

Demolition Take Down

Spark Project Report





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Summary



Demolition Take Down is a research and engagement initiative led by Islander Architects. The project began in October 2023.

The first phase was launched with the engagement of our community of practice - the construction industry. We welcomed input from across the sector from; architects, clients, contractors, developers, engineers, local authorities, planners, project managers, quantity surveyors, sub-contractors and technologists. This engagement was through a project website, an online survey, a series of in-depth interviews and a social media campaign. This phase sought to understand some of the reasons why existing buildings are often demolished and the challenges of adapting existing buildings for reuse.

From January to May 2024, the second phase extended to third-level education with a collaboration between the School of Architecture, Building and Environment with the School of Surveying and Construction Innovation at TU Dublin. This phase sought to introduce collaboration early in the education of construction industry professionals and break down entrenched disciplinary silos in an academic environment.

The third phase of the initiative combined the findings from the initial stages resulting in a large scale public installation at IMMA and a series of supporting events including talks, film screenings and engagement surveys. This collection of events along with the installation, showcased the underlying motivations as well as current challenges behind demolition practices in Ireland.

The aim of this project was to raise awareness of the extent of construction and demolition waste created in Ireland over each person's lifetime and point to collaborative solutions that the construction industry can embrace with the support of the public. Demolition Take Down aimed to spark an industry-wide discussion and pave the way for more sustainable, responsible approaches to demolition in Ireland.



Introduction



Only 6% of the employed population in Ireland work within the construction industry yet a staggering 48% of all waste generated in Ireland comes from within this one sector.

It is our observation that the construction industry plays a big role in climate change because it is based on an economic model that encourages and facilitates the needless creation of waste. We, as architects, are part of this problematic industry that produced 9 million tonnes of construction and demolition waste in 2021 alone. It is projected that this figure will grow each year unless action is taken.

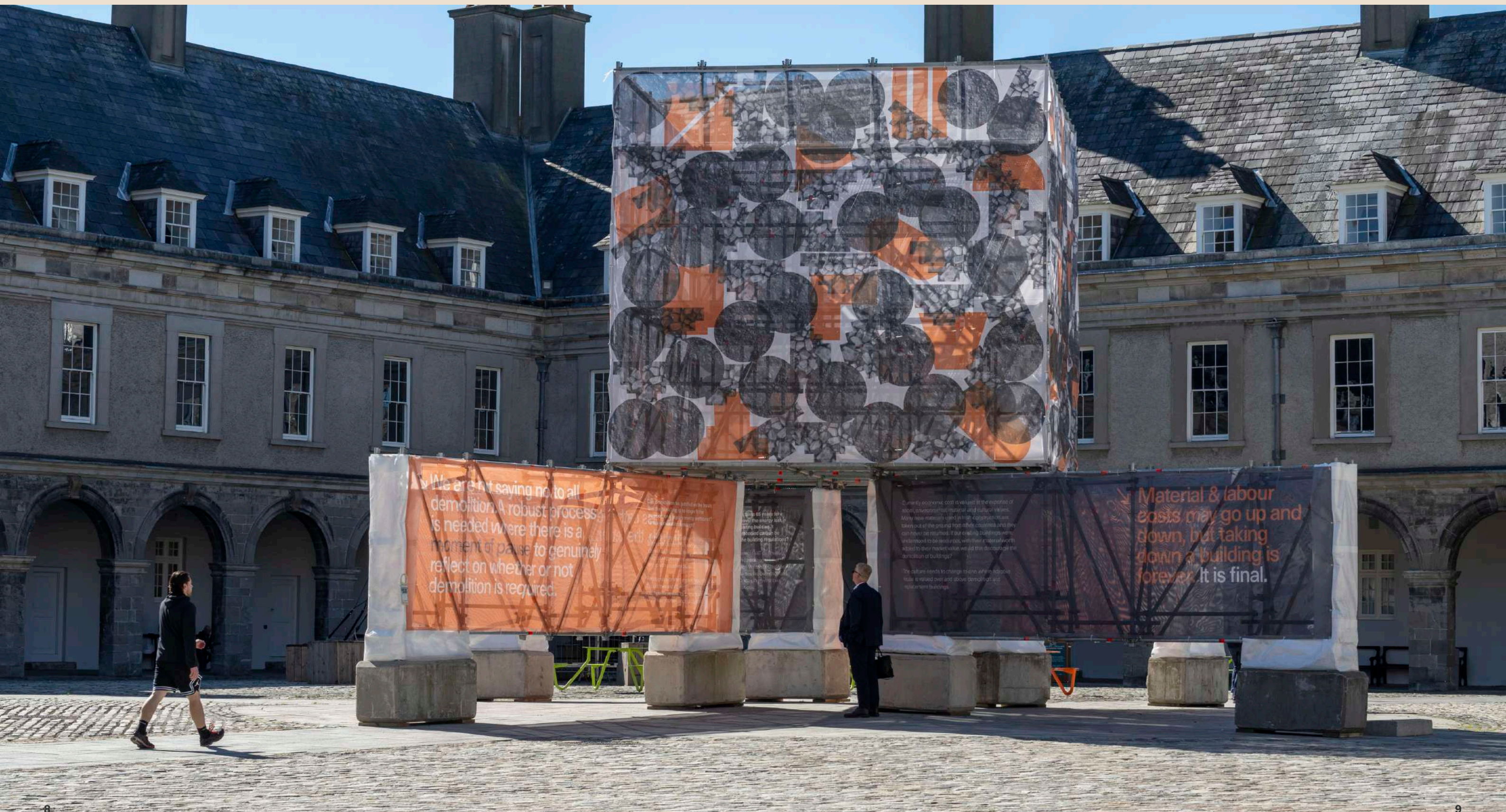
This project asks:

Who knows the true extent of wasted resources from the demolition of our existing buildings? and more importantly who cares enough to take action?

Demolition take Down set out to understand the current barriers and external forces that may be influencing this wasteful behaviour. The Creative Ireland Creative Climate Action Fund was an opportunity to spark action, through connecting with the wider construction industry as well as the general public, on the topic of demolition. Our project aims to create an attitudinal and behavioural shift by engaging across disciplines, gathering insights from the industry and highlighting possible ways forward.

Ultimately, Demolition Take Down is a call to action for policy makers, decision makers, councils, construction industry workers, clients and the public to take climate action now. Public attitudes are the life and death of a building.





Project Outline

The project team consists of the project lead, project partners, project suppliers, sponsors (beyond Creative Ireland) and those who provided in-kind support.

Overleaf is a summary of key activities carried out between October 2023 & October 2024 across several project stages.



Project Team



Islander Architects - Project lead

Islander Architects is a Dublin based design and research practice led by two registered members of the Royal Institute of the Architects of Ireland (RIAI), Laura Carroll & Ciarán Molumby. As a practice they aim to be agents of change, they believe in the broader social impact architecture and the built environment can have on our communities & places. Since their establishment in 2020, Islander Architects have been awarded numerous accolades including: The Reimagining Elderhood project for community-led housing, The Town Ecologies programme for village renewal along with the Arts Council's Agility Award for Architecture. Laura & Ciarán currently teach at the School of Architecture, Building and Environment, TU Dublin.

School of Architecture, Building & Environment, TU Dublin - Partner

SABE is a leader in third level professional, practice, education and research for the professions and disciplines tasked with planning, designing, building, making and managing places. Situated within the Faculty of Engineering and the Built Environment, SABE contains four disciplines;

- (1) Architecture,
- (2) Architectural Technologies,
- (3) Construction & Building Performance
- (4) Environment & Planning.

It is uniquely positioned to drive societal changes, and is committed to working with stakeholders to champion these issues at local, national and global level. The Architecture discipline is undergoing major transformation through the HEA funded 'Resilient Design Curricula' Building Change project, which involves radical revision in architectural education.

Miriam Delaney, Lecturer & Building Change Curriculum Change Lead & Emma Geoghegan Head of Architecture are project partners for Demolition Take Down. Their involvement was funded by TU Dublin SABE & Building Change.

School of Surveying and Construction Innovation, TU Dublin - Partner

Emer Byrne, Lecturer Real Estate, Valuations and Sustainability at TU Dublin is a project partner in arranging and implementing the cross-disciplinary work with the students from the School of Surveying and Construction Innovation, as well as being a key factor in securing additional funding for the installation from the construction industry. Her involvement was funded by TU Dublin.

Suppliers

- / Unthink, graphic design studio provided branding design, website design & graphic advice for the installation. (Creative Practitioners)
- / Scaffold Elevation, provided structural engineering design, wind load calculation reports, RAMS reports, scaffolding hire & delivery, construction and inspection of the installation. (Creative Practitioners)
- / Freeneys Graphics, provided material and printing of mesh banners for the installation

Sponsorship

- Aside from Creative Ireland funding, additional sponsorship from:
- / Building Change Ireland (Talks & elective)
- / N-TUTORR Fellowship Fund (Student invigilators)
- / IPUT Real Estate Dublin (Installation)
- / The RIAI (Installation)
- / The SCSi (Installation)

Support

- Additional non-financial support from:
- / The Irish Architecture Foundation IAF (Comms & mentoring)
- / IMMA Earth Rising Festival (Comms, host venue and public liability Insurance)

Images used throughout this report are by Islander Architects & Brian Cregan Photography.



Timeline



Foreword Phase 0: Set Up

October - November 2023

The project began in late October 2023 beginning with initial research, the creation of the project's branding and website design for Demolition Take Down and setting up of project social media pages. Parameters for the cross-disciplinary student elective were agreed with TU Dublin during this time.

Phase 1: Engagement - Industry

November 2023 - March 2024

The construction industry online survey was launched and a series of in-depth interviews were conducted from a wide range of construction industry stakeholders during this time. The website went live and the project was publicly launched by Islander Architects at the IAF's New Now Next Talk in December 2023.

Phase 2: Engagement - Education

January - May 2023

Cross-disciplinary student engagement was carried out through a weekly elective, workshops, guest lectures, film screenings. Both the School of Architecture, Building and Environment & The School of Surveying and Construction Innovation TU Dublin took part in this education series.

Phase 3A: Installation - Design & Build

February - September 2024

Finding a venue for the public insulation was key task during this time, the venue was agreed with IMMA in April 2024. Due to its scale additional sponsorship was sourced for the installation. Multiple iterations of the installation were tested from March onwards, before the design was set. Contractors & suppliers were appointed for the installation work. The installation was open to the public at IMMA for 3 weeks in September 2024.

