Clarke were inundated to a depth of five feet because of the steep drop from road level. In both houses, while the occupants slept unawares, water piled up over gardens and ground floors and damaged furniture, effects, carpets and walls with a thick deposit of silt.

Members of both families were literally marooned upstairs until help arrived at about 9 a.m. in the shape of mechanics working at Mr. Clarke's garage. Flooding in the garage was so intense that the staff found laden barrels of oil floating on the dirty waters on their arrival.

IN DILLON TERRACE

BELMULLET GIRL APPOINTED DOMESTIC SCIENCE TEACHER

By 12 votes to 5 Miss Mary Teresa Neary, of Belmullet, was appointed permanent whole-time teacher of domestic science at the meeting of Mayo Vocational Committee on Tuesday at Castlebar.

In addition to Miss Neary there was an application for the appointment from Miss Joan Daly, Lough Mask House, Ballinrobe.

Proposing Miss Daly for the position, Mr. B. Joyce said she was a former member of the Mayo vocational staff, and had given good service to the county. She was at present in Kilkenny, and for personal reasons was anxious to come to Mayo.

Mr. D. Kelly seconded.

Very Rev. Canon Feeney, P.P., Belmullet, proposing Miss Neary, said she had applied for previous positions to the Committee. She was fully qualified, and was of outstanding character. She was at the moment in Galway, and for personal reasons wished to be near home. He had nothing whatever against Miss Daly, but in the circumstances felt that the support of the members should be given to Miss Neary.

Mr. John Clarke seconded, and said if ever anybody was deserving of the position it was Miss Neary. They had also promised when a previous application from her had been turned down that if ever a vacancy arose again they would appoint her.

Mr C. Gilmartin said he would support Miss Neary, because he cause he thought that promise was given.

Mr. D. F. Courell and Mr. J. T. Morahan agreed.

The Reverend Chairman called for a vote, and the result was as stated at the outset.

For Miss Neary—Very Rev. Canon Feeney, P.P.; Very Rev. Canon Maloney Adm.; Very Rev. Father O'Connor, P.P.; Messrs O. Hughes, J. Clarke, D. F. Courell, C. Gilmartin, P. J. Kelly, M. Lyons, J. T. Morahan, P. J. Shanley, and Senator T. Ruane—12.

For Miss Daly—Ven. Archdeacon Prendergast, P.P.; Right Rev. Mgr. Dean Daly, Rev. G. Kearney, B. Joyce, D. Kelly—5.

Rev. Fr. Kearney said he would not like it to go from the meeting that they had promised anybody, as one speaker had said. They should have open minds on such questions.

The C.E.O. announced that Miss Gillivan, senior itinerant teacher, would be appointed to Swinford.

Ballina Herald 30.01.1954

Stage 1: Storymapping

In March 2024, we held our **Storymapping** Workshop at the Mary Robinson Centre, where residents of Ballina came together to share their stories, experiences and perspectives on the town. The workshop set out to explore how people interact with the public spaces in Ballina, how it has changed over time, the places they enjoy or avoid, and how weather, especially rain, shapes their daily routines and choices about where to go or stay. This marked an important first step in understanding the relationship between people, place and water.

During the session, participants recorded their ideas and experiences in a variety of ways - mapping key routes and spaces on 2D maps, capturing insights on post-it notes, and contributing to short audio interviews that offered more personal reflections. Together, these methods gathered valuable information about the physical condition of Ballina's laneways, as well as local views on climate change, water, rainfall and the role of laneways in the heritage quarter.

The following day, we explored Dr. Kathleen Lynn Lane through a place-based activity, **surveying** its physical condition while listening to the experiences and stories of participants. The aim of this workshop was to gather data on the physical condition of Ballina's laneways, and the views and experience of residents, business owners, and other members of the public on climate change, water and rain, and the use of public laneways in Ballina's heritage quarter. The team documented the laneway's layout and features, including drains, vents, and downpipes, while noting its 'wateriness', damp corners, shaded spots and areas exposed to wind or sunlight. Water was everywhere, cascading down buildings, pooling in puddles, and soaking into stone, creating habitats for moss and ferns and revealing both the beauty and challenges of the town's infrastructure.

Participants reflected on their own relationship with Ballina's public spaces, considering how they use the town, which areas they value or avoid, how the laneways have changed over time, and what improvements they would like to see.

The information gathered from both workshops on 2D maps, notes and sketches, and recorded 'vox-pop' semi-structured interviews were collected and used to produce findings (statistical, place-based and thematic) that were shared with the residents and used in the next phase of the project: Co-design.



SURVEYING IN STORYMAPPING WORKSHOP, MARCH 2024

Photo Credits: Sarah Cotterill



Stage 1: Questionnaire / Laneway Galleries

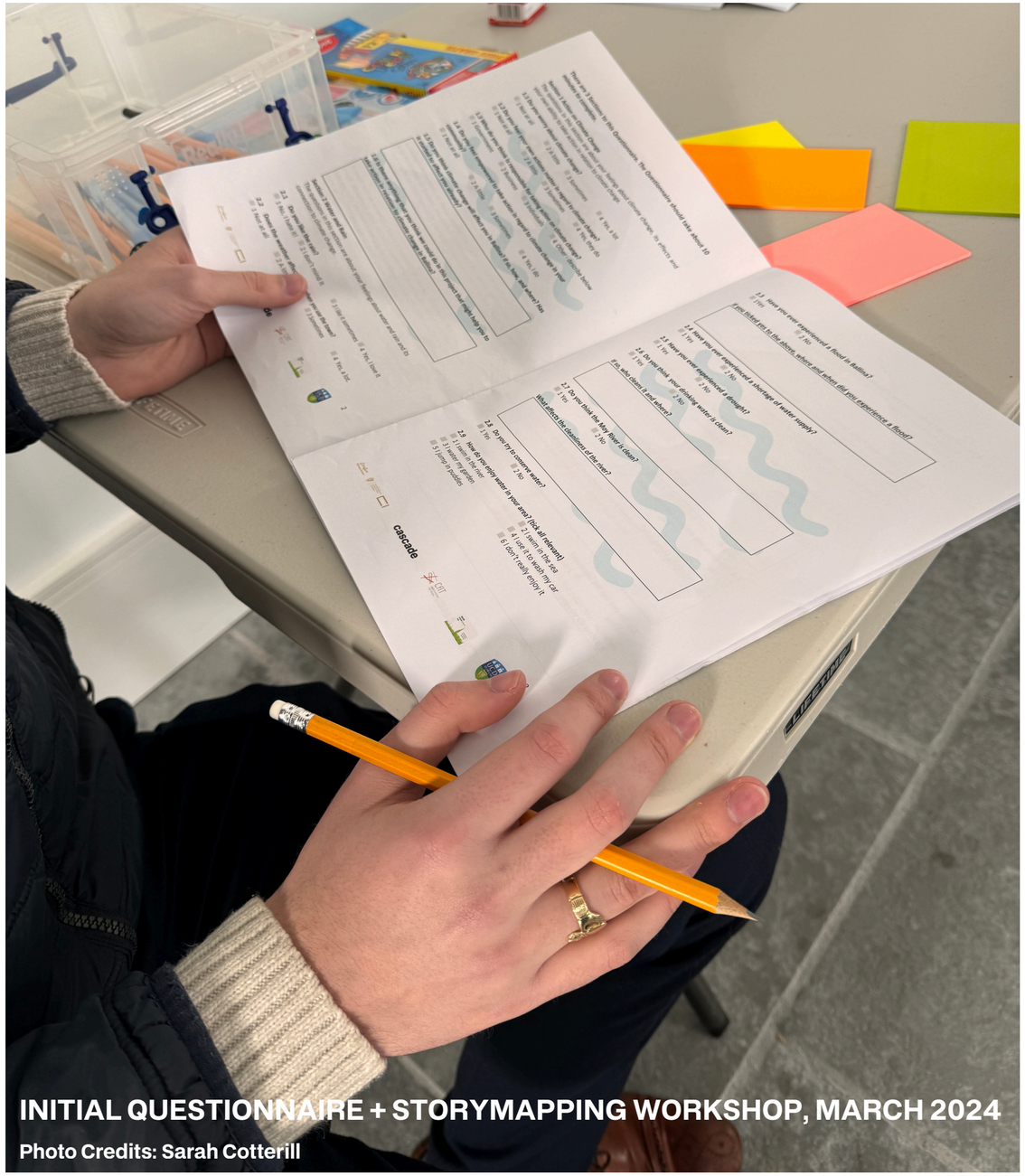
In addition to the Storymapping workshop, a town-wide questionnaire was issued to gather residents' views on how the Cascade project could support meaningful climate action in Ballina and to identify which areas of the town most require improvement.

Meanwhile, the town's lanes were transformed into 'Laneway Galleries', celebrating the hidden potential of these often-overlooked urban spaces. The Cascade team designed a series of "Storymap" signs - each one featuring a QR code linking to interactive digital activities - and installed them along a self-guided Laneway Trail. These Storymaps conveyed the insights gathered during the first phase of the project, mapping how people move through, pause in, or avoid different places, and how rain, weather and urban design intersect with everyday life.

To encourage further participation, community post-boxes were installed across the town to invite residents to contribute their own stories, suggestions, and visions for change.

The Laneway Galleries also featured a 'best practice' exhibition, presenting a series of designs showcasing both historical and contemporary, national and international case studies of how rainwater management has been integrated into the urban fabric. These examples illustrated how laneways can become places in which to pause, to play, to interact, and to experience water in new ways rather than simply being channelled away.

This Laneway Trail also formed part of the celebrations for Heritage Week 2024, allowing participants to take a self-guided walking route through Ballina's laneways and engage with the story of the town, its water-flows, its hidden spaces, and its climate-resilient future.



INITIAL QUESTIONNAIRE + STORYMAPPING WORKSHOP, MARCH 2024

Photo Credits: Sarah Cotterill

What could we do in this project to help you take action on climate change in Ballina?

cascade

"More and further engagement. Keep the message alive with the locals."

"Provide a bigger picture or strategy. Most stuff is just piece meal ... We need to be doing work constantly but people can't see the bigger impact..."

"Build support for community initiatives ... help identify funding to implement community ideas"

"Highlight the fact that if the river floods and bursts its banks the laneways will act as pathways for flood waters."

"Awareness is key...understand why this matters, ... and the huge benefits it can have on your day to day life"

"Inform and engage with people / businesses..."

"More inclusive in terms of community involvement. Other events and schemes in the town have excluded people in the past."

cascade



Which areas of the town would you most like to see improved and why?

"The laneways...they are very neglected"

"laneways, historic Ballina"

"better pedestrian access Less traffic"

"The laneway beside the library and bank of Ireland. Kathleen Lynn laneway. Pawn office lane and laneway at Clarkes Newsagents."

"I'd love our lanes to be more attractive, Professional Murals. No more street art."

"Kathleen Lynn Lane it's full of chewing gum and rubbish."

"All the laneways. Cleanliness has gotten out of hand!"

"Emmet Street and Cathedral Road - encourage more to love our river."

"Riverside area"

"The river bank on the Ardnaree side of the river. More amenities and use of green space"

"Along the river - it's our greatest asset and it's not really utilised"

"Around the river between the 2 bridges. It's awful with traffic and noise, pollution and such. Could be so lovely"

"the River Moy is such an asset to the town, but is massively underused..."

"Imaginative reuse of vacant and derelict buildings"

"Tone Street - many vacant properties"

"Pearse Street and O Rahilly Street as it's the spine of the Town and a barometer of vibrancy"

"The edges of the town as they look neglected and empty builds in the town."

"The lanes, vacant buildings... more could be made of these... to bring vibrancy and activity in to the town centre. "

EXAMPLE RESPONSES FROM INITIAL QUESTIONNAIRE

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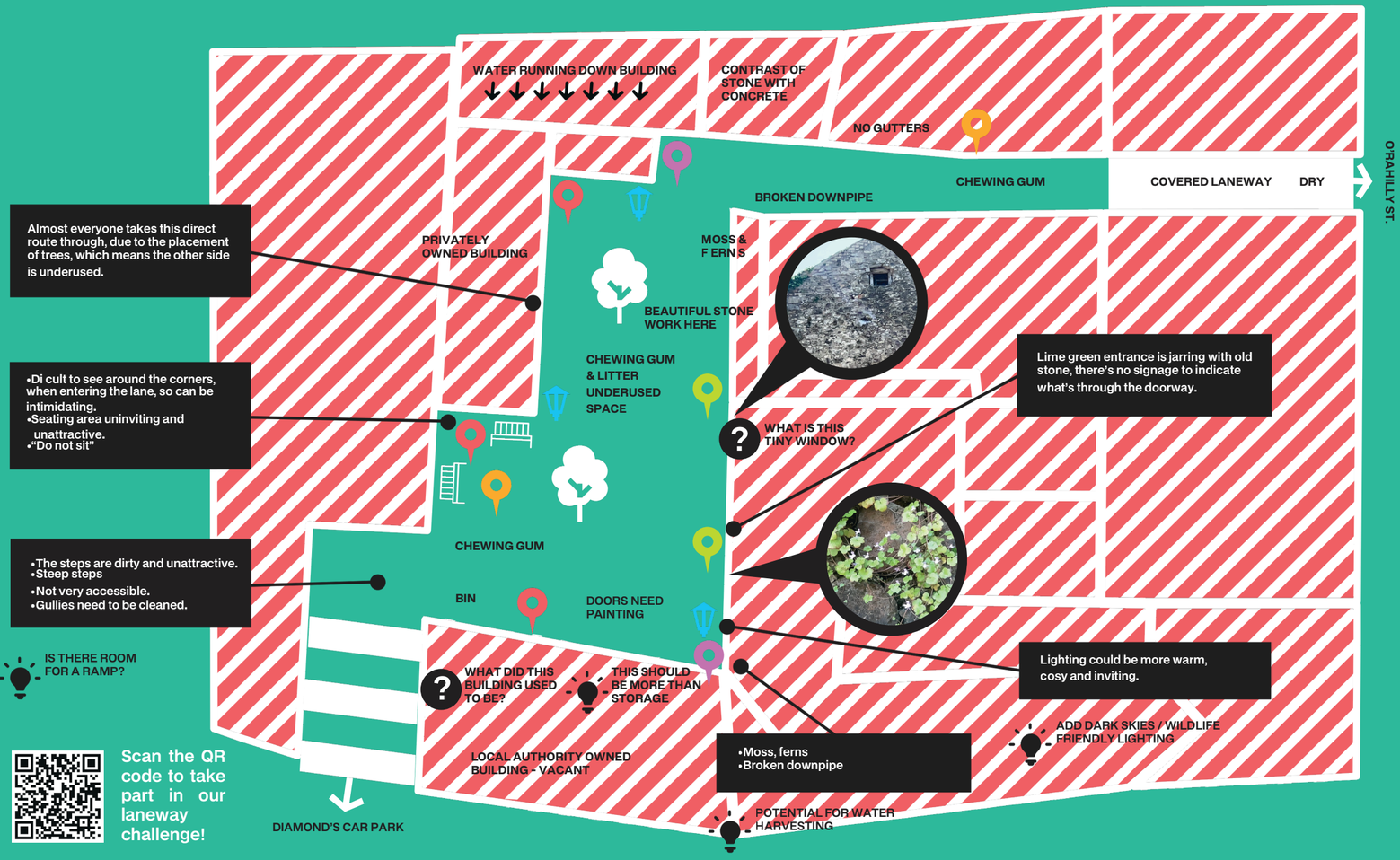
climate action project

This is what you told us in the questionnaire and during our first workshops.

How can the laneways of our historic town centres adapt to cope with increased rainfall from climate change? All residents of Ballina are invited to take part in a series of events and creative workshops throughout 2024 and 2025 to share their experiences of water and public space in the town, and explore how laneways can become a connected trail of climate-resilient, shared spaces that celebrate water in Ballina.



"I never actually looked at this space and I walk through here almost everyday."

"I walked through here maybe twice, usually with my eyes closed, trying to get through it as quickly as possible."

"Wouldn't it be great to know more about the stories of those buildings and the history of the place?"

"Need to talk to young people who use this space. Engage volunteer programmes with TY, or involve them in transforming the space with music/art?"

"There is so much potential to transform this space - soften it with planters and pots or a vertical living wall."

Scan the QR code to take part in our laneway challenge!

Kathleen Lynn Lane

Visit our signs in Moy lane, Pawn O ce lane, O'Hora's lane and beside the River Moy on Cathedral Road and Emmet Street.

DIRTY · COULD BE BETTER · DAMP · EXPLORE · YOUR IDEA · LIGHT

@cascade_ballina Keep up date with news and events
www.subscribepage.io/cascade

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SPONGE CITIES

From grey to green and blue

Climate change will likely result in Ballina experiencing an increase in extreme rainfall events that can overwhelm drainage systems and cause sudden flooding. Our towns could be more flood-resilient by becoming absorbent, like a sponge. Green roofs, permeable paving, rain gardens, bioswales, and constructed wetlands absorb & slow rain run-off to prevent flooding. By replacing hard grey concrete with porous green and blue spaces, 'Sponge cities' are more liveable for people and nature.

What if Ballina were spongy?



© Turenscape

Benjakitti Forest Park, Bangkok, Thailand

Bangkok is at high risk of flooding due to its low-lying elevation, subsidence, and global warming. Benjakitti Forest Park is a nature-based solution to this problem, co-designed by the sponge city concept inventor, Kongjian Yu. A former industrial site was transformed into a constructed wetlands landscape that can retain 200,000m³ of storm runoff & improve water quality – all on a low budget.



The new, low-maintenance landscape forms a wide variety of habitats which increase biodiversity. All existing trees were retained, and native plants are re-colonising the area.

Kasinthorn Ratchaoros via Wikimedia Commons



Using only materials from the site, excavators cut and filled to construct three main wetlands of varying depths dotted with islets, creating a porous landscape.

Supanut Arunoprayote via Wikimedia Commons



Boardwalks along the wetlands and an elevated skywalk through the tree canopy give residents the benefits of nature and active travel in a densely populated city.

© Jirirath Somsawat

Grey to Green, Sheffield, UK

Sheffield, like Ballina, was built on rivers. Heavy flooding in 2007 prompted the use of nature-based sustainable drainage. The Grey to Green regeneneration scheme turned a redundant dual carraigeway, where rainfall pooled on hard cover, into an active travel corridor with walking & cycling routes through a landscape of free-draining soil and vegetation. A previously rundown area is now a green street bustling with people & wildlife.

© Sheffield City Council



The nature-mimicking drainage system captures surface water in planted swales where it slows, soaks in and is filtered by soils and plants, before discharging into the river. It diverts 24,000 bathtubs' full of water a year from sewage treatment works.

© Sheffield City Council





Planted swales protect river biodiversity by capturing road pollutants such as oils, heavy metals and microplastics before they drain into watercourses. Maintenance was carried out by a local social enterprise.

© Sheffield City Council

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LANES AS LUNGS

What if getting aroundBallina were a walkin thepark?

Greening laneways can help with climate changeby

improving water management through absorbing and slowing rainwater run o . Green lanes support biodiversity, provide shade and shelter, and improve air quality. They can even bolster food sustainability by providing space for urban agriculture. Spending time in green spaces has been shown to boost mental and physical health for all ages. Ballina's network of laneways could become linear parks, bringing nature right into the heart of the town.







Licence to Green...In 2015, the mayor of Paris set a target to increase the amount of green space in the city by 100,000 hectares, by greening its streets, walls and roofs. Through the Permis de Végétaliser scheme, anyone can apply for a three-year licence to green, garden and farm an area of public space. Pocket parks and communal gardens have sprouted in lanes, verges and on buildings across the city.

© RionachNhNaill
© Valerie François



Local residents transformed the old night soil laneway behind their houses into a communal laneway park in Sydney, Australia

© Daniel Shipp



In Jakarta, Indonesia, the Gang Hijau (green alley) community movement transforms laneways and their walls into greenways and miniature urban farms, using vertical gardening and hydroponics.

© BeritaJakarta
© dok pusatjakarta.go.id





Laneway rain gardens in Malmö's Bo01 district absorb, retain and release rainwater run-o from surrounding buildings, while providing a haven for wildlife.

© Sebastien Ludwig



This Middlesbrough alley was used for fly-tipping until residents joined forces to plant it with fruit, flowers and vegetables.

© North News & Pictures Ltd



The only way is up. Cables support climbers' growth on a green wall facade in Switzerland, while flower gardens extend vertically on the walls of Spello's narrow alleyways in Italy.

© Matteo Burini

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Stage 2: Co-Design

'Co-Design' had two strands: The Cascade team employed a tactical urbanism approach to design and implement a demonstrator project to show how water can become a sensory and beautiful component of public space. We aimed to connect the gutters, downpipes and gulleys with sculpture, art and mini-rain gardens to capture the currently unmanaged surface runoff, engage the senses, and act as points of interest to pause and enjoy. In parallel, public co-design workshops were facilitated to generate a long-list of public ideas to reimagine the laneways in Ballina as places for people, water and nature.

Workshop I (July 2024)

As part of the Ballina Salmon Festival in July, Cascade hosted a public co-design workshop to engage residents in shaping the future of the town's laneways. The workshop built on the stories and data gathered during Stage 1 of the project, with the aim of collecting and sorting a longlist of community ideas. A key focus was on how laneways could be reimagined to help mitigate water-related climate impacts such as flooding, drought and rainwater runoff. Participants also engaged with the laneway 'Storymaps', which captured local stories, images and ideas. The workshop brought the community together to share their ideas, hopes and dreams for the laneways. Participants considered how these spaces could become more welcoming and social while also being future-proofed against the impacts of climate change. The day was filled with creativity, collaboration and community spirit. Highlights included a public session with local decision-makers on participation and democracy, live music from Nessa Music, and a graffiti workshop for young people led by local artist Emma Donoghue. The energy and imagination of the workshop helped to capture a shared vision for the laneways, setting the stage for the next phase of Cascade's design process.

Workshop II (September 2024)

The September Co-design Workshop engaged residents of Ballina in a collaborative design process, building on stories and data from earlier workshops. The session focused on developing ideas for water management, climate change adaptation, and enhancing the laneways. Students from St. Muredach's Secondary School, alongside community stakeholders, worked with facilitators to generate creative and practical solutions. Using maps and guided prompts, participants explored ways to transform the lanes into spaces that manage rainwater while offering beauty, activity, and community connection. Ideas included green planting, permeable surfaces, rain-absorbing gardens, and opportunities to play. A key part of the workshop was the laneway visits, where students observed conditions, identified challenges, and gathered inspiration. The workshop concluded with participants sorting and prioritising ideas, producing a longlist of concepts to help inform the negotiated plan for the laneways and embed young people's creativity into Ballina's public spaces.

CO-DESIGN WORKSHOP, JULY 2024

Photo Credits: Sarah Cotterill



Stage 2: Co-Design

1.5 °C Youth Festival (September 2024)

The creative spark came alive among Ballina's younger residents at the Mary Robinson Centre's 1.5 °C Youth Festival. This landmark event brought young people together for a weekend of fun, connection and awareness, exploring sustainability, climate change and our relationship with nature. Artist Alice Dixon led an interactive workshop, inviting children, teenagers, and their parents to reimagine the town's laneways. Participants sketched, wrote, and modelled their ideas in coloured clay, transforming abstract visions into playful, tangible forms. From imaginative murals to interactive seating and reimagined green spaces, the young people shared inventive concepts, showcasing their creativity and strong connection to their town. The festival celebrated artistic expression and highlighted the importance of young voices in shaping public spaces.

Ballina Fringe Festival 2024 (October)

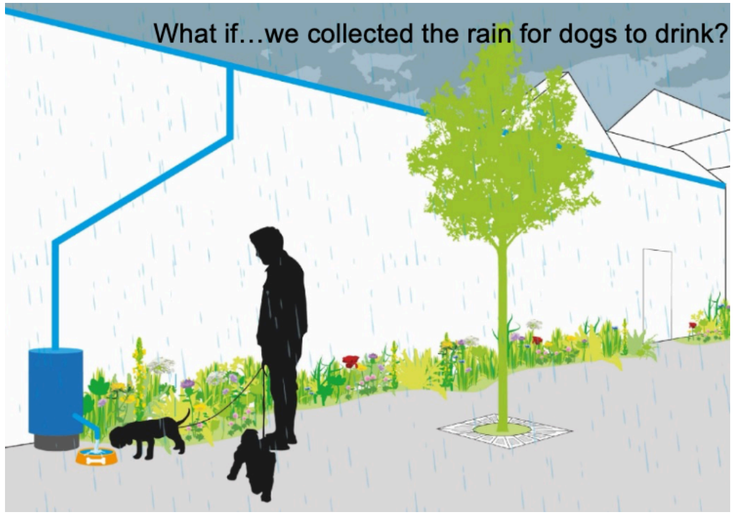
The community ideas gathered through the laneway galleries and co-design workshops were translated into a series of graphic sketches created by ACT Studio and showcased in an exhibition at the Mary Robinson Centre during the Ballina Fringe Festival 2024. The sketches illustrated a wide range of creative interventions, from urban pocket forests to sensory rain chains, demonstrating a strong commitment to using nature-based solutions and artistic practices to respond to climate challenges.

Festival attendees were invited to engage with the sketches, providing feedback on which ideas resonated with them and suggesting ways they could be improved. Participants were asked to vote both in person at the exhibition online allowing the community to shape the emerging proposals. One hundred and seventy-one (171) people participated in the online vote. Each person could vote for up to 5 ideas. The most popular ideas included:

- an urban pocket forest (91 votes);
- an educational water playground (69 votes);
- the use of rainchains to create a sensory experience with rain (53 votes);
- a connected trail of permeable laneways with places to play (50 votes);
- green roofs to absorb rainwater and provide habitats for bees (50 votes); and
- diverting the rain into raingardens (44 votes).

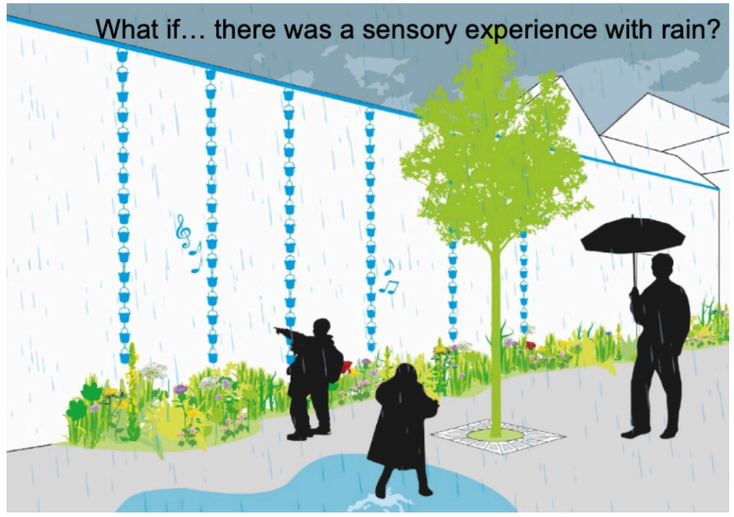
Voting also took place in person, with 16 votes cast. The water playground (8 votes), sensory rainchains (10 votes), and connected permeable laneways (10 votes) were among the most popular again, but green walls (8 votes) were more popular than green roofs (5 votes) and the urban pocket forest was less popular in-person than online (4 votes). This process helped identify the most promising concepts, while also generating new suggestions and insights that informed the next stages of the Cascade co-design process.













A SAMPLE OF SKETCHES PRODUCED BY ACT STUDIO FOLLOWING CO-DESIGN PROCESS

Stage 2: Co-Design

Workshop III (February 2025)

The aim of the workshop was to build on earlier co-design activities by enhancing ideas for Ballina's laneways and prioritising proposals to help inform the 'negotiated plan' for the town. In the morning, students from Moyne College and St. Mary's Secondary School revisited ideas from previous public sessions. They suggested improvements and applied a sustainability matrix, developed by the Cascade team, to evaluate each proposal. A central focus was water-sensitive urban design, approaches that manage rainfall while enhancing public spaces. Suggested solutions included permeable paving to absorb stormwater, rain gardens and a swale to filter runoff, and ways to turn excess rain into a visible and playful feature. In the afternoon, local authority staff and other laneway stakeholders assessed the feasibility of these ideas, considering maintenance and integration into the existing laneway network.

Mary Robinson Conference (May 2025)

Cascade took part in the 'Eco-Gathering' event held in May 2025 as part of the Mary Robinson Climate and Nature Conference organised by the Mary Robinson Centre in partnership with the University of Galway. The Eco-Gathering brought together around 260 delegates along with members of the public, featuring stalls from local businesses, community groups, and conference organisations. Cascade's presence at the event provided an opportunity to engage directly with conference delegates and the wider community, share information about our project, and build connections with other organisations committed to climate and nature action.

Demonstrator Design (June 2024 / March 2025)

The team met in person and online to develop and design the demonstrator solution for a laneway in Ballina. Drawing on community input and workshop insights, the team came up with ideas for a demonstrator installation in O'Horas laneway, to show how water can be transformed into a feature that manages runoff while enhancing public space. As part of this series of sesssions the team developed a 'sustainability matrix' so that each intervention could be evaluated. Criteria, including water management, creativity and beauty, behaviour, social use, environmental impact, process, inclusivity, and circular economy.This matrix was also used to compare interventions in the negotiated plan.



ENGAGEMENT WITH LOCAL AUTHORITY AND LANEWAY STAKEHOLDERS IN CO-DESIGN WORKSHOP 3, FEBRUARY 2025

Photo Credits: Sarah Cotterill

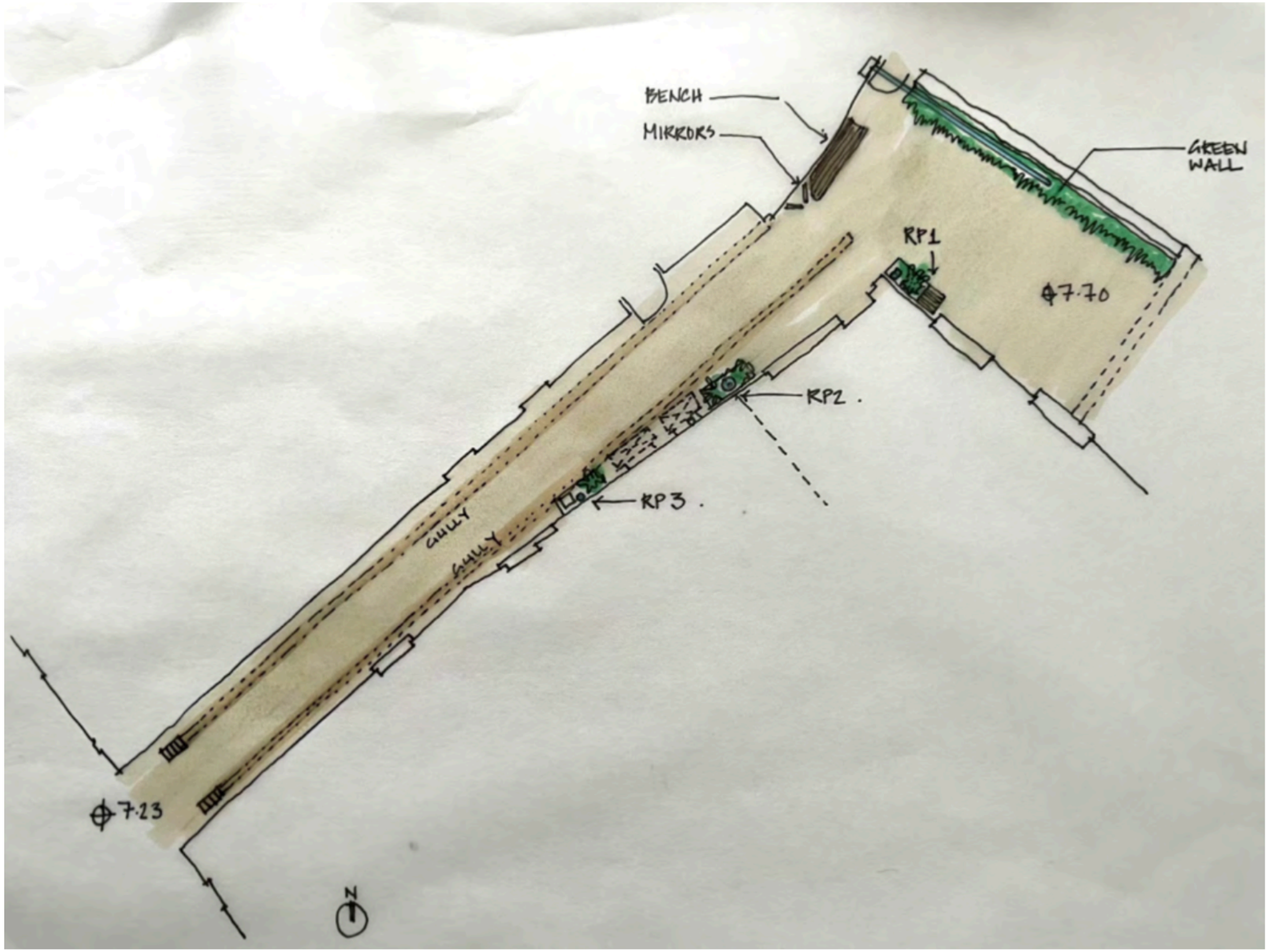
Stage 3: Creating

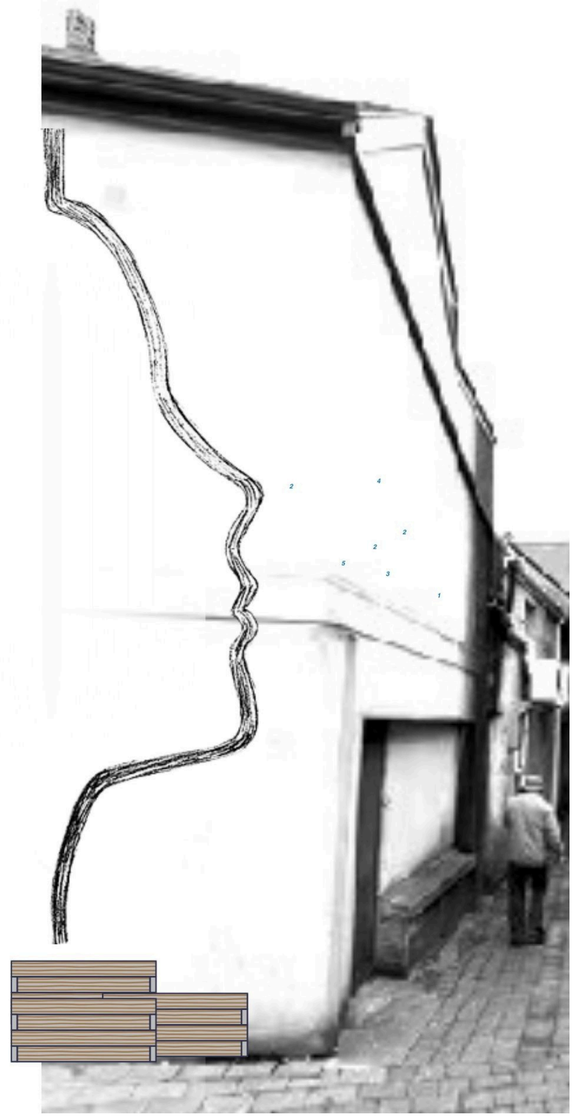
O'Horas Laneway Demonstrator

The Cascade team took a 'tactical urbanism' approach to reimagine O'Horas laneway, turning unmanaged surface water into a visible, functional, and beautiful part of the public realm. By linking gutters, downpipes, sculpture, and rain gardens, the project demonstrates how water can be celebrated while helping to slow the flow into the drainage system. Building on insights from community workshops and team co-design sessions, the Cascade team developed a detailed design concept suitable for tender, translating the collaborative ideas into a coordinated set of drawings and specifications. This process included close liaison with Mayo County Council, the property owners adjoining the laneway, and specialist consultants to ensure technical feasibility and compliance with local requirements.