Phase 3B: Engagement - Earth Rising Festival

September 2024

Student invigilators were trained to carry out public engagement through a survey of attendees at the Earth Rising Festival. A cross-disciplinary panel discussion and film screenings were hosted by Demolition Take Down over the festival weekend. Social media campaigns, the IMMA app, industry magazines, sponsors newsletter and online coverage promoted the Demolition Take Down installation & supporting events.

Phase 4: Further Coverage & Reflections

September - October 2024

Demolition Take Down were invited to give a series of public talks by Building Change Ireland, RIAI conference, Irish Architecture Foundation's GabLab Sessions and Creative Climate Action Project Gathering across the month of October.



Agreed Outputs & Outcomes

A number of activities, outputs & outcomes were set out in our application for the Spark funding & agreed in the signed SLA. The following pages detail how each item was addressed or altered over the course of the project.



Agreed Outputs



(1) Islander aim to reach as many people as possible within the construction industry to spark conversations about demolition waste. We will aim to network with our industry partners & make time to meet in person, at a range of venues including at a selection of major industry events and conferences.

Our analysis has shown increased awareness of the topic of demolition waste has been achieved within the construction industry using a variety of methods including; dedicated social media accounts, a project website, online surveys, word-of-mouth recommendations, panel discussions, and lectures. The fund has allowed us to strengthen relationships with original partners and develop valuable relationships with other partners/supporters as outlined in the section about Project Team. Having reached out to several industry conferences, the project was presented at the RIAI conference 2024, as part of the Constructive Interference talks series.

(2) We will conduct in-depth interviews with a wide range of construction professionals, experts and ambassadors about the role of demolition & demolition waste within the building industry. These interviews will help us to understand the current attitude towards the topic of demolition.

Our engagement with the construction industry has given us multiple perspectives on the impact of demolition waste and informed next steps to influence change to business-as-usual. The Demolition Take Down project conducted 19 in-depth interviews with significant decision makers in the construction industry. The aim was to agitate for change, to increase cooperation between disparate entities of the industry and to highlight possible solutions.

(3) Islander will design & construct an installation that will visually represent the scale of demolition waste to a wider public along with possible solutions that have been successful in Europe.

A large temporary art installation was designed and erected to depict a 146 tonne volume to raise awareness of the extent of construction and demolition waste created in Ireland on behalf of each citizen over their lifetime. It was on show to the wider public in the highly visible location of the Irish Museum of Modern Art courtyard. The design of the installation was a site specific art work, the concept adapted to suit the location in the courtyard with its strong axial arrangement of paths and symmetry. The installation presented itself to all four approaches along the granite pathways guiding the visitor to the centre of the courtyard. Scaffolding poles formed the structure in a pin-wheel formation supporting a volume overhead. The dynamic structure drew intrigue from the four sides of the courtyard, while still allowing views through.

The installation was on public display in September to coincide with both Culture Night 2024 and the Earth Rising Festival at IMMA. This exposure was an ideal opportunity to engage with members of the public about the topic of demolition as well as further engagement with the various professions and disciplines of the construction industry. IMMA has stated that over 15,000 people attended the Earth Rising Festival this year.

The installation was designed as a conversation-starter. The intention was to get people to stop and think, to encourage hope for the viewers. It is in this spirit that the lower banners had been arranged to point towards collaborative solutions that the construction industry can embrace with the support of the public.

(4) Islander will devise and deliver a student elective, through our project partner TU Dublin. We aim to foster a cross-disciplinary approach to the delivery of this elective with a group of students and staff from different programmes within TU Dublin. The elective will look at case studies, as alternative practices across Europe, & ask how these solutions are being developed and implemented. The elective will question what we could learn from these examples.

From January to May 2024, the Demolition Take Down outreach was extended to third-level education through the development of a special elective module delivered to a selection of 4th year architecture students each week over one semester. Students opted into chosen electives in groups of 8. This was funded by Building Change (through our partnership with the School of Architecture, Building and Environment TU Dublin).

The elective was organised around two collaborative participatory workshops organised as a joint venture between the School of Architecture, Building and Environment and the School of Surveying and Construction Innovation at TU Dublin. Eight architecture students were paired with 35 property economic students to assist them envision alternative proposals for an existing office building in Dublin as part of their valuations.

This initiative was the first of its kind and went a long way to break down entrenched disciplinary silos in an academic environment. Alongside the workshops, a range of guest speakers from the construction industry were invited to speak to the students about their experiences in adaptive reuse and in tackling demolition waste. A film screening event was organised to attract a wider proportion of both schools to become aware of the Demolition Take Down project and its ambitions.

(5) Islander will promote the research from the community of practice, with additional benefit- in-kind support from the TU Dublin students, staff & the delivery of the elective. A mixed-media promotional campaign will be developed to raise awareness of demolition waste and to stimulate cultural change. Where solutions are found these will be put forward. The traffic & analytics for online media will be documented, along with numbers of people involved in the initial engagement stages and throughout project duration.

In conducting interviews for the research alongside fundraising for the installation, a large network of influence was established within the construction industry. Considerable effort was invested to promote the project as widely as practicable given

the resources available to Islander. Priority was given to social media content development, primarily through Instagram and LinkedIn, to raise awareness of the brand and the dissemination of research. A project website was developed as a single page to validate the brand identity. It is envisioned that some platforms will be retained beyond the spark fund timeline.

Our partnerships with Miriam Delaney, Emma Geoghegan, and Emer Byrne were particularly important for promoting our efforts throughout the project timeline. Their public support was valuable in legitimising our project to encourage engagement with our social media content and in growing our following.

The supports received from the Royal Institute of the Architects of Ireland and the Society of Chartered Surveyors Ireland were twofold - additional funding as well as publicity of the Demolition Take Down project among their membership. The support from IPUT Real Estate gave credibility to the Demolition Take Down project for promoting it to a key sector of the construction industry and an important decision maker in whether to demolish existing buildings.

Towards the end of the project, Islander contributed to an article for the RTÉ website through their partnership with TU Dublin via the Brainstorm initiative. The publication of this article on the morning of Culture Night helped us put forward solutions to demolition waste, along with promotion for the installation, panel discussion and film screenings organised for IMMA.

The Irish Architecture Foundation joined the project as a supporter and exposure to their large audience from diverse backgrounds and disciplines was invaluable. The IAF invited us to speak at the New Now Next event in December 2023 at the Complex, Dublin. Their director, Emmett Scanlon, has offered us valuable mentoring focused on the curatorial challenges of presenting this research on demolition to a new type of audience at IMMA.

Agreed Outcomes



(1) Islander & our project partner TU Dublin are interested in collaborative solutions to demolition waste, between the various construction professions. As a consequence of this pursuit, we expect to spark a cultural shift within our community of practice and encourage a rethink of current methods of practice.

Throughout this project, we met with a range of professionals with differing perspectives. The knowledge gained from these meetings instilled the confidence needed to take a stand on the issue of demolition waste through a large scale public installation, public lectures and published content.

The support of the Irish Architecture Foundation developed from an informal mentorship to a more formal arrangement as part of their GapLab programme. Through GapLab, the IAF aims to give space to Demolition Take Down to work out the next steps for project beyond the spark fund. This will be supported via the various forms of capital – social, cultural and economic – available to the IAF. We presented the project at two GapLab Sessions at the IAF in 2024.

The relationship established with Emer Byrne as a result of this project has been essential to a large portion of its perceived successes. Emer introduced us to a new network of people and her continued involvement in the project is evidence of a strong collaboration to tackle demolition waste through widening our access to important decision makers such as IPUT Real Estate and the Society of Chartered Surveyors Ireland. Demolition Take Down has used this time to make relationships that could sustain the project beyond the lifetime of the spark fund and give the project significant visibility to become a role model for others to look up to in the future.

(2) The research will identify the barriers & provide alternative practices or solutions. Highlighted solutions will encourage a community of practice change their behaviour.

The project began with an online survey and in-depth interviews as the primary research method. The results of this engagement with the construction industry are multifaceted. Islander have taken the time to review all of the barriers identified, the alternative practices or solutions put forward and connections made between responses. This was honed for dissemination as part of the installation at IMMA along with the public talks and film screenings.

(3) Islander & our project partner TU Dublin intend to creatively express the scale of demolition waste in Dublin, as one example, to make the topic more accessible and a topical concern across wider society.

In one of our interviews with a senior engineer in a Local Authority, we learnt how public sentiment towards some buildings in the city could lead to their eventual demolition. If a neighbourhood or community felt disenchanting with a building or its infrastructure, they could lobby their local representative to bring a motion for demolition before the executive of the Council. This insight backed-up the need to engage with the wider public about Demolition Take Down project.

The partnership with the Irish Museum of Modern Art for their Earth Rising Festival was a major factor in making the topic of demolition more accessible across wider society. The attraction of this popular Dublin City destination increased visibility to our research, advancing our project aims. Our decision to erect a large temporary installation in the courtyard of the Royal Hospital Kilmainham (an early example of adaptive reuse) was strategic decision for the footfall it offered to get more eyes on the installation and raise awareness of the Demolition Take Down brand.