Process

- The team engaged contractors and partners, selecting suppliers with the skills to deliver bespoke elements of the installation. The final design represents a cohesive set of interventions implemented by multiple partners, collectively showing how creative design and collaboration can deliver climate responsive, community driven urban spaces.
- O'Horas lane was first cleaned by Mayo CoCo, and JC Outdoor Services power-washed and painted the buildings, creating a fresh canvas for the transformation.
- The green wall, designed by Alan Rudden Studio, captures roof runoff in a 700L water tank and distributes it to a 17 sq.m living wall system. With nearly 600 plants, it slows heavy rainwater, provides habitats for insects, improves air quality, reduces noise, and visually softens the lane with lush greenery.
- The rainwater planters, designed by the Cascade team, manufactured by Daniel Phillips of PATIO, and planted by GreenScene Landscaping, filter roof runoff before it reaches the main drain. This slows and cleans the water, helping to reduce flooding and remove pollutants. Each rain garden also creates an inviting space to enjoy the laneway, with a perch to sit on, a 'Suikinkutsu' (water harp) for an auditory experience, and a water bowl for wildlife and pets.
- Richard McKenzie of GreenScene Landscaping facilitated a hands-on planting workshop demonstrating the function of the rainwater planters. The session was followed by a group discussion with building owners, laneway stakeholders, Mayo County Council, and key community groups to explore ideas around maintenance and potential future uses of the laneway space.
- Downpipes and gutters were replaced to streamline the laneway's appearance and protect buildings from damage caused by unmanaged rainwater runoff. These were fabricated in bespoke mill-finish aluminium by Seamless Aluminium and installed by Ballina Seamless Guttering.
- Downpipes carry out essential, but often overlooked work, and this inspired the functional artwork 'Ida' by Ríonach Ní Néill. An aluminium downpipe shaped in the profile of a woman's face, it commemorates Ballina freedom fighter Ida O'Hora and the role of Cumann na mBan in securing Irish independence. It was project managed by Paddy Bloomer and fabricated by Tarco Pressings.
- Together, these interventions capture, slow and redirect rainwater while supporting biodiversity and improving air quality. They transform the laneway into an inviting space where people can pause, sit, listen and enjoy water as a celebrated feature of the urban landscape.





INITIAL SKETCHES OF LANEWAY INTERVENTIONS (DESIGNED BY PROJECT TEAM)

Stage 3: Green Wall Installation

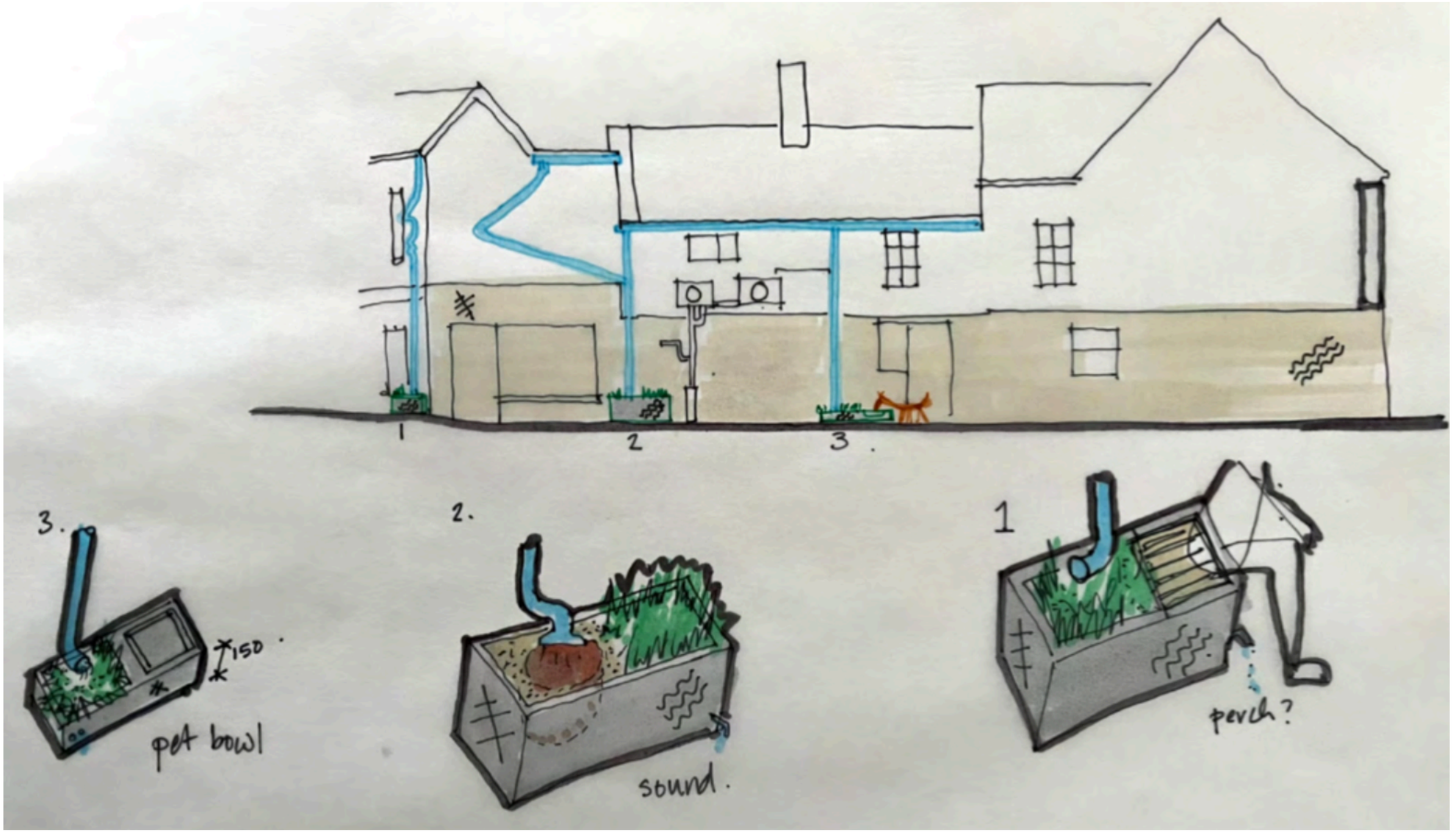


ALAN RUDDEN COLLECTION INSTALLING GREEN WALL, AUGUST 2025
Photo credits: Sarah Cotterill

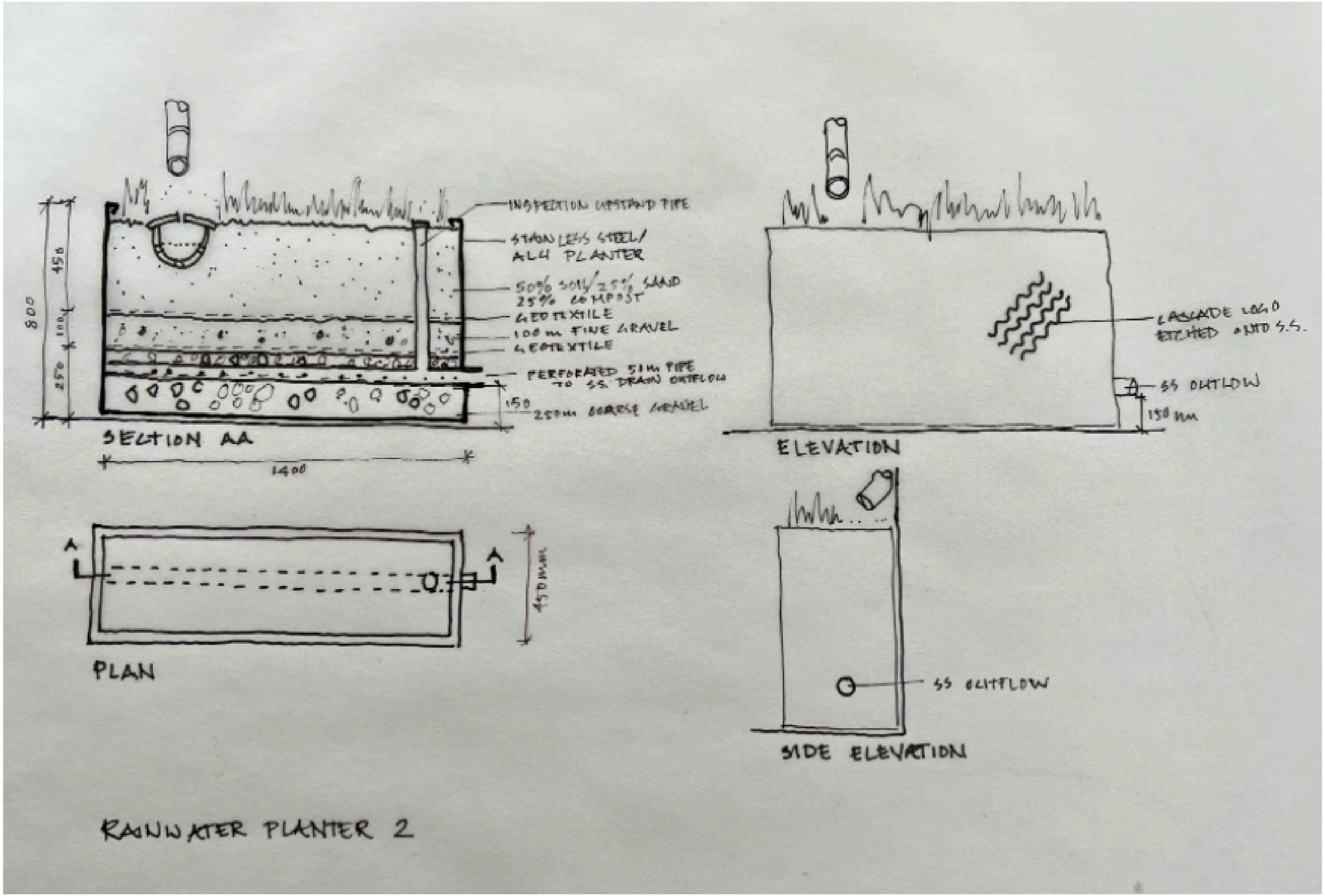


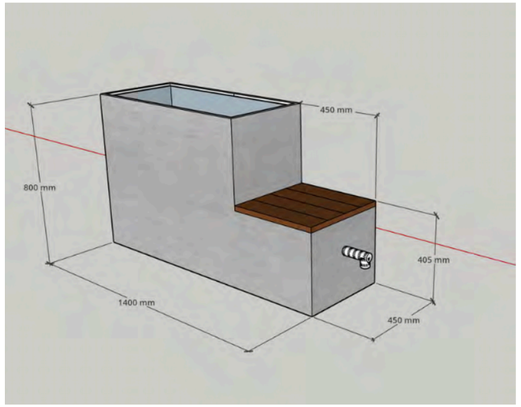
ARC GREEN WALL, AUGUST 2025

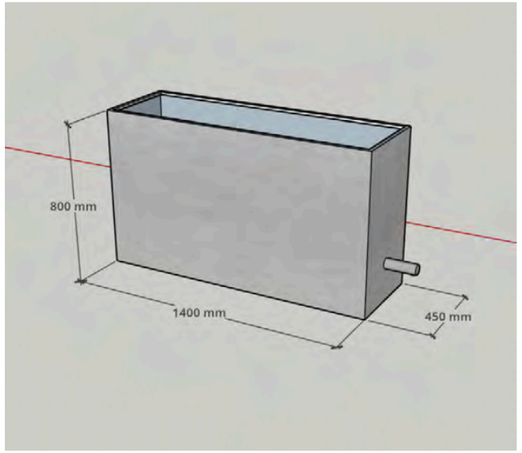
Photo credits: Sarah Cotterill

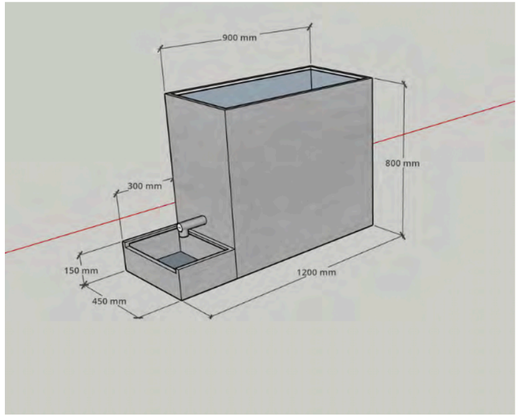


INITIAL SKETCHES OF RAINWATER FED PLANTERS AND NEW DOWNPIPES (DESIGNED BY PROJECT TEAM)



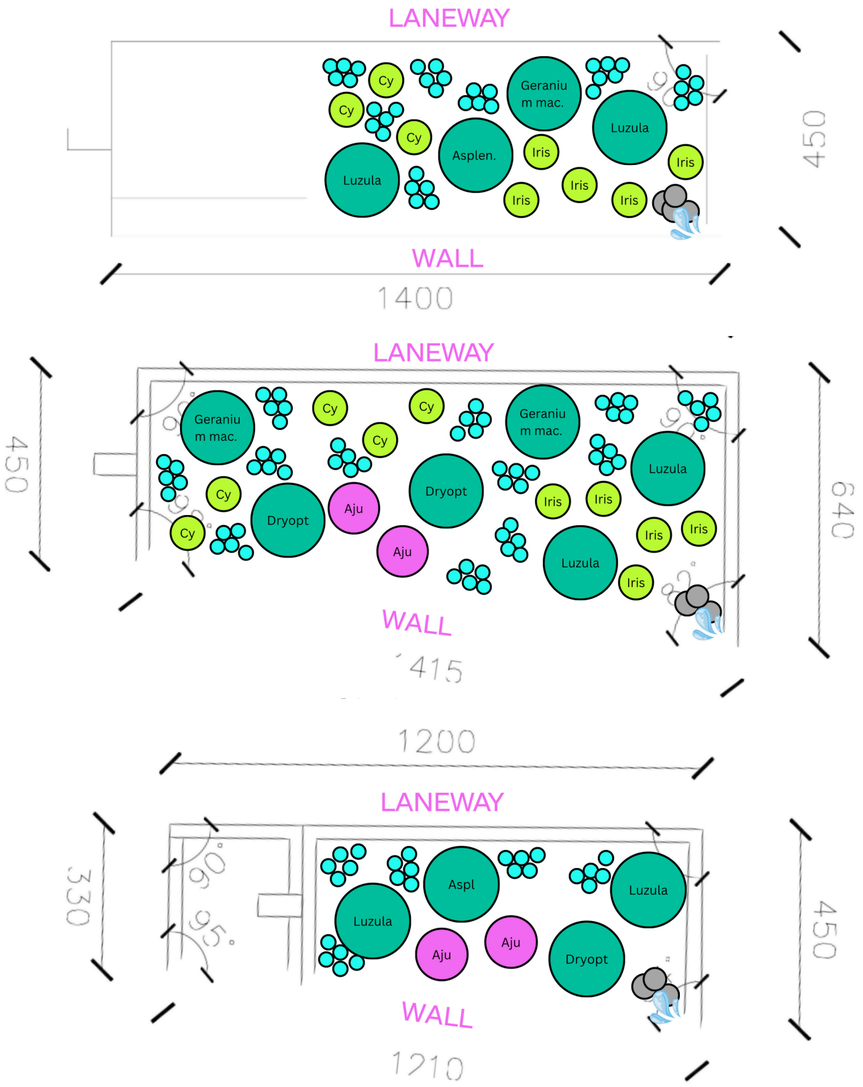


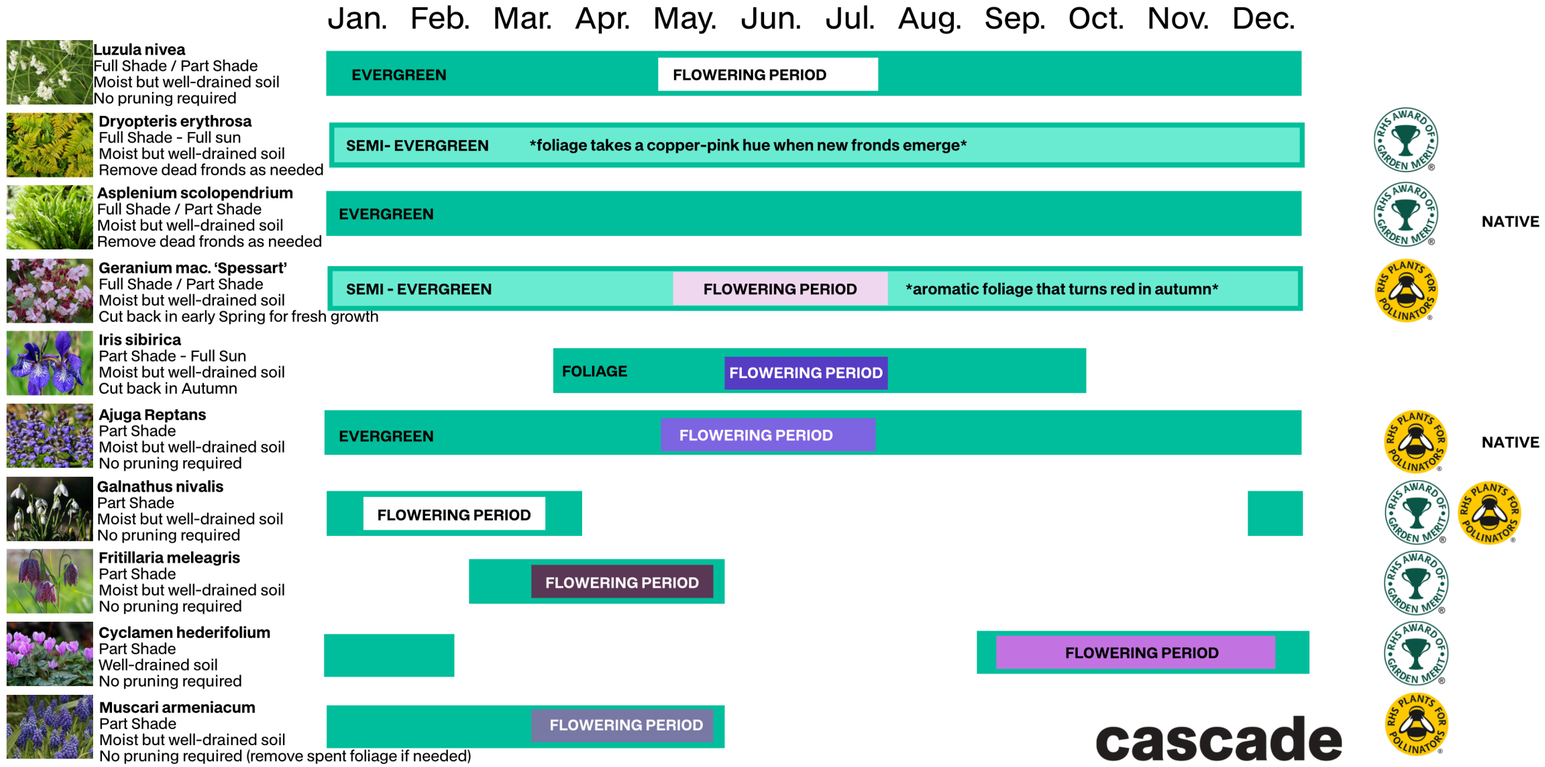




SECTIONS AND ELEVATION SKETCHES OF BESPOKE RAINWATER PLANTERS (DESIGNED BY PROJECT TEAM)

Stage 3: Rainwater Planters

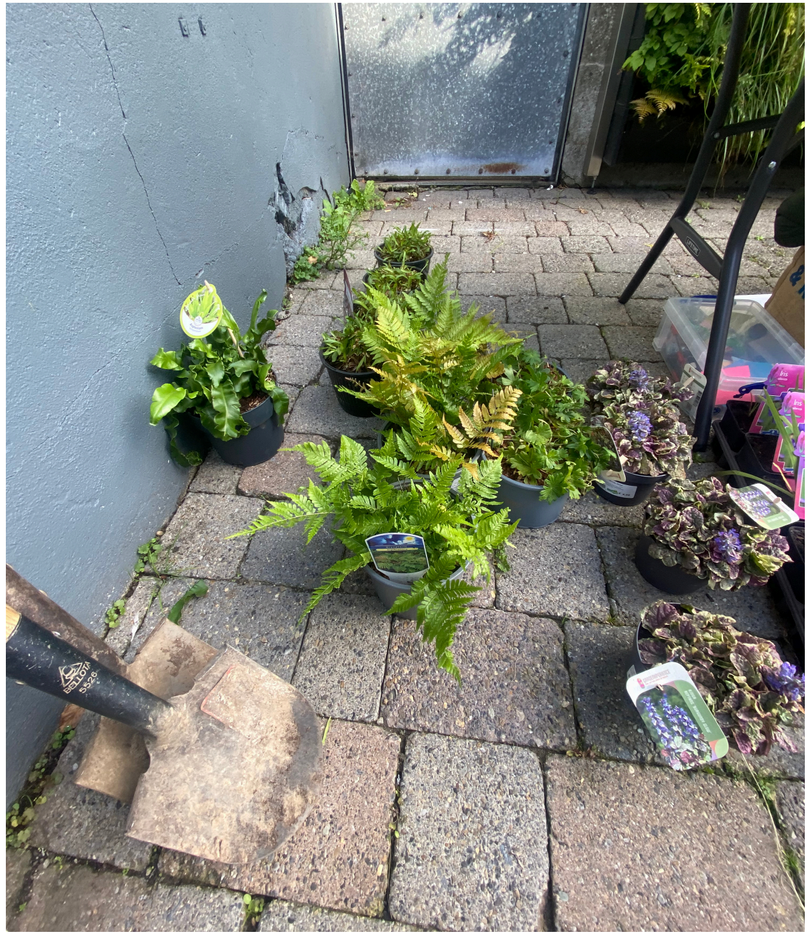




PLANT SELECTION FOR RAINWATER PLANTERS (DESIGNED BY PROJECT TEAM)

Stage 3: Rainwater Planters







BESPOKE PLANTERS MADE BY PATIO AND PLANTING BY GREENSCENE LANDSCAPING, SEPTEMBER 2025

Photo credits: Rebecca O'Malley

Stage 3: Gutters and Downpipes





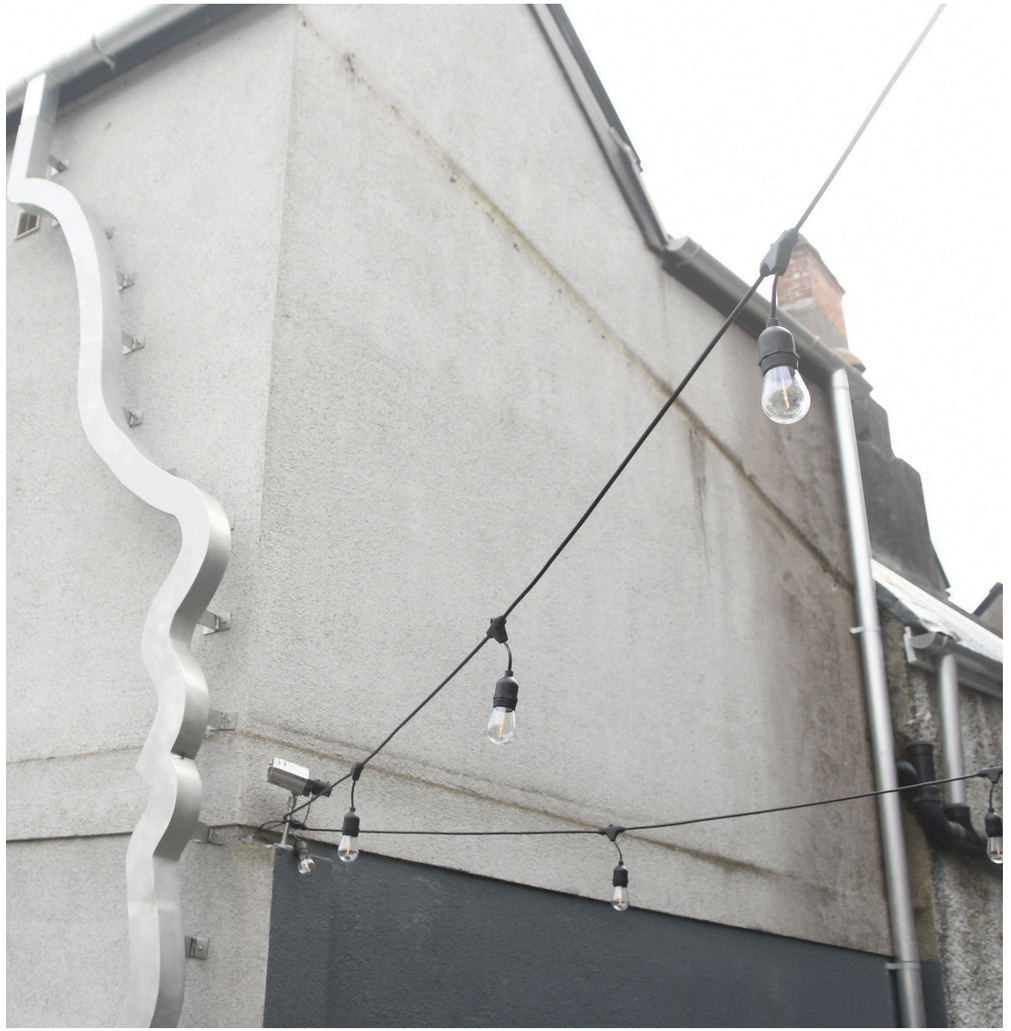


‘IDA’ FUNCTIONAL ARTWORK AND RAINWATER PLANTERS, SEPTEMBER 2025

Photo credits: Rebecca O’Malley

Stage 3: Seating and solar lighting





HARDWOOD SEATING AND FESTOON SOLAR LIGHTING, SEPTEMBER 2025
Photo credits: Rebecca O'Malley

Stage 3: Creating

Negotiated Plan

Over the two-year duration of the Cascade project, ideas from Ballina's residents, businesses, and community groups were gathered, discussed, and shaped into a negotiated plan - a shared vision for transforming the town's laneways into vibrant, inclusive, and climate-resilient public spaces. This plan celebrates water as a defining feature of Ballina's identity, drawing inspiration from the River Moy and the town's history of waterways and craftsmanship. The negotiated design reimagines laneways not as neglected back routes, but as dynamic connectors, linking people, stories, and spaces across the town.

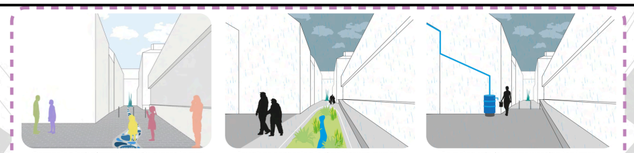
Local residents, business owners, and community organisations worked with the Cascade team through the series of workshops and on-site activities. Together, we identified issues such as flooding, poor drainage, lack of greenery, and underused urban spaces. These findings informed a collective exploration of "what if" possibilities—e.g. 'what if rainwater was redirected into raingardens or swales?', 'What if disused spaces became pocket forests or citizen gardens?', 'What if art and play reconnected people to the hidden flows of water beneath their feet?'

The negotiated plan captures these co-designed, practical, repeatable interventions designed to celebrate water while improving urban liveability. Each proposed intervention was evaluated against a set of sustainability criteria, including:

- Water management
- Creativity and beauty
- Behavioural and social use
- Environmental impact
- Inclusivity
- Circular economy principles

This assessment ensures that each idea contributes not only to ecological resilience but also to social wellbeing and cultural expression. The accompanying radial graphs visually illustrate the balance of impact across these criteria. Cascade invites communities to imagine the full potential of their town laneways. Installations in O'Horas Lane demonstrate what's possible, while this plan offers a shared vision for future transformation.

Ballina Negotiated Plan
for Water Resilient Laneways


Connected trail of laneways with places to play

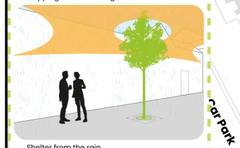
Sculpture connected to river through swales

Collected rain for power washing the lanes

Moy Lane


Remove pavers for citizen gardens


Mapping hidden underground streams


Shelter from the rain


Reusing the vacant building

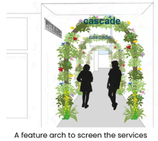

Urban pocket forest

Kathleen Lynn Lane


Diverting rain into rain garden


Sensory experince with rain


Collected rain for dogs to drink



A feature arch to screen the services


Green walls or collected water in planters

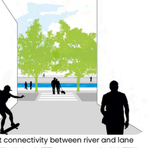
O'Hora's Lane

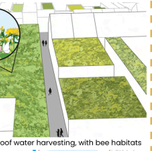

Creating a new stream


Swale replace the concrete and bollards


Adding rills to the lane


Water playground in a lane


Efficient connectivity between river and lane


Green roof water harvesting, with bee habitats


Water and stormwater infra awareness

Pawn Office Lane

1:500

cascade

Creative Climate Action

Clár Éire Ildánach Creative Ireland Programme

LEGEND

Historic Town Centre (for all lanes)

- Lavender Lane – Grow lavender and pollinator plants to add colour, scent, and bee habitat.
- Laneway Projections – Use video or light projections to bring life to windows after dark.
- Solar Car-Park Roofs – Install solar panels that generate power and provide cool shade for parked cars.

Kathleen Lynn Lane

- Citizen Gardens – Replace sections of paving with shared community planting spaces.
- Water Mapping Murals – Reveal the hidden underground water network through art and markings.
- Rain Shelter – A canopy structure provides shelter from rain and wind.
- Vacant Building Re-use – An empty building is repurposed with planting and a rain-harvesting water butt.
- Urban Pocket Forest – A small woodland with layered planting brings shade and biodiversity.

O'Horas Lane

- Raingardens – Planted beds filter rain and reduce flooding.
- Dog Bowl Fountain – Harvested rainwater provides fresh drinking water for pets.
- Feature Arch – Colourful arch hides pipes and celebrates water.
- Green Walls – Vertical planting cools and greens the lane.
- Music Wall / Water Harp – Interactive sound feature that plays with rainfall.
- Sensory Rain Experience – Hanging rain chains and puddles create sound, movement, and play.

Moy Lane

- Connected Trail – Linked laneways for walking, playing, and learning.
- Rain for Cleaning – Harvested rain reused to wash laneways.
- River Sculpture – Artwork linked to the Moy with light or water.

Pawn Office Lane

- New Stream – A small flowing channel brings moving water and wildlife into the lane.
- Swale Planting – Replaces concrete with a green planted swale to slow and filter stormwater.
- Rill – A narrow runnel carries rainwater and adds sound and movement.
- Water Playground – Shallow water play for children and families.
- Green Roofs – Roofs capture rain, cool the street and create bee habitats.
- Water Awareness Wall – Information panels reveal how the town's stormwater network works.
- Boxing Club Laneway – Opens a new path linking Pawn Office Lane with O'Hora's Lane.

Overview

Cascade explores how the laneways of our historic town centres can be reimagined as places that celebrate water, connect people, and help our towns adapt to climate change.

This plan reflects ideas gathered from Ballina residents over the project's two year duration, creating a shared vision for the town's laneways. The negotiated design celebrates water and the unique qualities and histories of place, strengthens connection across the town, and embraces inclusivity in the design of public space.

The plan proposes practical, repeatable interventions that make better use of rainwater and underused laneway spaces. What if we divert rain into raingardens, swales, green roofs, and rills, turning stormwater into a visible, celebrated resource? Rain could be collected for drinking fountains, pet bowls, or power washing, while pocket forests and community gardens introduce activity and greenery into the lanes. Sensory experience through water playgrounds, and art installations could deepen people's connection with water and place.

Cascade invites communities to imagine the full potential of their town laneways. Installations in O'Horas Lane demonstrate what's possible, while this plan offers a shared vision for future transformation.

How these ideas were co-designed ?

Local residents, business owners, and community groups worked alongside the Cascade team in a series of workshops and laneway activities. Together they mapped problems such as flooding, lack of planting and underused spaces, then imagined practical "what if" interventions - from raingardens and pocket forests to art installations and river links.

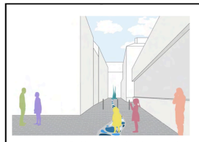
Each intervention in this plan was evaluated against a set of sustainability criteria, including water management, creativity and beauty, behaviour, social use, environmental impact, process, inclusivity, and circular economy. This assessment ensures that the outcomes respond to both ecological and human needs. The radial graphs in this plan illustrate the results, highlighting the impact of each intervention across the various criteria.

Additional community ideas :

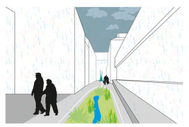
- Improved litter management
- More frequent public transport service
- Safer cycle-friendly design and markings
- Traffic calming and rerouting heavy vehicles
- Wider paths and improved accessibility
- Wildlife friendly lighting and increased visibility
- More seating and youth-friendly design
- Water harvesting for town planting
- Pop up shops / community use of vacant buildings
- Reuse / activate town car parks as community spaces.

Share Your Feedback

We'd love to hear your feedback on the plan. Visit the link at the QR and share your comments.



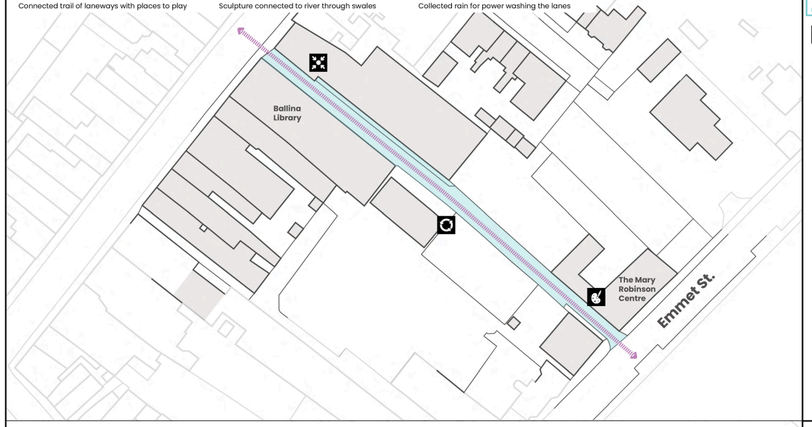
Connected trail of laneways with places to play



Sculpture connected to river through swales



Collected rain for power washing the lanes



Moy Lane

Connected Trail
Links laneways to encourage walking, social interaction.