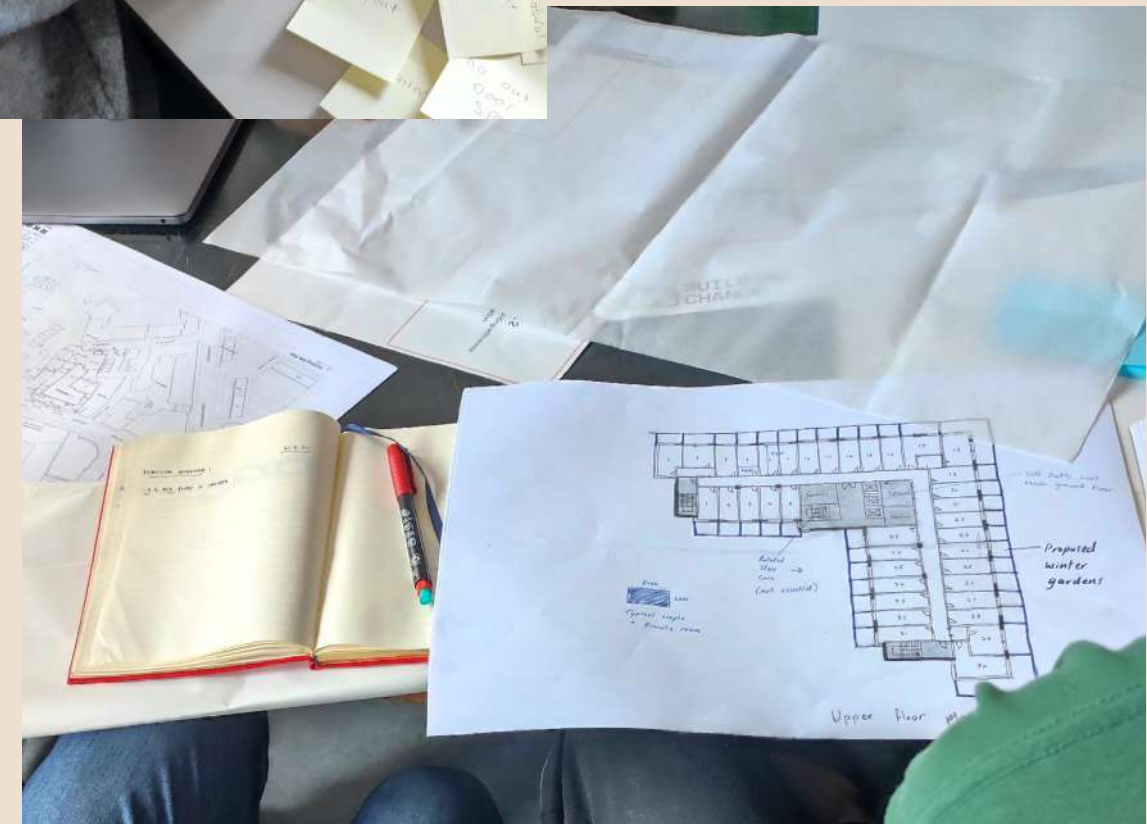
In support of this partnership and location, a multi-media offering was provided to allow a wider variety of engagement. The overhead volume of 146 cubic meters was designed to take the statistic of 9 million tonnes of C&D waste and break this down to be more relatable to an individual passer-by.

The supporting framework of banners at eye-level provided further information about the challenges of C&D waste along with a curated range of solutions proposed from the industry engagement conducted earlier in the project. For those interested in other ways to engage with the project, we offered two film screenings of the Demolition Drama (gifted to us through our public support of the House Europe! Project) and public talks suite with a cross-disciplinary panel discussion.

(4) Our project partner TU Dublin is committed to fostering more opportunities for cross-disciplinary student collaboration to make a resilient future. Shared teaching opportunities will be established and students will engage in cross-disciplinary discussions/ teaching outside their current departmental silos. It is hoped the elective will spark enduring connectivity between students and departments In TU Dublin. Students will gain new skills & knowledge to make informed decisions in their future careers.

The collaboration between the School of Architecture, Building and Environment and the School of Surveying and Construction Innovation at TU Dublin exposed both sets of students and staff to different ways of thinking and talking about the built environment. Feedback from the architecture students indicated that this was a challenging yet rewarding experience. Their inability to convince the property economic students to retain the existing building enlightened them to bias toward new build, values and risk. The property economic students were challenged to think laterally and take a moment to reconsider their calculations. This exchange of perspectives is unique for both schools and the knowledge gained can only improve with more experience.

We can attest that the experience of the elective for the eight architecture student had an influence on their outlook. Half of the Architecture students have opted to take part in a similar elective to look at the future of the existing American Embassy building on Elgin Road, Ballsbridge as part of their final year studies.



Engagement & Impact

The type of audience engagement and participation was varied to suit each phase of the project.

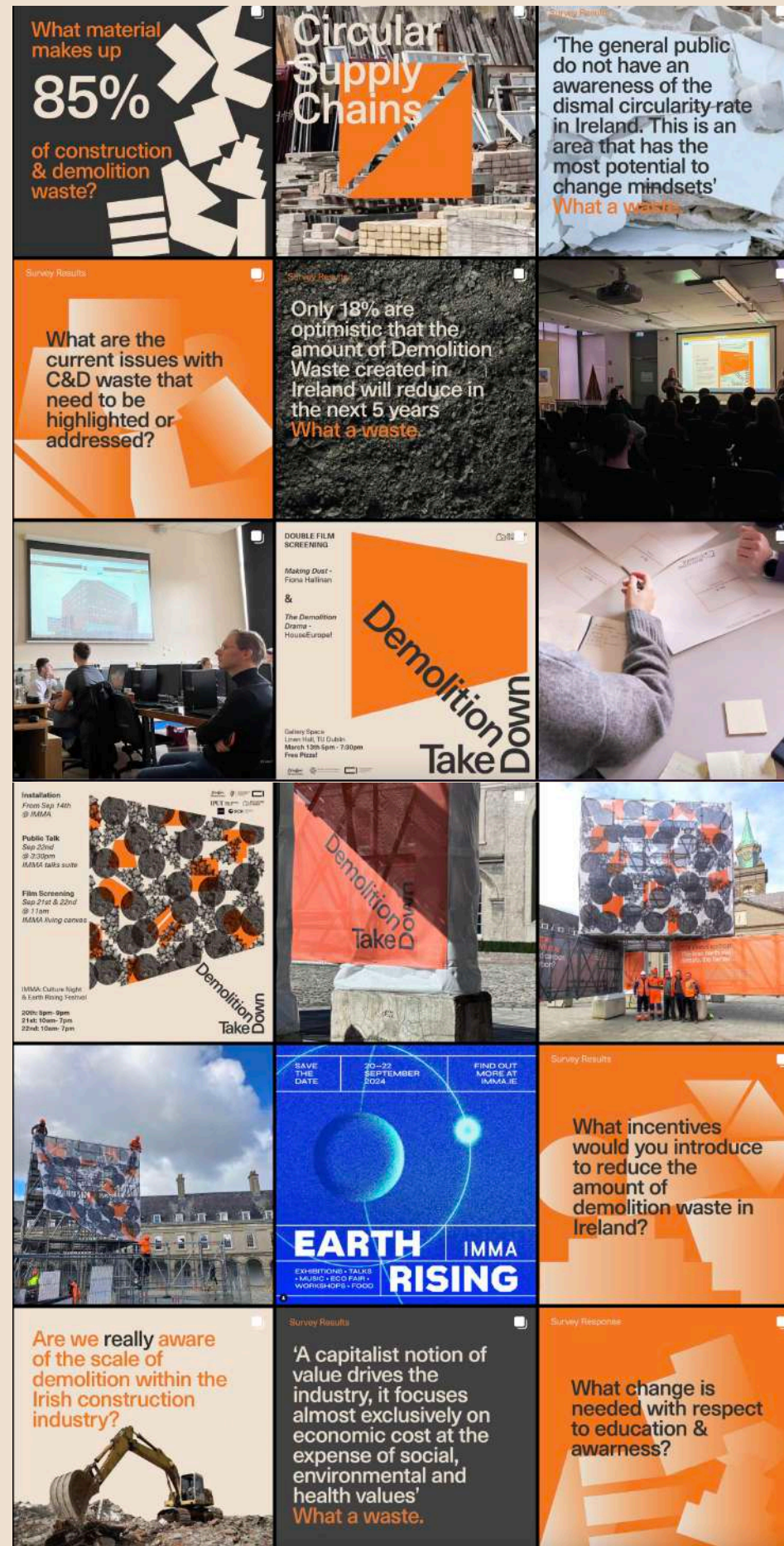
In the beginning, emphasis was placed on social media to raise awareness of the Demolition Take Down brand within the construction industry, especially for the online survey. Word-of-mouth recommendations and private messaging/ emails were important for arranging the interviews. The website was a useful validation tool for larger organisations looking to engage with the project.

As the project moved from the research phase to the final dissemination phase, the emphasis shifted to generating more content on social media to increase followers and engagement with the goal of encouraging more visitors to the events organised in IMMA.

Quotes taken directly from the industry engagement are highlighted throughout the report.



Industry Engagement



Instagram

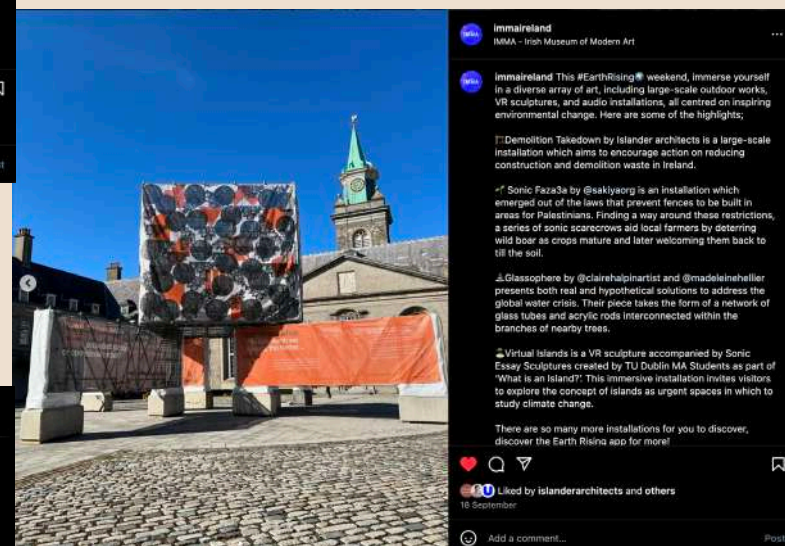
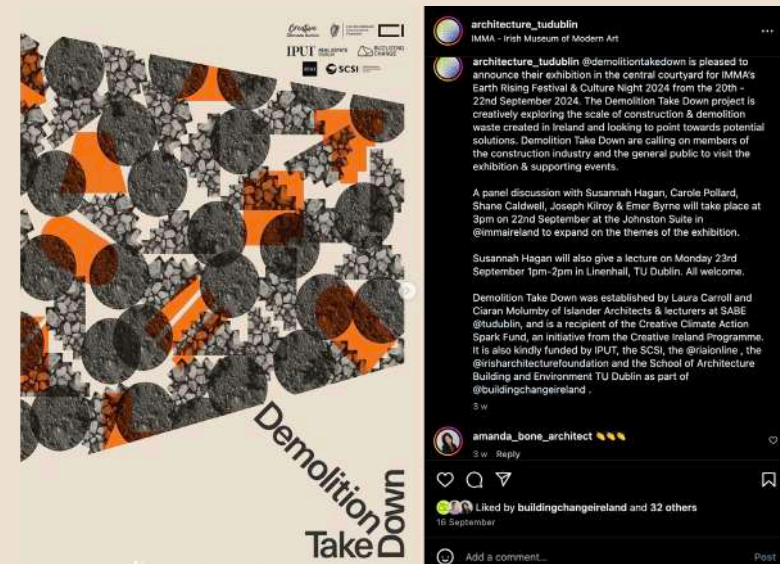
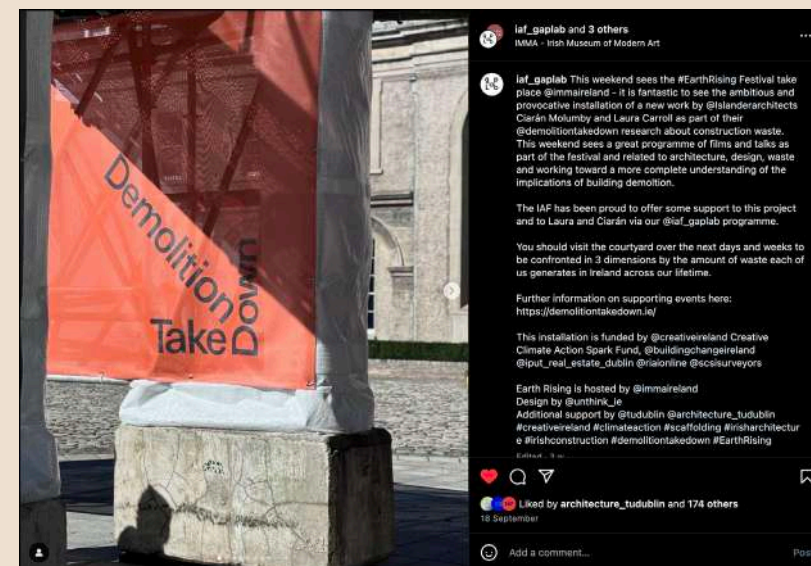
A dedicated instagram page [@demolitiontakedown](https://www.instagram.com/demolitiontakedown) was established for the project on 28/11/2023. From the beginning, it followed a wide variety of construction industry pages (Construction Industry Federation, Engineers Ireland, Society of Chartered Surveyors Ireland etc.) to encourage engagement throughout the sector. In the academic engagement phase of the project, the architecture students took over the content creation for the instagram page with posts focused on disseminating some of the results of the online survey. There was one paid advertisement used to raise awareness of the online survey and to encourage further engagement with the instagram page. In total 5,984 instagram accounts were reached with this advertised post but only 13 interactions including 1 new follower resulted from it. In summary:

- / 35 posts
- / 519 new followers between November 2023 & October 2024
- / Average engagement per post: 32
- / Average views per post: 695
- / Average exposure to non-followers per post: 38%

Reflection: In reviewing the analytics for each post, it is apparent that when there were consecutive posts in a short space of time, this saturation of content led to reduced engagement. Benefit-in-kind promotions were more successful than paid advertisements. As an example, collaborating with the IAF on a post led to a total 3,168 views with 183 interactions. The timing of this post was a big boost in raising awareness of the Demolition Take Down project and the events organised at IMMA. The installation being in IMMA for a duration of 3 weeks in September led to further promotion via mentions in posts and stories from various visitors including individuals and company/group accounts. This, combined with a shift in the type of content created - from text based to image based - throughout this period led to an increase of 92 followers in September alone.

Question the currently dominant capitalist understanding of value that drives the industry, which focuses almost exclusively on economic cost at the expense of social, environmental and health values.

We need policies and legislation that encourage not just architects, city planners and local authorities to adapt and reuse existing buildings rather than build anew, but also their clients, developers and private citizens. It should become more expensive and much more difficult to demolish a building, and at the same time less off-putting (administratively, technically and financially) to maintain, transform and reuse our existing heritage.



↘ Our buildings are generally a collection of finite resources. Is it right to munch up a building made of stone and all the stuff that makes cement and concrete? This point needs to be argued more.

LinkedIn

A dedicated LinkedIn page was established for the Demolition Take Down project on 28/11/2023. LinkedIn was identified as a useful social media tool for engaging with the construction industry. There was one paid advertisement used for 3 days in January to raise awareness of the online survey. In total 1,788 LinkedIn impressions were recorded with this advertised post with 50 interactions (33 as a result of sponsored advert), including 7 reactions and 1 repost resulting from it. In summary:

/ 23 posts

/ 167 new followers

/ Top 4 industry breakdown:

39.4% from Architecture and Planning,

8.5% from Higher Education,

5.5% from Real Estate and

5.5% from Government Administration

/ Average engagement per post: 45

/ Average impressions per post: 300

Reflection: In reviewing the demographic breakdown of followers by industry, the dominance of the Architecture and planning industry in the make-up of the followers is a big factor in the type of engagement with the content posted. The ability to tag people, organisations along with the use of hash-tags was crucial to raising awareness of the project outside the existing networks that are established within the architecture community. It is worth noting that the most effective post was in relation to one of the student workshops organised between the architecture and property economic students at TU Dublin with a presentation by Paul Hadfield of Scott Tallon Walker Architects to staff and students. Overall, this post exposed the Demolition take Down

project to 908 impressions and engaged with 453 of these with 30 reactions, the most for any single post. Emer Byrne, also played a significant role in raising awareness of the project & public events in the Real Estate sector.

Website

A dedicated project website www.demolitiontakedown.ie was launched on 21/12/2023 to support engagement with stakeholders in the construction industry. It was developed as a single page with key project information and the online google survey integrated as part of its development. This feature of the website was useful for sharing information throughout larger organisations like the local authorities and to provide opportunities for greater passive engagement of the survey. The website content was revised since it was originally launched; to to close the online survey and put focus on the public dissemination strategy through the partnership with IMMA and the Earth Rising Festival.

/ Over 2,000 total views (827 from in September 2024 alone) with the average viewing time of 2 minutes 37 seconds.

Reflection: Unfortunately, the online survey did not include a question asking respondents whether they completed the form via an email link, via social media link, or via the website directly. Therefore it is difficult to assess the success of the website in delivering this goal.

The content generated for social media posts were more experimental to test reaction to content and raise awareness of the project. The website has been a useful platform to refine our public messaging; in providing greater clarity of our aims and deliverables.

↘ Buildings are going up now that are already becoming empty, unused, and are more likely to be demolished in the near future.

↘ Change of mindset across education, practice and policy that will see us move away from an industry and a culture based on 'knock down and replace' towards maintaining, repairing and transforming our existing built environment.

Email

A dedicated project email info@demolitiontakedown.ie was established in November 2023 to distinguish the Demolition Take Down project from Islander Architects and our teaching at TU Dublin.

/ Total of 980 emails sent
/ Total 1,100 emails received

Reflection: It is not possible to fully analyse the engagement through email. The email address is the authoritative point-of-contact for the project and we have received significant expressions of interest from two of the Dublin Local Authorities requesting information on how they could tackle Construction and Demolition waste within their jurisdiction. This is an important step in the right direction for brand awareness of the Demolition Take Down project among a key stakeholder group in the construction industry.

Talk - Irish Architecture Foundation's New Now Next

13/12/2023 @ The Complex Dublin 7

The Irish Architecture Foundation, supported by ARUP, invited Islander Architects to present at a unique gathering of exciting and revered architects, artists, writers and thinkers from across Ireland. We presented alongside Array Collective, BothAndGroup, Hy-brasil and Tom Keeley. Firmly rooted in the 'now' and the 'next' of architecture in Ireland and worldwide, this talk built on current momentum on topics such as resources, activism and identity. This opportunity to speak in front of a large and diverse audience was utilised to publicly launch the Demolition Take Down survey and industry engagement.



➤ Allow for greater flexibility in uses and/or compliance with planning or other appropriate statutory regulations if adaption or re-use is meaningfully applied to a project.

Survey

The launch of the online survey was preceded by a period of desk-study research for approximately 4 weeks. This allowed for the development of a targeted line of questions to gauge (a) interest in the project themes, (b) familiarity with existing information freely available on the internet, and (c) tips for further research or interviews. The survey was developed using Google Forms and was formally launched alongside the project website on 21/12/2023 via the social media channels and through our TU Dublin email lists. Paid advertisements were used to boost awareness of the survey throughout the different sectors of the construction industry. In summary:

/ 51 responses

/ Top 3 industry breakdown:

42.2% of responses from Architects,
26.7% from Architectural Technologists and
4.4% from Building Contractors.

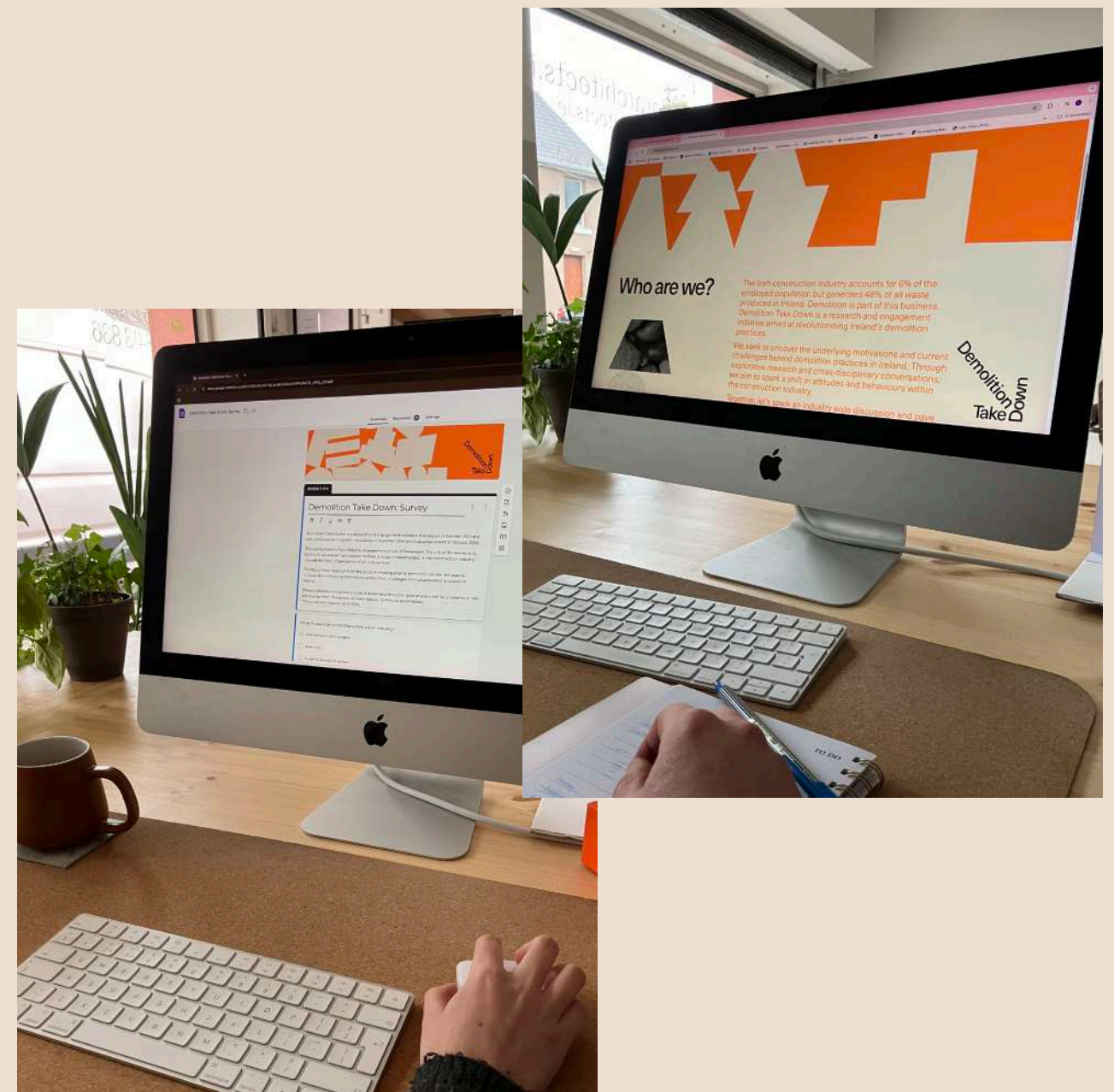
/ 45% of participants sought further engagement with the project