Rain for Cleaning
Harnesses rainwater to clean lanes sustainably.

repeatable

River Sculpture
Acts as a landmark that links art and water with the Moy River.



Shelter from the rain



Reusing the vacant building



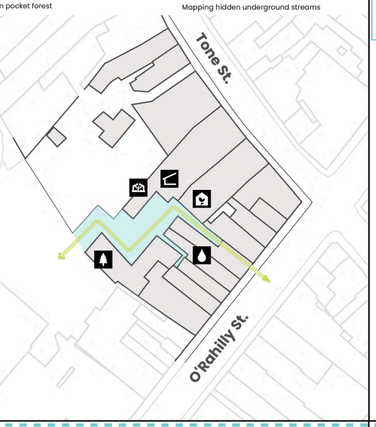
Urban pocket forest



Mapping hidden underground streams



Remove pavers for citizen gardens



Kathleen Lynn Lane

Rain Shelter
Provides comfort and protection while creating a small gathering spot.

Vacant Building Re-use
Activates an empty structure with greenery and rain storage.

repeatable

Urban Pocket Forest
Adds shade, biodiversity, and natural cooling to the lane.

Citizen Gardens
Creates community hubs fostering biodiversity and local care.

Water Mapping Murals
Reveals hidden water flows, building awareness and connection.



Creating a new stream



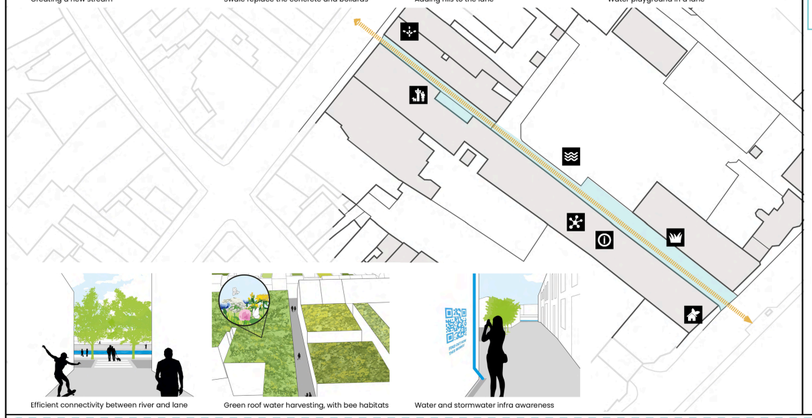
Swale replace the concrete and bollards



Adding rills to the lane



Water playground in a lane



Efficient connectivity between river and lane

Green roof water harvesting, with bee habitats

Water and stormwater infra awareness

Pawn Office Lane

Green Roofs
Capture rain, cool the environment, and create habitats for pollinators.

Water Awareness Wall
Reveals the hidden stormwater system through education and engagement.

repeatable

Rill
Introduces sound, movement, and visual interest through narrow water channels.

Water Playground
Offers families a joyful space for play, cooling, and connection.

New Stream
Brings flowing water, wildlife, and atmosphere into the lane.

Swale Planting
Manages drainage while cooling and greening the streetscape.

Boxing Club Laneway
Improves access, safety, and connectivity between streets.



Diverting rain into rain garden



Sensory experince with rain



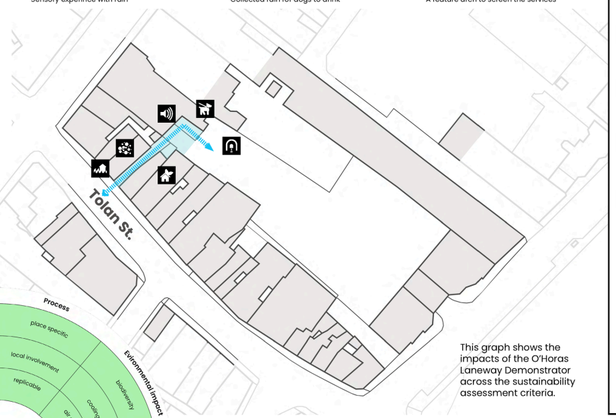
Collected rain for dogs to drink

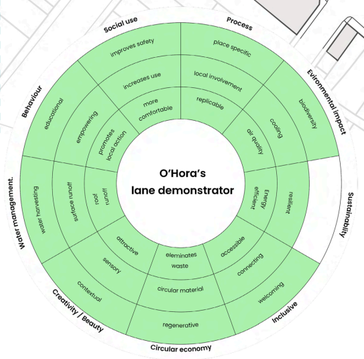


A feature arch to screen the services



Green walls that collect water in planters





This graph shows the impacts of the O'Horas Laneway Demonstrator across the sustainability assessment criteria.

This graph shows the impacts of the O'Horas Lane Demonstrator across the sustainability assessment criteria.

Satisfies the criteria
- Yes
- No
- Maybe

O'Hora's Lane

Raingardens
Reduce flooding by filtering rain while enhancing beauty.

repeatable

Dog Bowl Fountain
Reuses rainwater to care for pets and foster community spirit.

Feature Arch
Conceals pipes while adding colour and celebrating water.

Green Walls
Improve air quality, cool the street, and green the urban space.

Music Wall / Water Harp
Creates an interactive soundscape that is playful and engaging.

Sensory Rain Experience
Immerses people in water's sound, movement, and play.

O'Horas Lane

Co-designed ideas

Here are some of the co-designed ideas included in the O'Horas laneway demonstrator:

What if...
we diverted the rain into raingardens?

What if...
we collected the rain for dogs to drink?

What if...
we installed green walls? Or collected rainwater in planters

What if...
there was a sensory experience with rain?

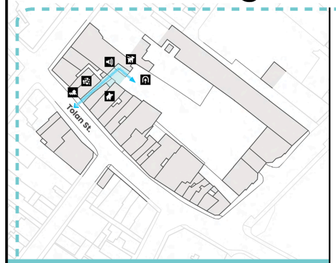
O'Hora's Lane as the demonstrator

The Cascade team has taken a 'tactical urbanism' approach to reimagine O'Horas laneway, turning unmanaged surface water into a visible, functional, and beautiful part of the public realm. By linking gutters, downpipes, sculpture, a green wall and rain gardens, the installation demonstrates how water can be celebrated while helping to slow the flow into the drainage system. Cleaning, painting and new bespoke gutters and downpipes create a safer, more streamlined laneway.

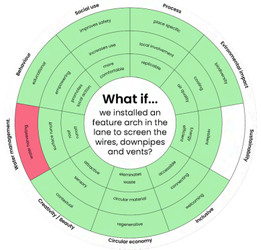
New planting and water-sensitive features bring nature, colour and biodiversity, while sculptural artwork pays tribute to Ballina's heritage and history.
Together, these interventions capture, slow and redirect rainwater while supporting biodiversity and improving air quality. They transform the laneway into an inviting space where people can pause, sit, listen and enjoy water as a feature of the urban landscape.

Ballina Negotiated Plan for Water Resilient Laneways

Ideas Impact Analysis



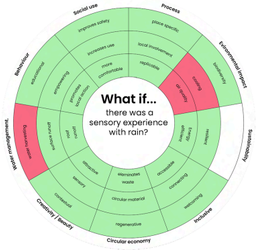
O'Hora's Lane



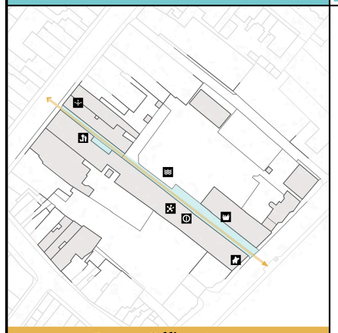








Demonstrator



Pawn Office Lane



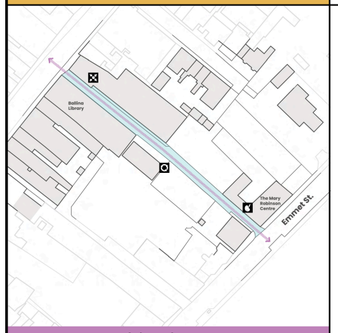






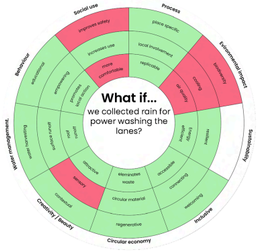




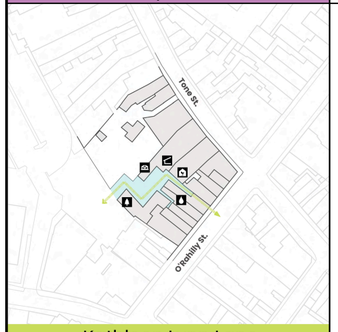


Moy Lane





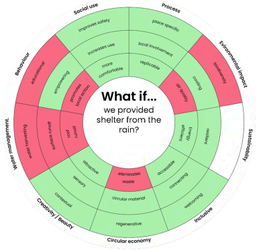




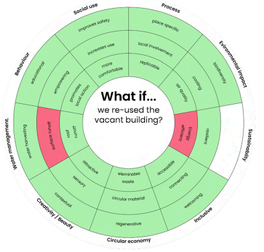
Kathleen Lynn Lane













SUSTAINABILITY MATRIX TO EVALUATE CO-DESIGNED IDEAS

CRITERIA	Weight (%)	Weight (%)
Water Management	20	1. Does it help manage rainwater coming off buildings? 2. Does it help reduce the likelihood of flooding in the lane and downstream? 3. Does it store rainwater for other uses? 4. Does it slow the flow of runoff? 5. Does it stop puddling?
Creativity / Beauty	15	1. Does it connect to the context - history, heritage, materials of Ballina? 2. Does it engage the senses? 3. Is it imaginative, creative? 4. Is it attractive? 5. Does it transform or re-invent the space?
Behaviour	15	1. Does it spark change through education? 2. Can it empower people to feel they can make a difference? 3. Can it change mindsets around how we manage water in our towns? 4. Can it promote local climate action? 5. Can it raise awareness of climate change and water?
Social Use	10	1. Does this idea make the lane more comfortable? Eg sunny, a place to stop & sit, sheltered from the wind, dry? 2. Does it make the lane feel more safe? 3. Does this idea improve or bring into use the adjacent buildings? 4. Does the design encourage people to travel through the lane? 5. Does the design encourage people to spend time (together) in the lane?
Environmental Impact	10	1. Is this a place for nature? 2. Can it cool the lane during heatwave? 3. Does it Increase Biodiversity? 4. Does it improve air quality? 5. Could it remove pollution from roads and stop it getting into our river?
Process	10	1. Is the design specific to Ballina? 2. How much involvement do locals have in the design, making and care of this idea? 3. Could it be repeated elsewhere? (Replicable)
Cost	10	1. How much will it cost? 2. How long will it last? 3. How much will it cost to maintain? 4. Who will maintain it? (Does it need specialist maintenance?) 5. Does it represent value for money?
Sustainability	10	1. How does this idea contribute to the sustainable, thriving and climate resilient future for Ballina? 2. Does it require energy to run it? 3. Is this idea resilient to extreme weather events - wind, temperature, flood, drought ..?
Inclusion	**Required**	1. Can everyone access and use the space? 2. Are other species welcome? 3. Does it welcome people of any age? 4. Does the design help connect places in Ballina? 5. Can anyone with any needs use this?
Circular Economy Principles	**Required**	1. Eliminate waste and pollution 2. Circulate product and materials 3. Regenerative nature



O’HORAS DEMONSTRATOR LANEWAY LAUNCH, BALLINA FRINGE FESTIVAL, SEPTEMBER 2025

Photo credit: John O’Grady

Stage 4: Evaluation

O'Hora's Lane in Ballina has been revitalised as a vibrant, climate-resilient shared space. The Cascade project celebrated this milestone with the launch of its demonstrator installation in the laneway, followed by the opening of its exhibition at Ballina Civic Offices as part of the Ballina Fringe Festival 2025, where we shared the project's two-year journey with residents to reimagine Ballina's laneways.

The laneway event featured short talks from Orla Murphy and Dr Ríonach Ní Néill (Cascade team), Terry O'Reilly (Historian), and Cllr. Jarlath Munnelly (Cathaoirleach, Ballina Municipal District) and was well attended by laneway building owners, community groups, local authority staff and other residents. The exhibition, installed by Abhainn Studios, who also created the graphic design throughout the project, was officially opened by Senator Mark Duffy and Adele Mealey from Creative Ireland. Music on the night was provided by BRÍDÍN, the acclaimed folk harpist, singer and composer.

At the exhibition we presented the negotiated plan for Ballina's laneways, a vision that:

- Celebrates water and the unique qualities and histories of place
- Strengthens connection across the town
- Embraces inclusivity in the design of public space

This plan brings together the stories and ideas shared through our storymapping and co-design workshops, alongside the demonstrator project tested in O'Hora's Lane. Our team were on hand to guide residents through the project, sharing insights from the process and discussing how Cascade can inspire new approaches to shaping Ireland's historic town centres.

Stage 4: Evaluation





CASCADE FINAL EXHIBITION, BALLINA FRINGE FESTIVAL, SEPTEMBER 2025
Photo credits: John O'Grady

Stage 4: Evaluation

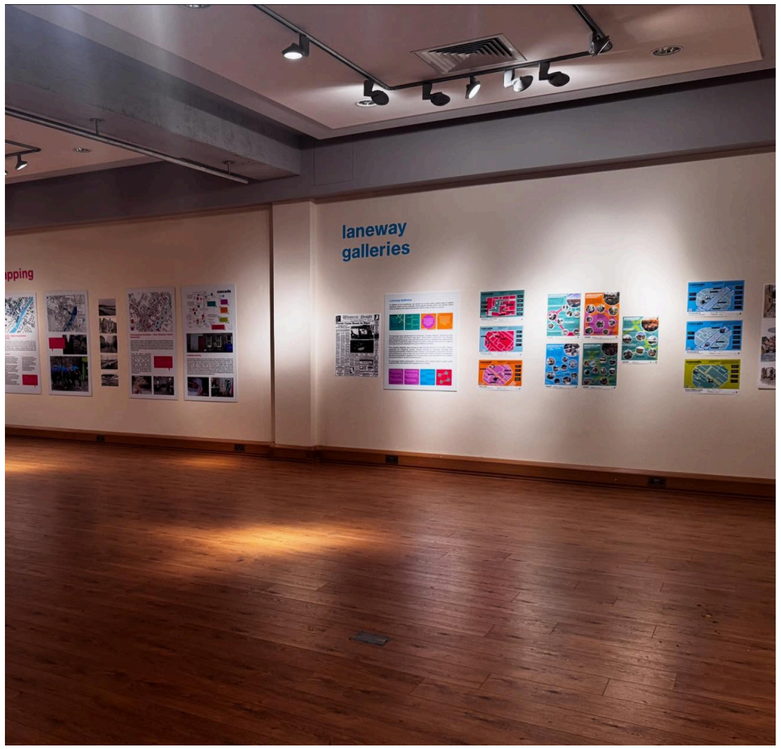
Exhibition attendees were invited to provide **feedback** on the negotiated plan and the Cascade process, either directly to the team or by leaving written feedback notes to inform the final evaluation of the project. Some of the feedback received is included below:

“Sparking hope is so critical, to help people to take action and to foster action in others, I think in that case the project has been very successful”

“A wonderful project. The example set in O’Horas lane is a fine one to actually see what is possible. It would be great if some more of it could be implemented”.

Stage 4: Evaluation







CASCADE FINAL EXHIBITION, BALLINA FRINGE FESTIVAL, SEPTEMBER 2025
Photo credits: John O'Grady

Stage 4: Evaluation

Along with feedback from Exhibition attendees, Ballina residents with a connection to Cascade - including local business and property owners, representatives from the local authority, and other community members who participated in project workshops - were re-engaged through a questionnaire and semi-structured interviews to reflect on the project's outcomes and its potential legacy. Their insights helped assess how the co-design process influenced local awareness of climate resilience, particularly in relation to managing increased rainfall in Ballina's laneways. Here's a little of what they told us:

20% **of respondents were business/property owners on the laneway, 40% were members of the local authority and 40% were residents.**

33% **said Cascade had significantly changed how they think about climate change in laneways. The remaining 67% said the project changed how they thought about it a little.**

50% **of respondents said they had made changes in their work or personal practices because of the project.**

83% **said they had noticed changes in how people use or feel about the laneways since the project,**

... and that Cascade had lead to new connections, partnerships and/or community activities for them.

100% **said Cascade changed how they viewed the laneways (e.g. as places that could slow down, store or reuse water).**

All respondents said they would be interested in being part of future initiatives like this...

and commented that the laneway interventions, community connections and educational aspects would have lasting impact.





O’HORAS DEMONSTRATOR LANEWAY LAUNCH, BALLINA FRINGE FESTIVAL, SEPTEMBER 2025

Photo credits: John O’Grady

Stage 4: Evaluation

As part of the semi-structured interviews with key laneway stakeholders, we received the following responses to this question:

Have you noticed changes in how people use or feel about the laneways since the project started?

“Yes, I have had discussions with the public and colleagues alike who see the benefit of the project and would like to see a further roll out”

“We've talked about them more, and want to check them out. I and others can see that they are spaces that could be used more by the community and have the potential to lessen the impact of climate change.”