Reflection: The timing of the project launch in November 2023 and the subsequent launch of the survey in December 2023 was a difficult period to attract attention. The amount of responses is disappointing and the demographic breakdown of responses by industry makes analysis of some questions skewed in favour of the architectural interests i.e. the lack of engagement from the likes of Quantity Surveyors and Mechanical & Engineering Engineers among others made it difficult to arrive at multi-disciplinary solutions. To some extent, these shortcomings were addressed more broadly through arranging the interviews.

Significant effort was made to use larger organisations to help with the promotion of the survey among their members.

Institutions like Engineers Ireland, The Royal Institute of Architects Ireland, The Society of Chartered Surveyors Ireland among others did not reply to initial requests to collaborate. Upon reflection, brand awareness of the Demolition Take Down project was only beginning and so it was difficult to establish trust in this short time period.. This combined with the survey period either side of Christmas made it difficult to establish trust throughout the survey period.

The successes are evident in the demographic breakdown by industry and are a result of convincing both the Administrator for the School of Architecture, Building and Environment and the Creative & Communications Director at the Chartered Institute of Architectural Technologists to share a link to the survey via their email lists.



➤ Maybe it comes down to climate literacy and how people understand the climate crisis. The situation we are in is dire. Construction is a big industry so we have the opportunity to find a big solution to mitigate the climate crisis.

Interviews

A series of in-depth interviews were arranged primarily via the online survey and word-of-mouth recommendations. These interviews were conducted mostly via online video calls, with some taking place in person.

The interviews were carried out over a three month period beginning in December 2023. The interview length averaged 1 hour and the feedback provided was conversational and informal in nature, with no individual's name being published to permit exchange of opinions and ideas more freely.

/ Total of 19 interviewees

/ Top 3 industry breakdown:

- 5 interviews with Public Service Bodies,
- 3 interviews with Local Authorities and
- 3 interviews with Private Enterprises.

/ Top 3 topics covered:

- 5 interviewees with an interest in policymaking,
- 3 interviewees with an interest in planning control and
- 3 interviewees with an interest in construction & demolition.

Reflection: These interviews were crucial in helping us to clarify our earlier research and to understand the challenges facing the industry. The feedback provided during approx. 1,100 minutes of interviews was an important component in allowing us to develop the public engagement strategy for 2024. The variety of backgrounds and interests for the interviewees gave us a wider spread of viewpoints on the topic of Construction & Demolition

waste. Not all of the interviewees were in agreement with us on key issues facing the industry, this was important to us to gather a true reflection of the industries opinions.

This engagement resulted in more rounded knowledge and gave us the confidence to develop informed and varied content to disseminate as part of the installation and supporting events.

➤ The only way Construction & Demolition waste will reduce in this country is if there is another economic recession! It is unlikely that Construction & Demolition waste will be reduced for the right reasons.

Education

Student Elective

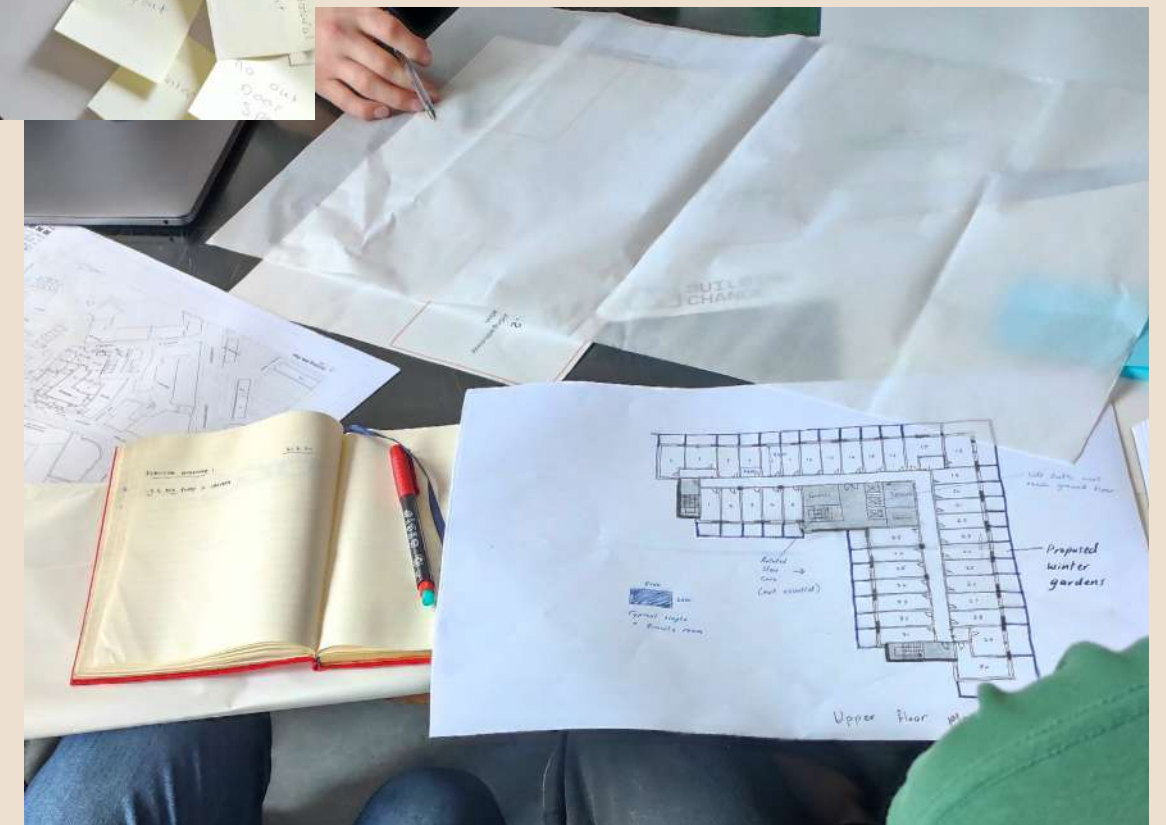
From January to May 2024, the second phase of the project was extended to third-level education. No Creative Climate Spark Funding was allocated to these teaching activities. Additional support was received from Building Change Ireland to allocate time to run an elective and to integrate the Demolition Take Down project across two schools in TU Dublin.

This elective was run by Demolition Take Down for eight architecture students for two hours per week over 12 weeks. This phase also sought to introduce collaboration between architecture students and property economic students via two half-day workshops. These were run in February & March 2024 with the primary aim to break down entrenched disciplinary silos in an academic environment.

/ Approx. 50 students participated in the workshops
/ Total of 30 hours teaching time

Reflection: This elective provided additional resources to generate social media content for the Demolition Take Down public dissemination as well as access to a diverse student involvement in the public engagement strategy during the Earth Rising Festival 2024 in IMMA. A quote from one of the students involved:

➤ The elective made me aware of the problems our industry is facing as well as how people within construction feel about them.



Film screenings

Two films were selected by Demolition Take Down for public screening in the Linen Hall campus in TU Dublin. This event coincided with TU Dublin Green Week, an annual celebration taking place across all five campus locations. The Sustainability Office in TU Dublin helped to promote the event through their social media, website and email.

The Demolition Take Down event was advertised ahead of the film screenings and invitations were extended beyond the School of Architecture, Building and Environment through a combination of public announcements, email lists and a poster campaign.

'Making Dust'

Fiona Hallinan & Dr. Ellen Rowley.

This film essay looks closely at the demolition of a church in Finglas, Dublin through a portrait of the building's dismantling. The film points to questions of sustainability in architecture such as counting the embodied energy of this church. Tracing how materials were financed, grown and crafted, the project provided scope for audiences to reflect on the life of the building itself, socially, culturally, and environmentally.

Dr. Ellen Rowley from the School of Architecture at UCD joined us for the evening to introduce 'Making Dust' and explain her perspective on the significance of this particular demolition event for the people of Finglas West.

'The Demolition Drama'

HouseEurope!

This was an Irish premier for this film which explored the current reality that buildings are viewed more as investments than as housing for people. Caused by speculation, millions of square meters sit empty and in ruin, or they are being demolished and replaced. From the real estate sector to architects to the construction industry these sectors profoundly influence our environment and the fabric of society. This film included contributions from well known architects such as Herzog & de Meuron and Lacaton & Vassal along with other leading European stakeholders.

Reflection: The overall attendance for the film screening was recorded as 26. Pizza was organised for the end of the event for a chance to network afterwards with the audience and to make engagement more comfortable for everyone. While the overall

attendance was disappointing, (the bad weather may have impacted this) it was evident that the word had spread beyond the School of Architecture, Building and Environment with external guests in attendance. It was exciting to be able to show two very different films to an audience mixed of students, staff and guests to Linen Hall. These films perfectly presented the complexity of demolition from the perspective of human value systems to the financial realities that we as a society operate within. It was great to observe the discussion and debate occurring in the gaps between and after these films.



Public Installation

A large installation in the courtyard of IMMA was designed & built by Demolition Take Down to raise awareness of the project themes more widely. This dissemination strategy demonstrated how to balance the goal of climate action with the creative process.