“Definitely a talking point with local footfall.”

“Some people appear to appreciate our laneways more. When they look good they are more attractive... with quirky additions they are more appealing and people want to see more enhancements.”

“[I’ve] noticed more emphasis on using and enhancing the laneways”

Stage 4: Evaluation

As part of the semi-structured interviews with key laneway stakeholders, we received the following responses to this question:

Have you (or your organisation) gained new skills, knowledge, or connections through this project?

“Yes, increased my awareness of laneways and the need to look after them.”

“Yes, a more creative approach to dealing with rain water should be considered/used. Rain water is not always a negative, it provides habitats etc.”

“I've learned so much about how to engage with a community and how to story tell to improve engagement. Plus it's given me ideas of things I can do at home to improve how my garden could help with slowing the movement of water in heavy rainfall.”

“I’ve met some like-minded people from around the town that I didn't know previously.”

“Yes - connections and knowledge”

Stage 4: Evaluation

As part of the semi-structured interviews with key laneway stakeholders, we received the following responses to these two questions:

Which parts of the project do you think will have the most lasting impact in Ballina?

"The legacy of the O'Horas laneway build itself. It's beautiful and shows what can be done."

"Awareness of the lanes and the need to look after them."

"The community engagement."

"Creative approach to dealing with rain water, celebration of nature and natural enhancement of lanes is possible"

"Recognition of the importance of laneways and the need to make improvements."

What role do you see for you/your organisation/group in sustaining this legacy?

"Working with the various players to upkeep and expand the project."

"Personally I love sharing stories like this with others to help foster hope and inspire others. I'm also looking at some of your approachs for another project I am involved in to help support community engagement."

"Repeated cleanups!" "Monitoring upkeep."

"Positive action in seeking funding to extend the initiative."

Stage 4: Evaluation

As part of the semi-structured interviews with key laneway stakeholders, we received the following responses to this question:

Were there unexpected outcomes - positive or negative - that rippled beyond the project?

“Yes - we [the local authority] have had preliminary discussions about potential funding regarding further initiatives like this.”

“[It’s a] much improved lane that initially didn't seem to have much potential to me.”

“... I've been chatting to other friends and family members about the project. I think it gives people a sense of hope hearing about things happening in communities like ours.”

“Unfortunately, in spite of cleanups the litter and graffiti are reportedly as bad as before!” [more work to be done here]

Stage 4: Evaluation

As part of the semi-structured interviews with key laneway stakeholders, we received the following responses to this question:

Is there a story or moment from the project that best captures its meaning or impact for you?

“Seeing the 'penny drop' for people who may not have been involved or supportive previously”

“The session I enjoyed the most is [one of the last co-design workshops] when the community were selecting the values and future initiatives we'd like to see in Ballina.”

“During [one of the co-design] workshops, when I arrived at O'Horas lane I felt disappointed that I'd been sent to an insignificant lane. Within a short time I could see its huge potential. I was eventually delighted that I had input into this one.”

“Walking down to see the lane with my friend and we talked about how the living wall would slow the movement of water, but also how beautiful it is. Enjoying the space was great, it was my first time walking down that lane. And we imagined what it would be like to have more of the lanes transformed like this, where there is function and beauty.”



Stage 4: Evaluation

As part of the semi-structured interviews with key laneway stakeholders, we received the following responses to these two questions:

What do you think worked well in the way the project was run?

"The way it was presented with beautiful visual displays of what could be done."

"Lots of communication and involving many players."

"Ongoing communication & engagement, encouragement to be creative, input from UCD team."

"The early interaction with your team."

"The personal approach, how everyone had time to speak and be heard. And the storytelling helped to bring it to life and to understand the potential impact."

Is there anything else you'd like to add about the project's impact or legacy?

"I felt that Ballina was very lucky to have been selected to benefit from the academic expertise brought by Cascade. We have a wonderful network of lanes, they are part of the fabric & history of our town. Their value has been recognised for decades in Ballina Town Plans, promoting permeability and funding upgrades e.g. Pawn office lane (when funding allowed). The Cascade project brought this to a new level and celebrated our laneways even more. "

"The community approach can be used to tackle other issues our community faces."



YOUTH GRAFFITI WORKSHOP IN DR KATHLEEN LYNN LANE WITH ARTIST EMMA DONOHUE

Photo credit: Sarah Cotterill

RELEVANT FINDINGS

1. Working at town-centre scale requires longer timeframes and greater flexibility.
Cascade operated within a more complex context than Ripple. The town-centre setting involved multiple businesses, residents, and local authority stakeholders, resulting in a more complex ownership and decision-making landscape. The longer two-year duration was essential to allow relationships to develop, trust to build, and ideas to be negotiated in a meaningful way. This supported deeper institutional engagement and enabled the delivery of both a demonstrator and a negotiated plan that can inform future funding and delivery.

2. Broader engagement can be effective, even if participation is less continuous.
Cascade engaged a larger number of people overall than Ripple, though proportionally fewer individuals attended every workshop. This resulted in a broader but shallower engagement model, which was appropriate for the scale and openness of the town-centre context. Rather than a single, tightly bounded community, Cascade engaged different parts of the public through workshops, festivals, exhibitions, questionnaires and online formats . This approach allowed people to contribute in different ways and at different intensities, while still meaningfully influencing project direction and priorities.

3. Communication methods must be adapted to scale and context.
Communication approaches that were effective in Ripple, such as door-to-door leaflet drops, were not feasible at a town scale. Cascade demonstrated the importance of adapting communication strategies to suit context, using a combination of social media, a dedicated website, festival programming, exhibitions and public events to reach people where they already were. These channels enabled wide visibility, transparency and ongoing feedback, while acknowledging that not all engagement can or should be highly intensive.

4. Tangible, visible interventions are critical for shifting perceptions and building hope.
The transformation of O'Hora's Lane into a climate-resilient demonstrator was repeatedly referenced by participants as a powerful outcome. Seeing and experiencing the changes on the ground helped people recognise the potential of laneways that were previously undervalued. The demonstrator validated the co-design process, rewarded community input, and acted as a proof-of-concept for what could be achieved elsewhere. This aligns with strong feedback highlighting a desire to see similar interventions rolled out across the town.

5. Water-sensitive design can deliver multiple co-benefits in dense urban spaces.
The rainwater-fed green wall and planters demonstrated how nature-based solutions can be integrated into constrained historic laneways. The green wall alone provides 17.3 m^2 of planted surface, extracts an estimated 40 kg of CO_2 annually (equivalent to 3–5 ten-year-old trees), can capture the equivalent of a 1-in-100-year, 15-minute storm event via a 700-litre rainwater tank and 300-litres of storage within the green wall. It also contributes to urban cooling, biodiversity and air quality improvement. Beyond these functional benefits, participants strongly valued the aesthetic and experiential qualities of greenery, sound and wildlife, reinforcing the importance of combining performance with beauty.

RELEVANT FINDINGS

6. Storytelling and creative engagement deepen understanding of complex climate issues.
Cascade showed that storytelling, creative media and participatory processes can make issues such as drainage, water systems and climate resilience more accessible and meaningful. Storymapping trails, functional artworks like Ida, exhibitions, and short films enabled people to connect heritage, water and climate adaptation in tangible ways. Participants reported increased understanding of how water moves through the town and how everyday spaces can contribute to climate resilience.

7. Interdisciplinary and cross-sector collaboration strengthens delivery and legacy.
The project highlighted the value of collaboration across art, architecture, engineering, heritage, community practice and local government. Partnerships with Mayo County Council, local businesses, designers and contractors enabled co-funding, maintenance agreements and long-term support for the demonstrator. These relationships also created pathways for future initiatives, with early discussions underway regarding further funding and implementation.

8. Co-designed plans are valuable legacy tools for continued action.
The negotiated plan for Ballina's laneways, featuring over 30 community-generated ideas, provides a shared reference point for future decision-making. Aligned with New European Bauhaus principles of sustainability, beauty and inclusion, the plan functions as both an advocacy document and a practical foundation for future funding applications. It captures local knowledge, aspirations and priorities, ensuring that future interventions remain rooted in community ideas.

9. Creative climate projects can build capacity and confidence.
Cascade fostered new skills, relationships and confidence among participants, from residents and students to local authority staff and practitioners. Participants reported applying what they learned to other projects, conversations and even their own homes and gardens. This ripple effect demonstrates how creative, participatory climate action can extend beyond the immediate project to influence attitudes, behaviours and future initiatives.

10. Hope is a critical outcome of climate action.
Across interviews and feedback, participants repeatedly emphasised the importance of hope. Cascade demonstrated that visible action, collaborative processes and shared ownership of change can counter climate fatigue and inspire people to believe that positive transformation is possible in their own communities. This sense of hope was as important an outcome as the physical interventions themselves.



CASCADE TEAM AND STAKEHOLDERS IN O'HORA'S LANE
Photo Credit: John O'Grady

CONCLUSIONS

The Cascade project achieved its aims to reimagine water as a valued, visible and celebrated resource within Ballina's historic laneways. Through a creative, community-centred process of story mapping, co-design, creating and evaluating across 2024 and 2025, Cascade brought together residents, artists, designers, engineers and local stakeholders to explore how these overlooked spaces could play a meaningful role in climate adaptation. By placing water at the heart of design and decision-making, the project demonstrated how laneways can become climate-resilient, socially vibrant and culturally rich parts of the town.

Through extensive engagement, Cascade generated a shared vision for a connected network of water-sensitive laneways in Ballina's heritage quarter. This work culminated in a co-designed masterplan and the delivery of a demonstrator laneway at O'Horas Lane, incorporating functional art, nature-based water systems, planting, seating and lighting. The transformation of this space illustrates the potential of community-led, water-sensitive design to enhance everyday places, spark hope, strengthen social connections and inspire further climate action. Participant reflections highlight increased appreciation of Ballina's laneways, a deeper understanding of water and climate, and a strong desire to see this approach extended across the town.

Cascade demonstrates the power of interdisciplinary collaboration across art, architecture, engineering and community practice to foster learning, creativity and collective action in response to climate change. The project builds on the legacy of Ripple and shows how small, carefully considered interventions can shift perceptions, unlock potential and create momentum for lasting change. The Cascade team feel privileged to have worked with the people of Ballina and would like to sincerely thank all residents who shared their time, ideas and stories. We are grateful to our partners in Mayo County Council and the Mary Robinson Centre for their support, and to Creative Ireland for funding this work through the Climate Action Fund II. We look forward to seeing how the lessons and approaches developed through Cascade can be scaled up and out, cascading across other towns and communities to create climate-resilient, beautiful and inclusive public spaces rooted in local water, heritage and people.

The Cascade Team: Sarah, Rebecca, Orla, Philip, Mark, Kevin and Ríonach



GREEN WALL BIODIVERSITY
Photo Credit: John O'Grady

APPENDICES

Excerpts from The Irish Times 'Greenest Places' awards in which Ballina reached the shortlist (top 3) along with Skerries and Killarney from the long list (right).

Sections ☰ THE IRISH TIMES

Ireland's Greenest Town

Skerries, Co Dublin

Killarney, Co Kerry

Ballina, Co Mayo

Abbeyleix, Co Laois

Kiltimagh, Co Mayo



Members of the Ballina Green Town volunteer network help to shape a greener, more sustainable future for the town. Photograph: Michael McLaughlin

Ballina, Co Mayo

Ballina's green efforts are as extensive as you might expect, given the range of community groups collaborating within the town.

From the Mary Robinson Centre and the Belleek Woods Enhancement Committee to Ballina Boxing Club and Ballina Stephenites GAA, there are many parts that make up the whole. Ballina's environmental projects include ecological studies and the mapping of 11 petrifying streams and tufa habitats.

A former smuggling ship was sunk at the mouth of the River Moy in Killala Bay last year to create Ireland's first artificial reef. It has already developed into a biodiversity haven, with a range of fish species.

Ballina, Co Mayo, has become a trailblazer of green initiatives across climate, biodiversity and scale-up of renewables, driven by a broad cross-section of organisations. This was enabled by emphasis on community engagement "at the level they can participate in," says Emma Donoghue, who is manager of the town's Mary Robinson Centre.

The town stands out for going beyond the obvious, such as roll-out of solar PV, notably in delivering a wide range of impactful biodiversity projects. While it helps having one of Europe's largest urban woodlands on its doorstep, "all this work is a testament to Ballina's strong community ethos and commitment to environmental stewardship".

It includes ecological studies and mapping petrifying streams and tufa habitats; wetland ecosystems that are part of a distinctive limestone landscape. At the mouth of the River Moy in Killala Bay, the MV Shingle, a former smuggling ship was sunk last year to create Ireland's first artificial reef which has quickly become a biodiversity haven with diverse fish species.



The Irish Times Greenest Places shortlist revealed

These 14 nominees show concrete evidence of widespread action on climate and sustainability goals

IT The Irish Times / Aug 30, 2025

CASCADE FEATURED IN “INTERWOVEN” QUILT
Source: The Irish Times

Environment

Quilt woven by Irish groups sends message of solidarity to Cop30 climate summit

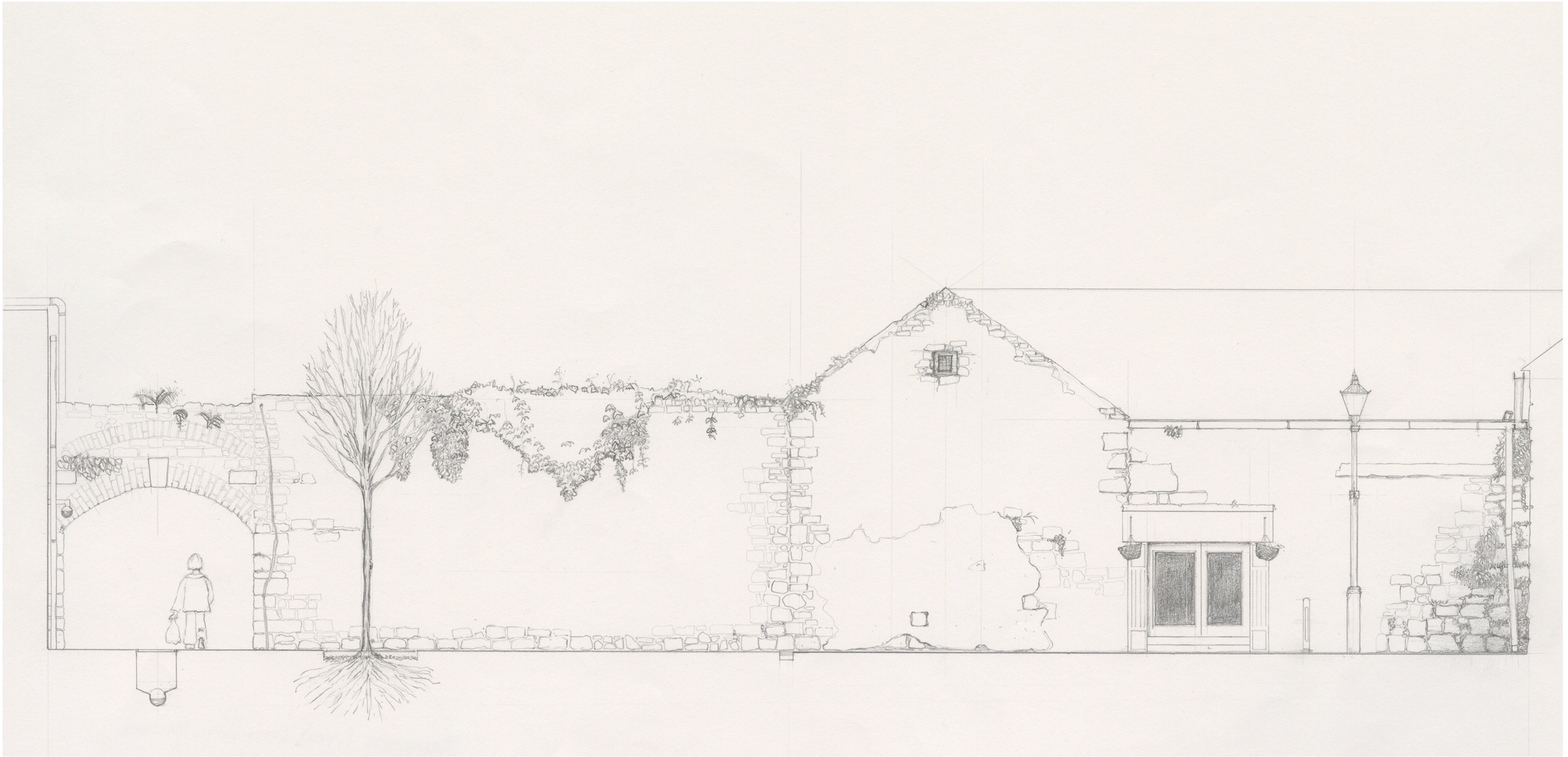
Former president of Ireland Mary Robinson will present quilt to Brazilian climate minister



Mary Robinson noted that 'this quilt reminds us ... that we are stronger together.'