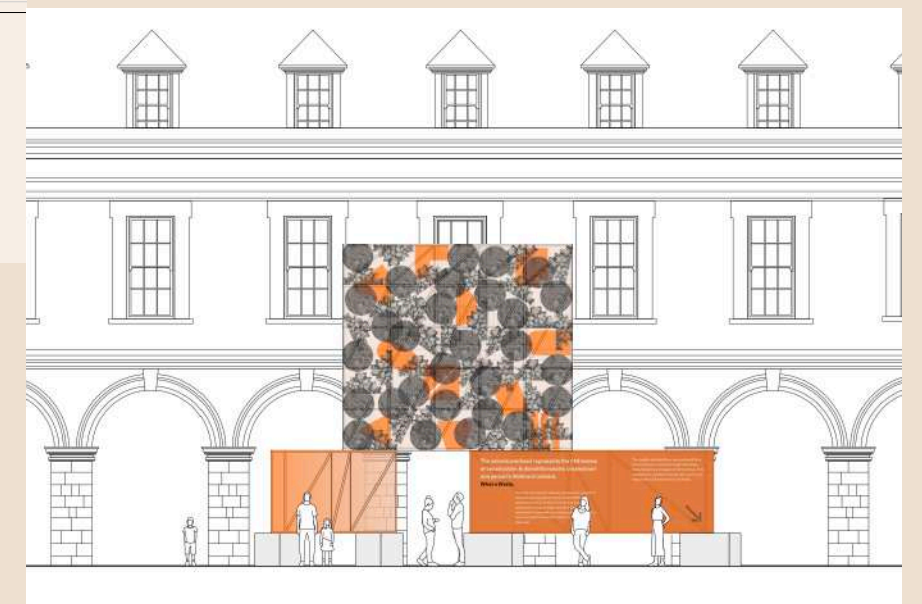
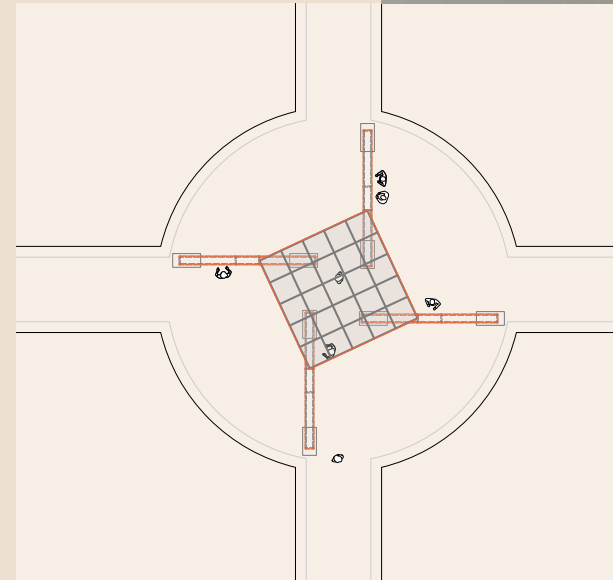
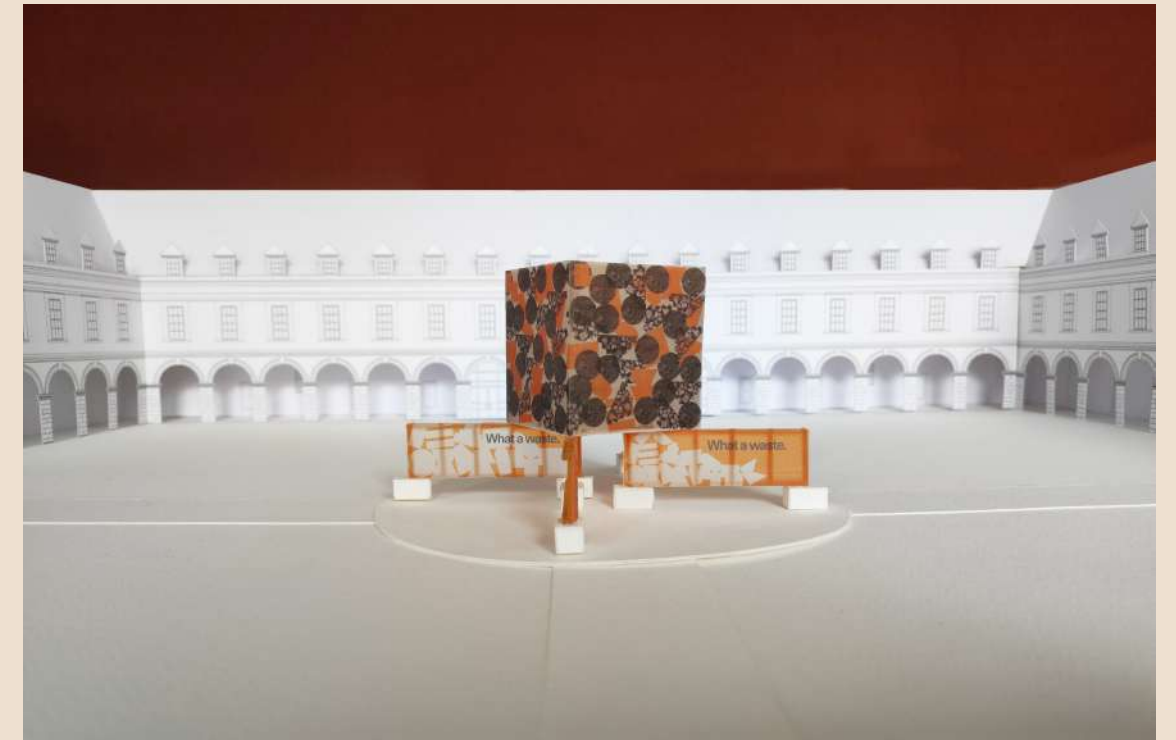
Design & Build

Balancing the goal of climate action with the creative process

A lot of the research and information gathered during earlier stages of the project was statistic or report based. The challenge was in how to visually represent the scale of the issue so it is understandable by the construction industry but also the general public. In the initial interviews with the industry it came to light that it was expected that the Demolition Take Down project would conclude in a traditional 'white paper' report. Many were surprised to hear our intension to have a large scale public installation. Before securing a venue in IMMA we had approached some industry conferences and asked if they could host our installation, the response was not overly positive. It was important to us to go beyond the business as usual format and tackle the goal of climate action in construction in a new and creative way.

We explored how to visually capture data (from reports, interviews and surveys) in a way that a person can relate to and be compelled to take climate action? We decided the best way to do this was to allow a person to see the sheer volume of construction and demolition waste that is created by the industry on behalf of each person over their lifetime.

With IMMA as a venue we knew the audience would be a mixture of the general public, the art community and those from the construction industry. We decided to strike a balance between a conceptual and graphic treatment to the cube volume, versus the more pragmatic lower banners highlighting both the issue but also potential ways forward. This project was about collaboration and the breaking down of existing siloed thinking. Input came from a variety of industry professionals and students with a future in the construction sector. Their opinions, ideas and solutions informed the design of the installation and steered the topics for the engagement events. It was important for us that the installation and events needed to be an accurate reflection of the current situation within the Irish construction industry.



The role of creative practitioners

As architects, we took on the lead creative practitioner role in the project, but engaged with others in graphic design and engineering roles along the way.

We engaged Unthink graphic designers from the beginning of the project to design the projects branding and website. It was important that the project would grab the attention of the construction sector, accurately reflect the message of the project, and be taken seriously. The colours chosen are associated with the industry such as the use of 'safety orange'.

The logo focuses on a confident, bold and innovative approach with a system built on parts 'clicking' and working together to form the logo and various programme identities.

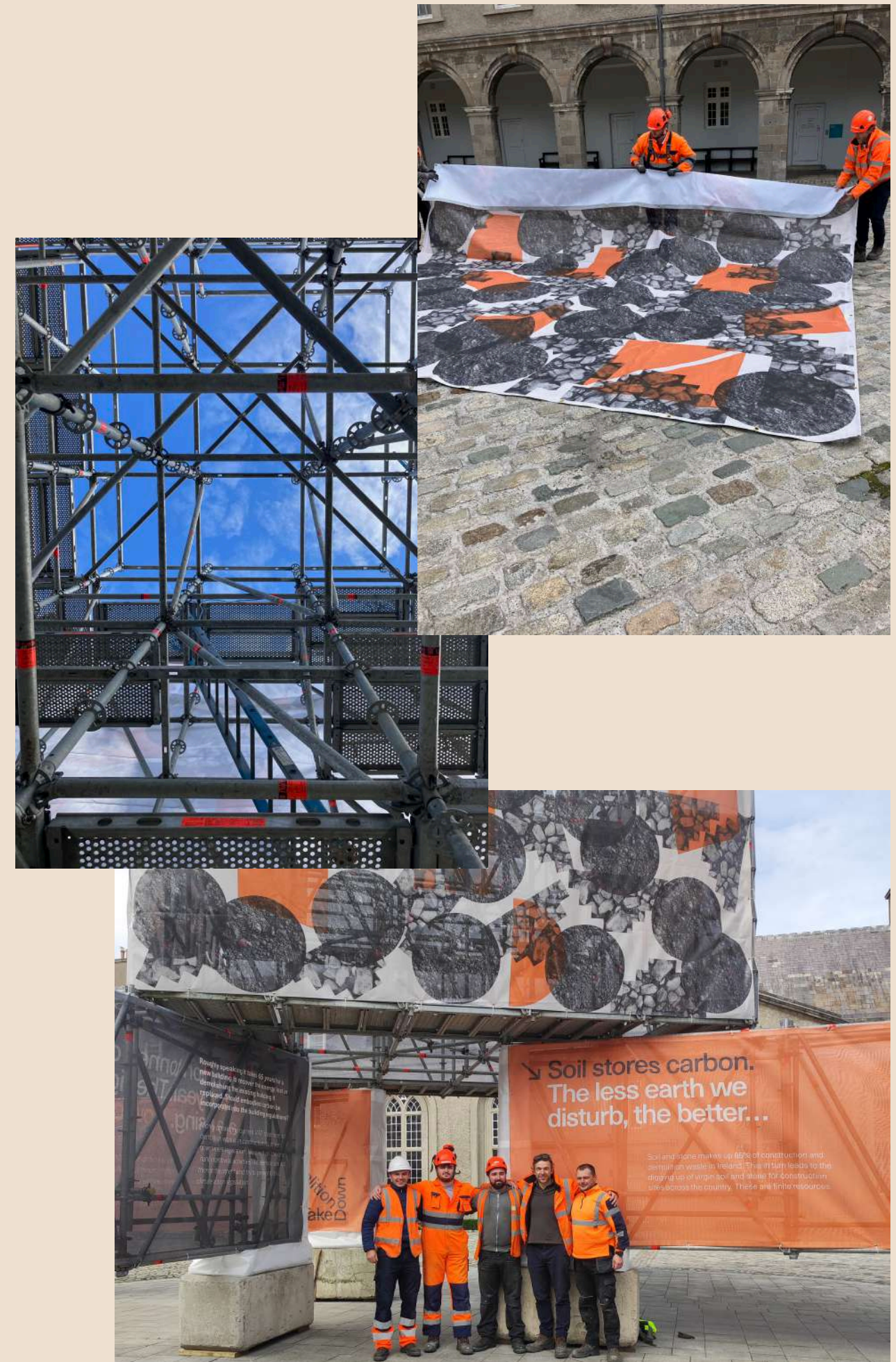
Demolition
Take Down



An array of graphic devices were developed as part of the branding. These elements could be scaled, coloured, cropped and combined in a variety of ways to create an infinite selection of graphic imagery. These elements were also used on the website, social media and became a key factor in the installation itself. For example, the cube of the installation not only represents the 146 tonnes of construction and demolition waste, but it also graphically displays that 85% of this waste in Ireland is currently soil and stone. The orange shapes depict all the materials many of us associate with demolition such as concrete, glass, steel, membranes and insulation but the grey shapes represent soil and stone. These are finite resources that could easily be reused or retained on site. Shown in a graphic way, the hope is that this statistic will be more memorable and encourage action.

Islander designed the concept for the large installation at IMMA, but the design was completed in collaboration with a structural engineers, scaffolders and graphic artists. The installation altered and took on new shapes during these collaborations. A quote from one of the scaffolders involved sums up the experience:

➤ It's impressive to see how art and engineering can come together to create something impactful like the installation at the Irish Museum of Modern Art. Collaborations like these not only showcase creativity but also raise awareness about important issues.





Key Messages



The installation reflected key findings and opinions gathered from the industry during the earlier stages of the project. The design of the installation took advantage of its location in IMMA's courtyard, integrated along the primary access route making it highly visible.

The text on the banners identified some non-exhaustive problems for the industry to do with construction & demolition waste but also points to some solutions.

The six key messages highlighted in the installation were:

Soil Stores Carbon.

The less we disturb the better..

Soil and stone makes up 85% of construction and demolition waste in Ireland. This in turn leads to the digging up of virgin soil and stone for construction sites across the country. These are finite resources.

How can we design out this 7.7 million tonnes of soil and stone waste? Do we really need to excavate a basement for a car park? Should we continue to build on the edges of towns that require new roads and infrastructure?

Currently, matching supply and receiver sites is almost impossible. Could local depots be provided where materials are stored, tested and approved for reuse in a regulated way.

How much does the building weigh? What is greater, embodied carbon or operational carbon?

Roughly speaking it takes 65 years for a new building to recover the energy lost in demolishing the existing building it replaced. Should embodied carbon be incorporated into the building regulations?

Money speaks, the current VAT treatment of demolition work is in contradiction to other government legislation. We can't on one hand incentivise activities like demolition and then on the other hand try to prevent it via climate action legislation.

Material & labour costs may go up and down, but taking down a building is forever. It is final.

Currently economic cost is valued at the expense of social, environmental, material and cultural values. Many new materials used in Irish construction are taken out of the ground from other countries and they can never be returned. If our existing buildings were understood to be resources, with their material worth added to their market value, would this discourage the demolition of buildings?

The culture needs to change to one where adaptive reuse is valued over and above demolition and replacement buildings.

We are not saying no to all demolition. A robust process is needed where there is a moment of pause to genuinely reflect on whether or not demolition is required.

Can demolition be justified on the basis that the building is no longer fit for purpose, or is highly energy inefficient? Is this justification enough, or should it be calculated as proof?

If you keep taking pieces of neighbourhood away incrementally, you may end up with a nowhere place. People grieve for what is gone, you might walk through town and a building is demolished, you might not be able to pinpoint what used to be there but you feel a sense of loss.

Good enough.

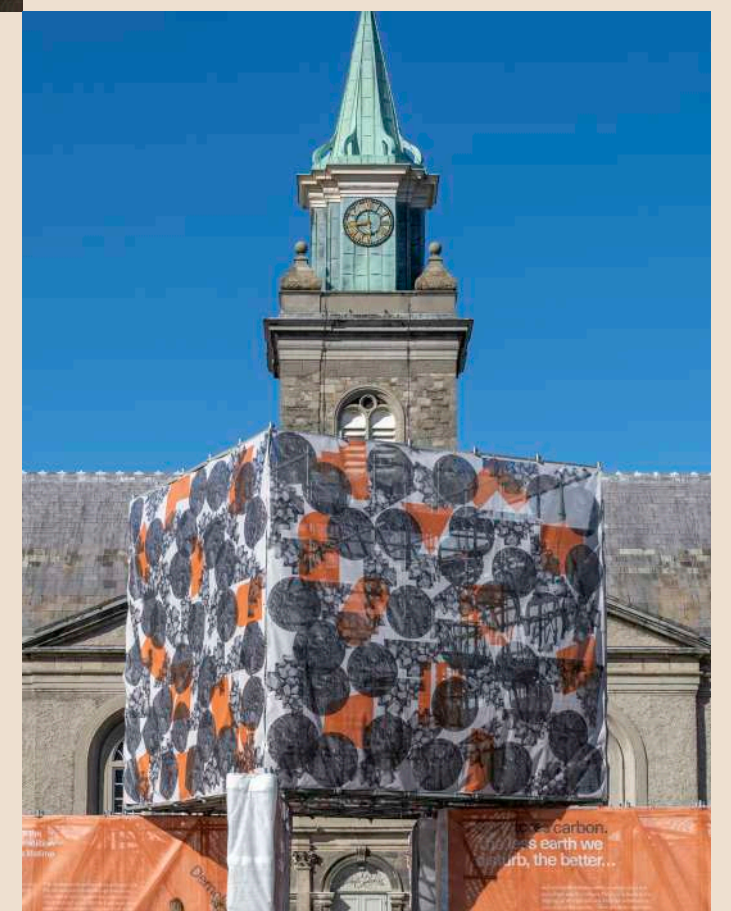
It is often difficult to upgrade 60s, 70s and 80s buildings to 2024 standards. The aim should be to improve the energy efficiency of existing buildings as far as is reasonably practicable.

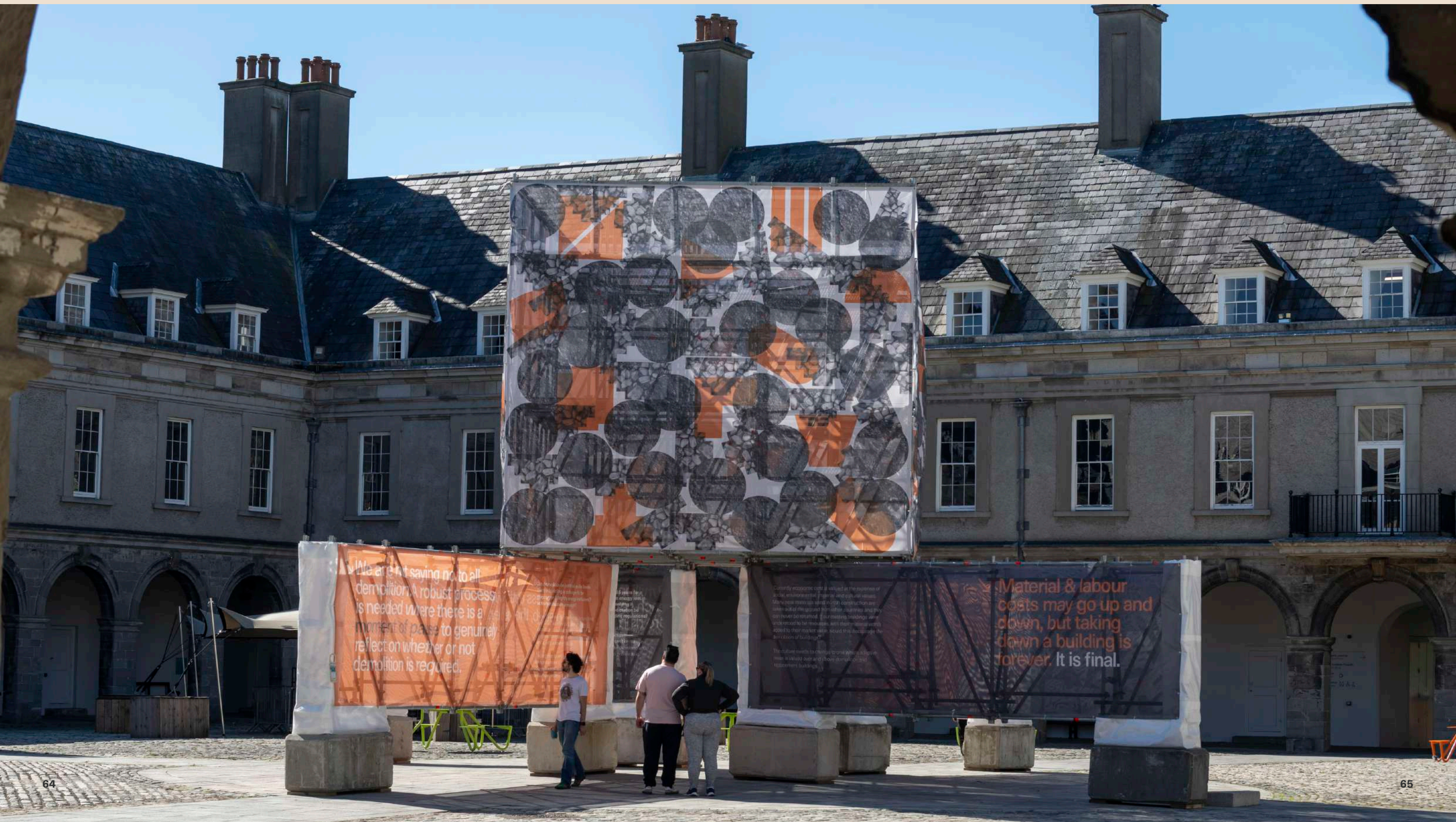
Could retrofit become more viable with the introduction of a national policy to relax the building regulations for these older buildings?

Change requires resourcing.

Skills, knowledge and risk are a big barrier to changing business as usual. A shift towards retrofit over demolition will require a skill set that isn't typical for every project. Upskilling the labour force to work confidently with existing structures or reused materials will be required.

Are there opportunities for the new roles of demolition auditor, waste resource manager, circular economist as well as insurance providers focused on retrofits? It is up to the industry to collaborate and be open to new methods of practice.