SKETCH OF DR KATHLEEN LYNN LANE BY ORLA MURPHY



SKETCH OF DR KATHLEEN LYNN LANE BY ORLA MURPHY

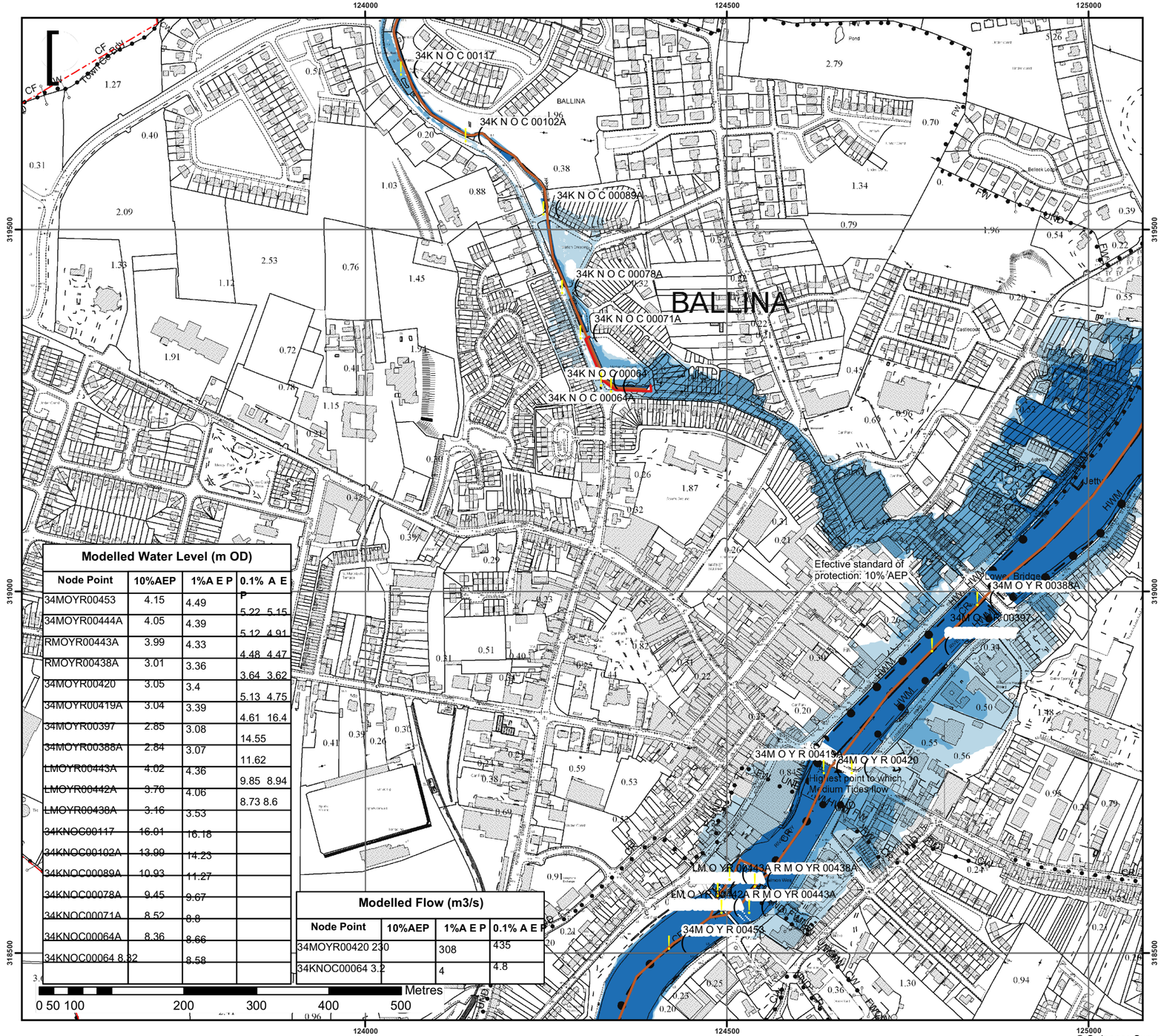




SKETCH OF O'HORA'S LANE BY GIULIA CHERCHI



SKETCH OF DR KATHLEEN LYNN LANE BY GIULIA CHERCHI

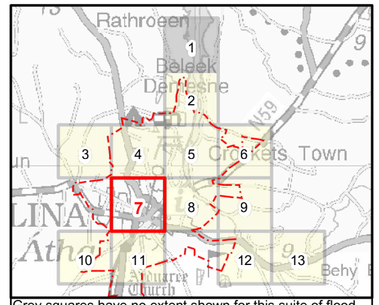


Modelled Water Level (m OD)

Node Point	10%AEP	1%A E P	0.1% A E P
34MOYR00453	4.15	4.49	5.22 5.15
34MOYR00444A	4.05	4.39	5.12 4.91
RMOYR00443A	3.99	4.33	4.48 4.47
RMOYR00438A	3.01	3.36	3.64 3.62
34MOYR00420	3.05	3.4	5.13 4.75
34MOYR00419A	3.04	3.39	4.61 16.4
34MOYR00397	2.85	3.08	14.55
34MOYR00388A	2.84	3.07	11.62
LMOYR00443A	4.02	4.36	9.85 8.94
LMOYR00442A	3.76	4.06	8.73 8.6
LMOYR00438A	3.16	3.53	
34KNOC00117	16.01	16.18	
34KNOC00102A	13.99	14.23	
34KNOC00089A	10.93	11.27	
34KNOC00078A	9.45	9.67	
34KNOC00071A	8.52	8.8	
34KNOC00064A	8.36	8.66	
34KNOC00064 8.82		8.58	

Modelled Flow (m3/s)

Node Point	10%AEP	1%A E P	0.1% A E P
34MOYR00420 230		308	435
34KNOC00064 3.2		4	4.8



Grey squares have no extent shown for this suite of flood maps so no maps have been produced.

AFA Boundary Defended

Area Defence – Wall

Model Nodes Modelled

River Centreline

10% AEP Fluvial Extent

1% AEP Fluvial Extent

0.1% AEP Fluvial Extent

IMPORTANTUSERNOTE:
THE FLOWS PRESENTED IN THIS MAP ARE RELEVANT TO THE LOCATION SHOWN ONLY. THEY SHOULD NOT BE USED WITHOUT FIRST REFERRING TO THE HYDRAULIC MODELLING REPORT TO UNDERSTAND THE CONTEXT OF THE HYDROLOGY AT THE SITE.

THE VIEWER OF THIS MAP SHOULD REFER TO THE DISCLAIMER, GUIDANCE NOTES AND CONDITIONS OF USE THAT ACCOMPANY THIS MAP.

OPW
Oifig na nOibreacha Poiblí
The Office of Public Works

The Ofice of Public Works
Jonathan Swift Street
Trim
Co. Meath

JBA consulting

JBA Consulting
24 Grove Island
Co r bally
Limerick, Ireland

WESTERN CFRAM STUDY
CATCHMENT FLOOD RISK ASSESSMENT AND MANAGEMENT

Map: Ballina Flood Extent			Final
Map Type:	Flood Extent		
Map Area:	HPW	Source: Fluvial	Scenario: Current
Drawn by:	DR Date: Oct 2016	Scale:	1:5,000
Checked by: JC Date: Oct 2016			Original @ A3
Approved by: SPW	Date: Oct 2016		
Map No: W34BLN_EXFCD_F3_07		**Sheet:**	7 of 13

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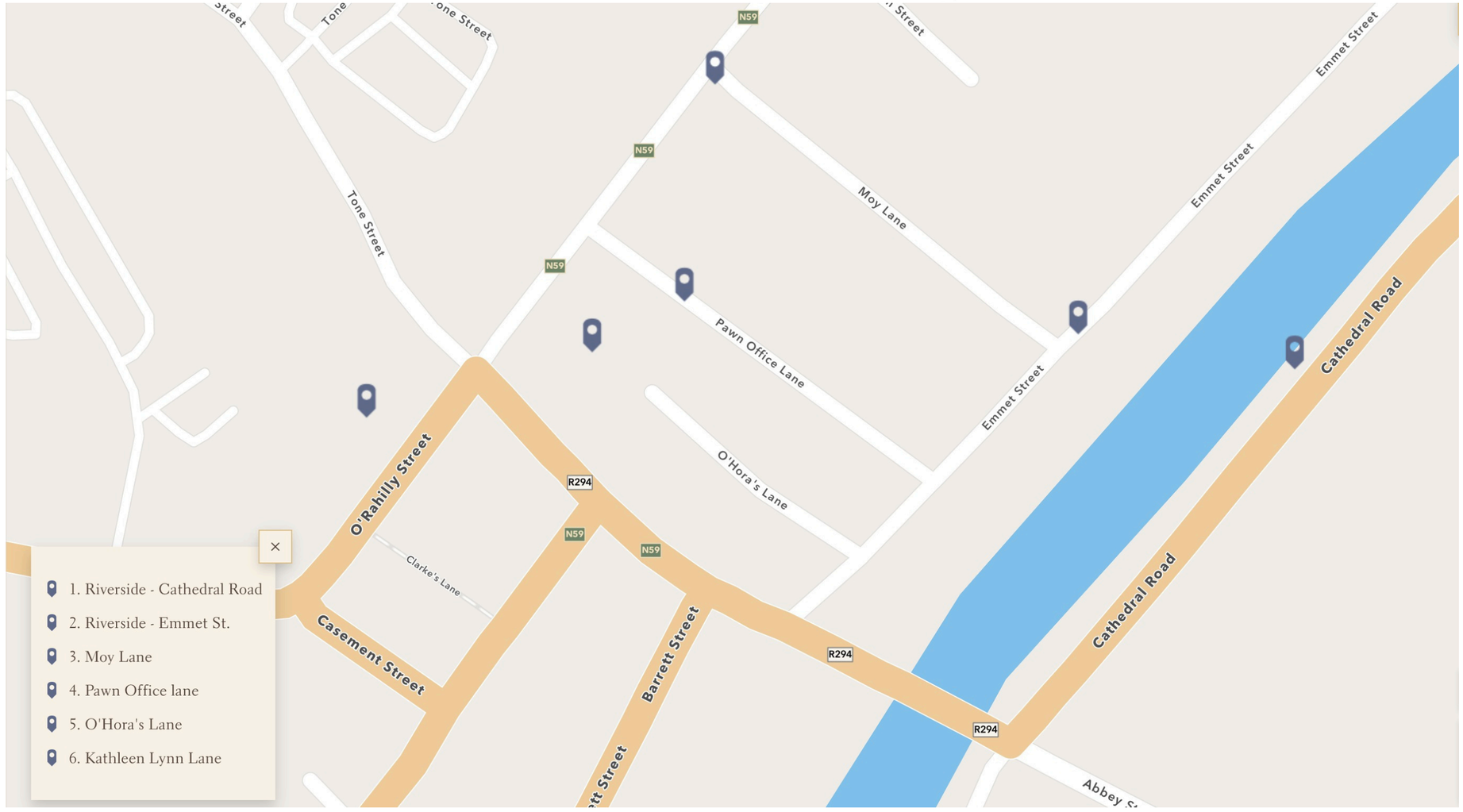
cascade

climate action project

Find out what you've told us so far about the lanes. Visit our signs in Kathleen Lynn lane, Moy lane, Pawn Office lane, O'Hora's lane and beside the River Moy on Cathedral Road and Emmet Street.

How can the laneways of our historic town centres adapt to cope with increased rainfall from climate change? All residents of Ballina are invited to take part in a series of events and creative workshops throughout 2024 and 2025 to share their experiences of water and public space in the town, and explore how laneways can become a connected trail of climate-resilient, shared spaces that celebrate water in Ballina.



Laneway Trail

Scanthe QRfor digital map

@cascade_ballina Keep up date with news and events
www.subscribepage.io/cascade

#Creat i veCli mateAct i on #cascadeballina

cascade

Laneway Name:

To fill in this sheet please refer to the questions on page 2.	**DESCRIBE YOUR IDEA BELOW!**	**2. WHERE ON THIS LANEWAY?**	**3a CHALLENGES** **3b OPPORTUNITIES**		**4. WHO CAN HELP?**
YOUR IDEA #1a			CHALLENGES – OPPORTUNITIES –		
YOUR IDEA #1b					

cascade

Laneway Name:

5. The 'Best Practice' Exhibition Idea you like the most and why.
DRAW IT! / NOTES (please use here if no space left in sheet above)

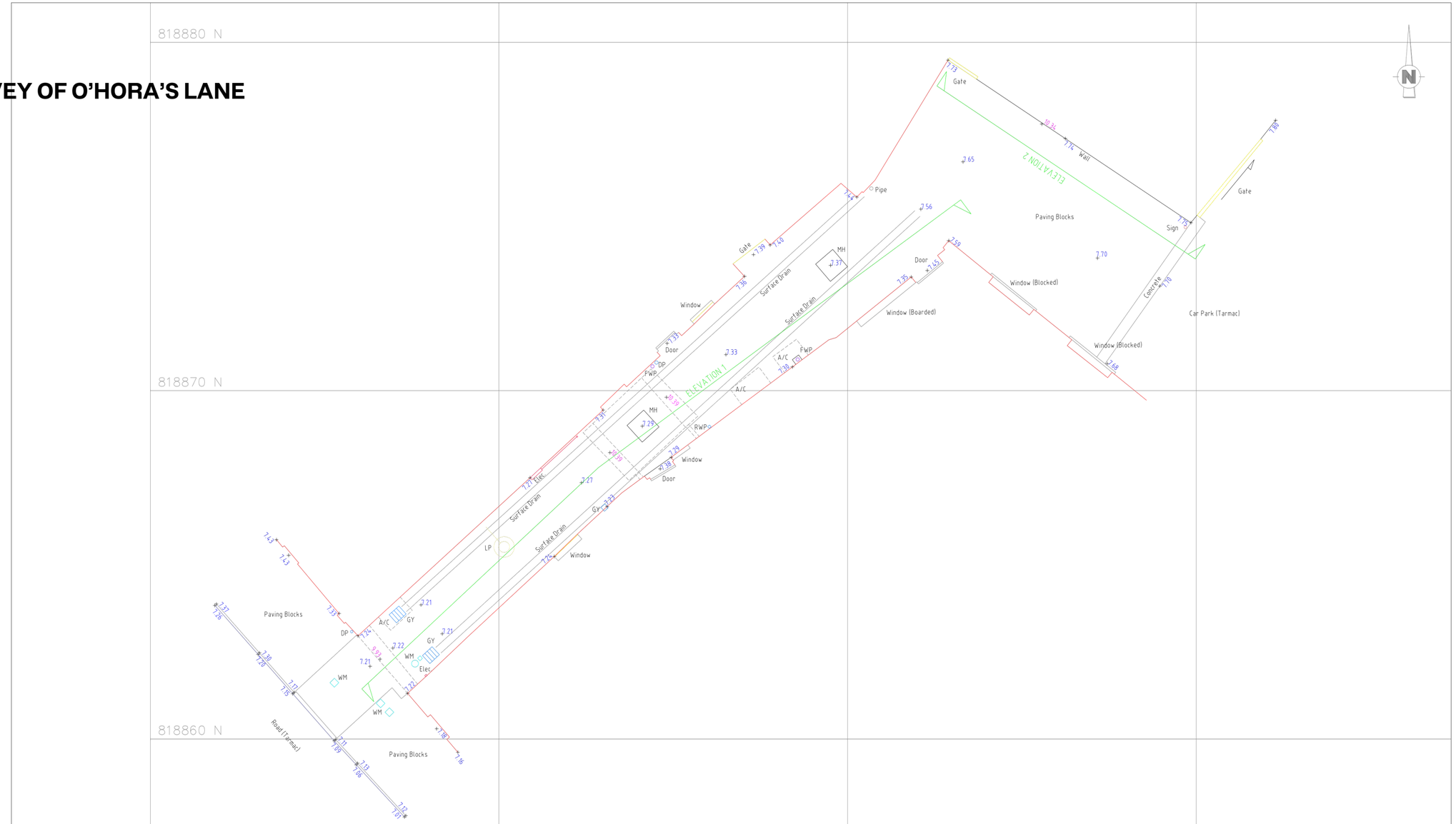
Questions

1a. What ideas do you have about how this laneway could become more water resilient? Describe your idea.
1b. Do you have any other ideas on what could go into this laneway and why would it make the space better?
2. Where on this laneway do you think your idea would work best. Please describe.
3a. Are there any difficulties in implementing this idea?
3b. What positive changes would be made by implementing this idea?
4. Who in the community could help make this idea happen?
5. From the best practice ideas exhibited, what do you like the most?

CASCADE FINAL REPORT

Example sheet devised for summer school laneway activity

PLAN SURVEY OF O'HORA'S LANE



LEGEND :

Survey Point
Contour Fencing
Gate Building
Structure Wall
Road Edge
Kerbed Road
Path / Track
Banking / Drain
Detail
Overhead Detail
Overhead ESB
Overhead Telecom
Vegetation
Tree Trunk
Tree Spread

Manhole (General)
Storm Water
Foul Water
Access Junction
Sluice Valve
Fire hydrant
Water Meter
Telecom Pole
ESB Pole
Lamp Post
Sign Post
Traffic Light
Bollard
Radon Sump
Earth Rod
Gas Valve

Survey Point Level 100.00
Roof / Wall Level 200.00
Digitised TÉ data:
Folio Setout:
Setout Coordinate
Window
Door
Structural H Beam

Client:	Survey Type:	Drawing No:	Project No.	Project Location:		
Rebecca O'Malley	MeasuredBuilding	Plan	KG25211	O'Hora'sLane,Ballina, Co. Mayo		
Horizontal Datum:	Level Datum:	Scale:	Surveyed By:	Survey Finish Date:	Drafted By:	Issue Date:
ITM IRENET95 / EPSG: 2157	OSGM15	1:100 A3	KD	02/07/2025	KD	03/07/2025

Survey Notes:

- This survey was drafted from point cloud derived by using a Laser Scanner. Reattachment to ITM and OSGM15 datum was undertaken using GPS.
- Only visible detail was recorded.
- Please report any found anomalies to the KGSS office for rectification.

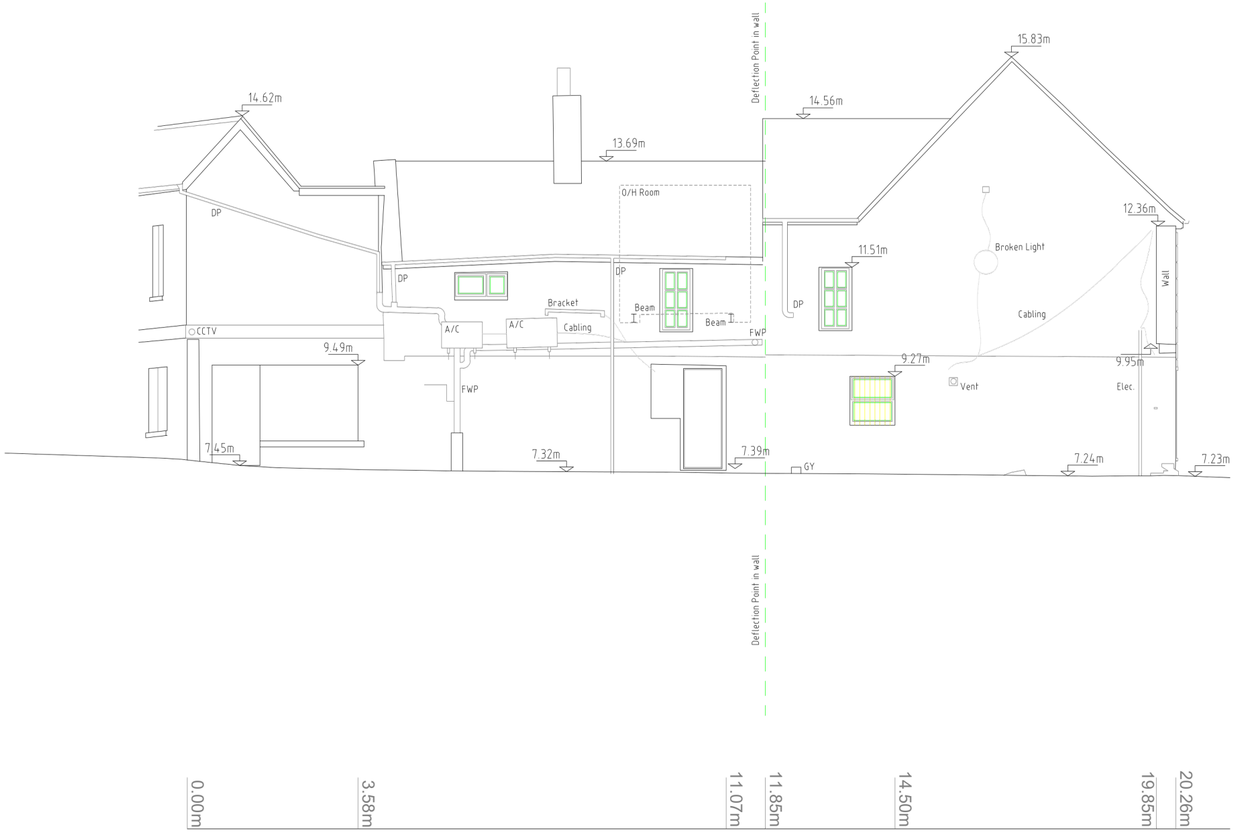
Modifications	Date	Rev.

KGSS

Thomas Street, Castlebar, Co. Mayo, Ireland, F23 H978. Tel : +353 (0) 94 901 0103 - Email : info@kgss.ie - Web : www.kgss.ie

Geo Spatial Solutions: Topographic Services | Engineering Surveying | Legal Mapping | Monitoring Solutions

ELEVATION SURVEY OF O'HORA'S LANE



Elevation 1

Datum : 0.00m

LEGEND :

Survey Point
Contour
Fencing
Gate
Building
Structure Wall
Road Edge
Kerbed Road
Path / Track
Banking / Drain Detail
Overhead Detail
Overhead ESB
Overhead Telecom
Vegetation
Tree Trunk
Tree Spread

Manhole (General)
Storm Water
Foul Water
Access Junction
Sluice Valve
Fire hydrant
Water Meter
Telecom Pole
ESB Pole
Lamp Post
Sign Post
Traffic Light
Bollard
Radon Sump
Earth Rod
Gas Valve

Survey Point Level 100.00
Roof / Wall Level 200.00
Digitised TÉ data:
Folio Setout:
Setout Coordinate
S/O: Pt1 E:100.00 N:100.00
Window
Door
Structural H Beam

KGSS

Client:	Survey Type:	Drawing No:	Project No.	Project Location:		
Rebecca O'Malley	MeasuredBuilding	Elev1	KG25211	O'Hora'sLane,Ballina, Co. Mayo		
Horizontal Datum:	Level Datum:	Scale:	Surveyed By:	Survey Finish Date:	Drafted By:	Issue Date:
ITM IRENET95 / EPSG: 2157	OSGM15	1:100 A3	KD	02/07/2025	KD	03/07/2025

Survey Notes:

- This survey was drafted from point cloud derived by using a Laser Scanner. Reattachment to ITM and OSGM15 datum was undertaken using GPS.
- Only visible detail was recorded.
- Please report any found anomalies to the KGSS office for rectification.

Modifications	Date	Rev.

Thomas Street, Castlebar, Co. Mayo, Ireland, F23 H978. Tel : +353 (0) 94 901 0103 - Email : info@kgss.ie - Web : www.kgss.ie

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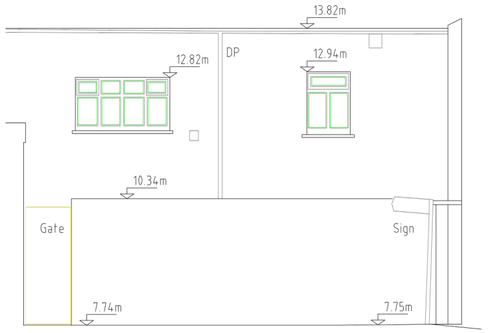



Elevation 2

Datum : 0.00m

LEGEND :

Survey Point
Contour
Fencing
Gate
Building
Structure Wall
Road Edge
Kerbed Road
Path / Track
Banking / Drain Detail
Overhead Detail
Overhead ESB
Overhead Telecom
Vegetation
Tree Trunk
Tree Spread

Manhole (General)
Storm Water
Foul Water
Access Junction
Sluice Valve
Fire hydrant
Water Meter
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Lamp Post
Sign Post
Traffic Light
Bollard
Radon Sump
Earth Rod
Gas Valve

Survey Point Level 100.00
Roof / Wall Level 200.00
Digitised TÉ data:
Folio Setout:
Setout Coordinate
S/O: P1
E:100.00
N:100.00
Window
Door
Structural H Beam

KGSS

Client:	Survey Type:	Drawing No:	Project No.	Project Location:		
Rebecca O'Malley	MeasuredBuilding	Elev2	KG25211	O'Hora'sLane,Ballina, Co. Mayo		
Horizontal Datum:	Level Datum:	Scale:	Surveyed By:	Survey Finish Date:	Drafted By:	Issue Date:
ITM IRENET95 / EPSG: 2157	OSGM15	1:100 A3	KD	02/07/2025	KD	03/07/2025

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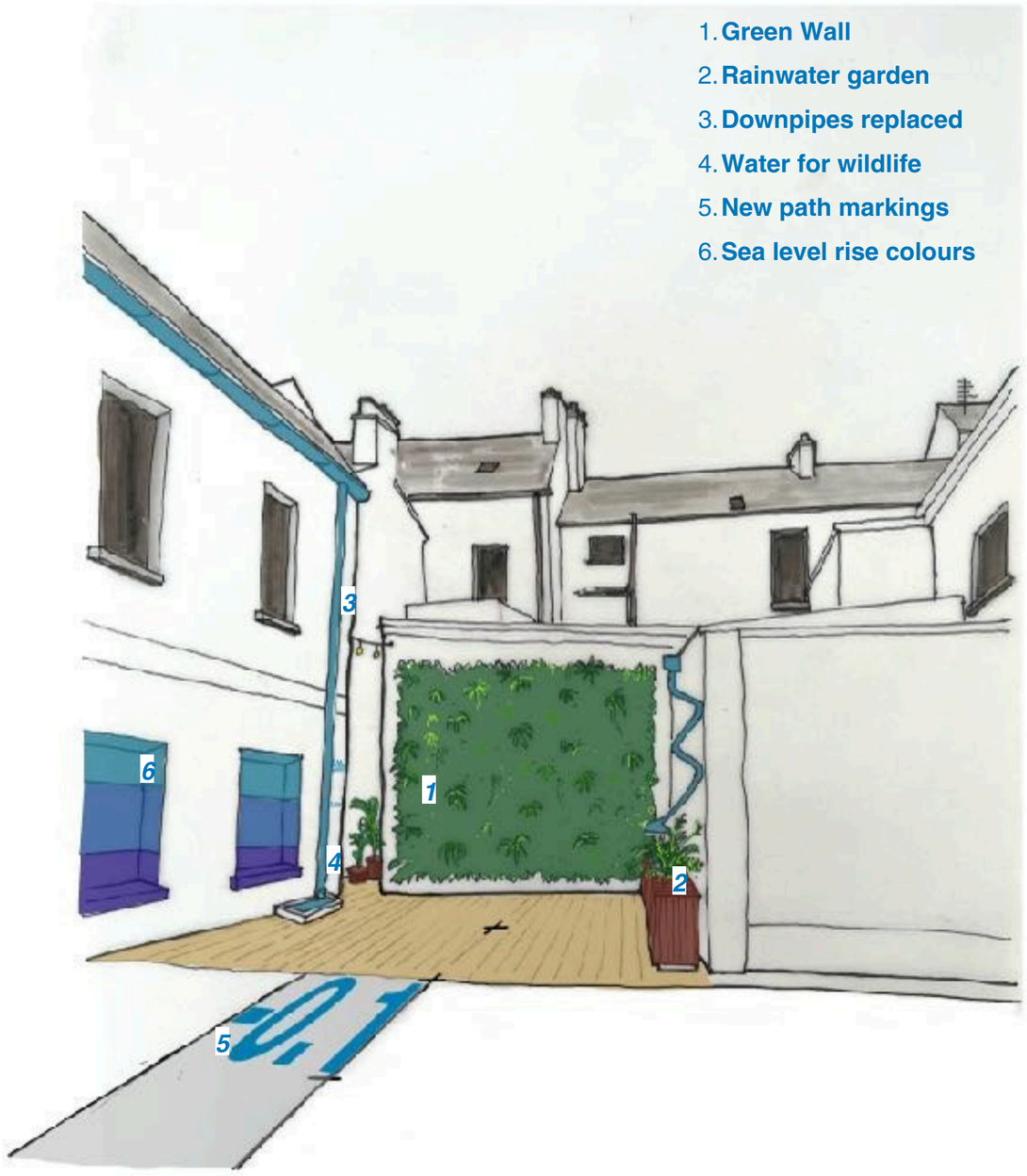
INITIAL CONCEPT SKETCH OF O'HORA'S DEMONSTRATOR

DESIGNED BY PROJECT TEAM, SKETCHED BY ORLA MURPHY

view north from car park





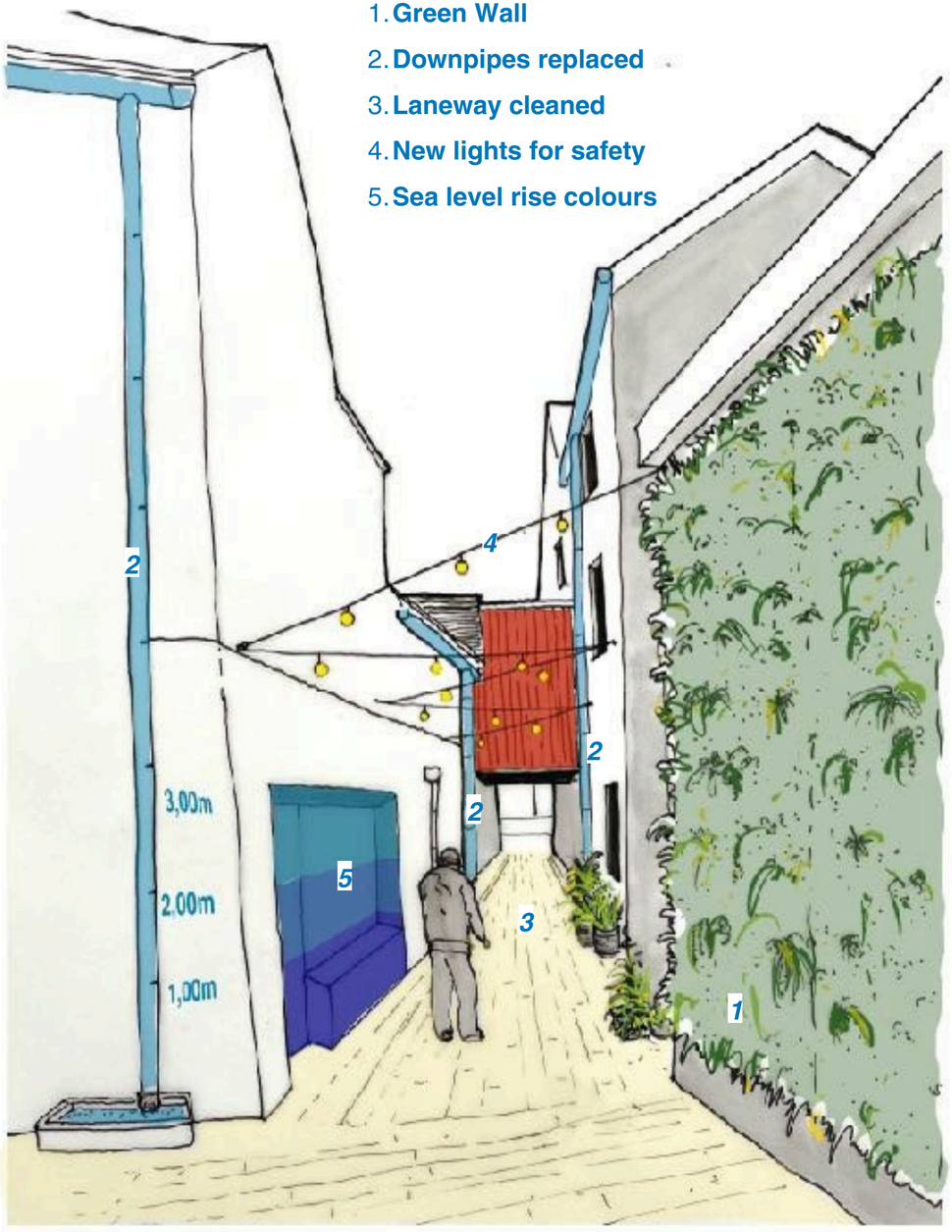
INITIAL CONCEPT SKETCH OF O'HORA'S DEMONSTRATOR

DESIGNED BY PROJECT TEAM, SKETCHED BY ORLA MURPHY



view west to Tolan Street

1. Green Wall
2. Downpipes replaced
3. Laneway cleaned
4. New lights for safety
5. Sea level rise colours



sheet n. 01

USE FIGURED DIMENSIONS ONLY
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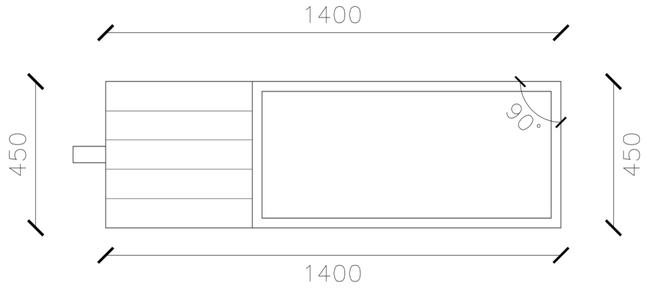
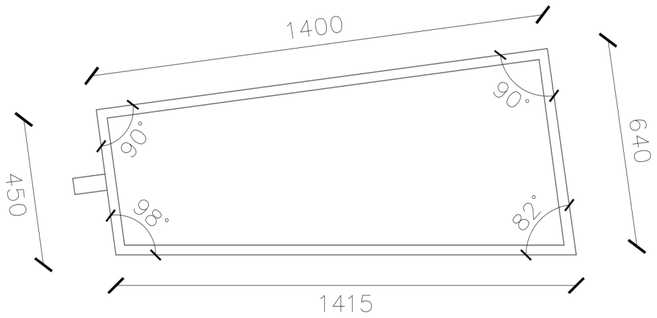
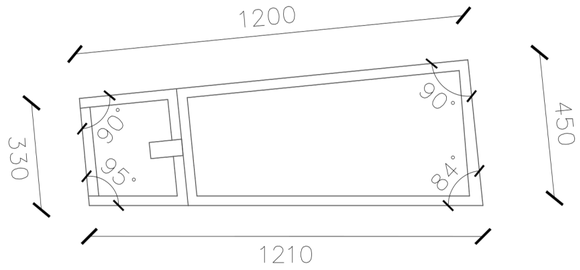


Raingarden 1



Raingarden 2



Raingarden 3

Plan dimensions of 3no. planter are based off on-site location coordination with client. For elevations and sections of planter please see existing design document drawings.

changes	date

24-03
CASCADE

Project location
O'Hora's Lane, Ballina
Co. Mayo

Client
–

sheet content
Planter Plans

scale	format
1:15	A3
Drawn by	Checked by
RH	JM
date	Revision
13-08-25	–

ACT