Earth Rising

Public & further industry engagement

Funding was secured from the N-TUTORR Fellowship Programme for third-level student involvement at the installation during the Earth Rising festival. A total of 21 students were involved across the full weekend of 20th - 22nd September 2024 at IMMA. The student invigilators were an important feature of the public engagement strategy - dressed in bright orange hoodies to compliment the colour scheme used in the installation - they gathered feedback from the visiting public. Demolition Take Down developed a simple and quick survey for the students engaging with members of the public. The design of the installation provided opportunities for passive engagement or more in-depth engagement depending on the level of interest of the visitor.

- / 15,000 attended the Earth Rising Festival 2024
- / 114 total number of survey responses
- / 42% of the attendees had heard about the project prior to visiting IMMA during the Earth Rising Festival weekend. The top 5 ways of finding out about the installation were: IMMA, Instagram, RTE article, The Irish Green Building Council newsletter and by word of mouth.
- / 69% of respondents had not worked in the construction industry
- / 31% of respondents currently work/ have previously worked in the construction industry
- / 94% were concerned about the impact of construction & demolition waste on our environment having visited the installation.

Reflection: The installation was an ambitious project with significant time and resources required by the project team to deliver the outcomes described here. The necessity to fundraise additional money for the events at IMMA introduced the project to larger organisations who are significant stakeholders in the Irish construction industry. Organising the installation, public talks and student engagement was a big learning experience for Islander Architects but the exposure to a new and larger audience was worth the efforts required.

The direct impact of the project could clearly be noticed by the student invigilators who have developed new methods of practice through carrying out public engagement with the attendees of the festival. This experience will inform their future studies and hopefully have sparked enduring connections with other students across the construction industry,



Supporting Events

Additional funding was secured from Building Change Ireland for costs associated with the public talks organised in TU Dublin and IMMA.

Discussions on Demolition Take Down

22/09/2024 @ Talks Suite IMMA 3:30- 5:30pm.

Additional funding was secured from Building Change Ireland for costs associated with the public talks organised in TU Dublin and IMMA.

/ Panel Discussion attendance 37 (roughly 50:50 split between industry and general public attendees)

In conjunction with the courtyard installation of Demolition Take Down we co-hosted a series of short presentations by leading thinkers and practitioners in the design and building industry. The discussion included an introduction from Islander Architects, followed by presentations, a chaired panel discussion and Q&A. The invited speakers were; Susannah Hagan, Emeritus Professor of Architecture at the University of Westminster, Ellen McKinney sustainability manager at IPUT Real Estate Dublin; Joseph Kilroy of the Chartered Institute of Buildings (CIOB); Dr Carole Pollard architect & architectural historian and former RIAI president. This cross-disciplinary discussion was chaired by Emer Byrne from the School of Surveying and Construction Innovation, TU Dublin. The speakers were asked to offer responses to Susannah Hagan's proposition taken from her acclaimed book, *Revolution? Architecture and the Anthropocene* (2022).

Reflection: The audience was a mix of the general public and people from the construction industry, the room was not full, so attendance could have been better. However, in attendance were some key players in the construction and construction education sector.

The mix of topics were curated by Demolition Take Down to capture the different sides of the debate on the issue of demolition. The talk seemed to be well received with audience questions leading to the late finishing of the event. This perhaps shows that there is a strong appetite for these types of discussions.

↘ *'All we have built represents energy already expended and pollution already created [...] To tear down an existing building and replace it with a new one repeats the environmental impact on the same site, an impact we can now ill afford [...] It's actually far more complex a calculation than this, and leaves to one side the possibility that the building you're removing is no longer fit for purpose, or is highly energy inefficient, and the one you're replacing it with addresses these problems. If an existing building can plausibly be re-used, however, then we do have to engage systematically with this kind of accounting.'*



Film Screenings

21 & 22/09/2024 @ IMMA, screening times varied

The Demolition Drama' by HouseEurope! (31 minutes) is a documentary interviewing several important architects and economists on the impacts of speculative development to European communities. The Demolition Drama discusses how functioning buildings are often demolished to make way for new construction. This is a practice that prioritises profit over people and overlooks renovation and transformation as socially, sustainably, and economically beneficial alternatives.

Reflection: The film was screened twice at the Earth Rising weekend, however due to technical issues with IMMA's Living Canvas screen, the location of the film and times were rescheduled.

Due to the late promotion of the time changes, it was unclear how many people were in attendance. One rescheduled screening directly clashed with the Demolition Take Down panel discussion so we have concluded that it had poor attendance.

Education Hive Minds Talk

23/09/2024 @ Linen Hall Gallery Space, TU Dublin, 13:00pm

Following the IMMA panel discussion Susannah Hagan gave a second lecture to TU Dublin staff & students with the title 'Education Hive minds: Educating Architects in the 21st Century.' This talk focused on how architectural education can tackle the climate crisis through design and collaboration.

/ 120 staff & students of TU Dublin in attendance

Further Coverage



RTE Brainstorm

An RTE Brainstorm article 'What an art installation tells us about demolition waste in Ireland' was published on 20/09/2024 (the Morning of Culture night 2024).

It has been read 19,136 times to date with average read time of 2 minutes and 3 seconds.

Public Talks

Demolition Take Down were invited to give a series of public talks across the month of October by Building Change Ireland, Constructive Interference at the RIAI Annual Conference, The Irish Architecture Foundation's GabLab Sessions and Creative Ireland's The Gathering.

Further Coverage

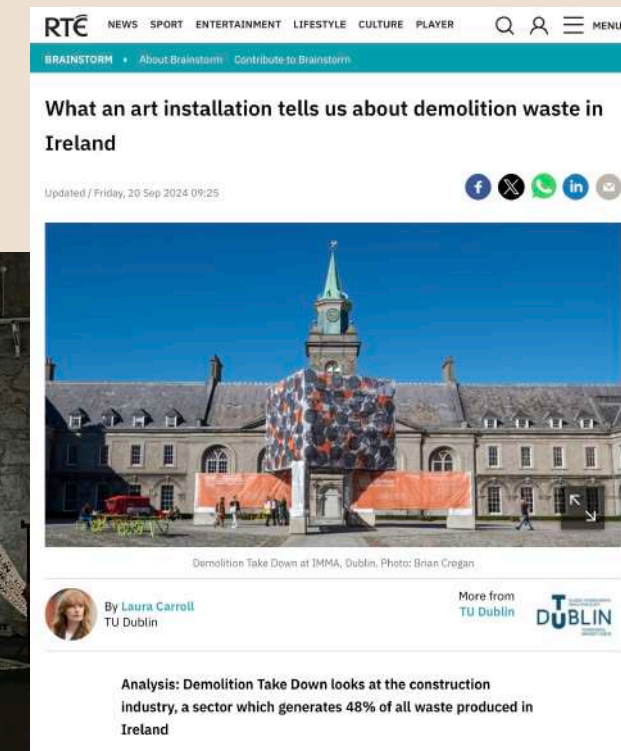
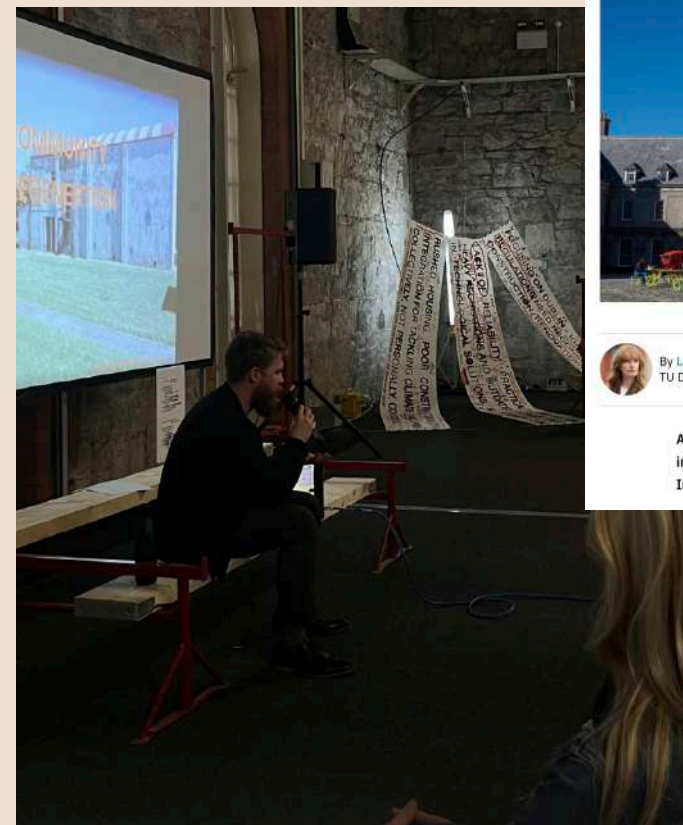
Additional coverage was featured in the following publications, however we do not have analytics for these articles:

- / The Irish Green Building Council's Newsletter - August 2024
- / The Surveyors Journal - August 2024
- / RIAI Newsletter - September 2024
- / Architecture Ireland Magazine - September 2024
- / Type publication - November 2024.

Reflection: During the interview phase of the project, it was highlighted by several Local Authorities that the EPA's 'Best practice guidelines for the preparation of resource & waste management plans for construction & demolition projects' booklet had been re-shared around several departments in different Local Authorities. It was highlight that Demolition Take Down was having a direct impact and helping to motivate a change in attitudes and behaviours at council level.

In September 2024 the EPA announced a new National By-Product Criteria for Greenfield Soil and Stone. The EPA is now streamlining the regulation of construction materials to promote the reuse of useful soil and stone that would traditionally end up as a waste in landfill. We cannot take full credit for this recent amendment but would like to think that through our conversations with the EPA in 2023 & 2024 it may have had some impact on its introduction. We see this as an opportunity to take further action following this first step in the right direction. With this barrier removed we should see a dramatic reduction in the scale of finite resources going to landfill.

Following the installation two Local Authorities have contacted the Demolition Take Down team to enquire about storage & reuse of materials that have been removed from their demolition or regeneration projects. There is clearly a desire to change current methods of practice but a nervousness in how to proceed. We hope going forward that the ideas highlighted in the installation can further influence system changes, policy changes and behavioural changes in the industry.





Reflection



Conclusion



Demolition Take Down are delighted with the scope of engagement and outcomes we achieved across the last year. It was encouraging to witness the level of participation and interest from both the industry and the public on the topic. It's clear that there is a desire for changes to be implemented sooner rather than later.

We are proud of the silos that were broken down over the past few months, both at education and industry level. Awareness of the Demolition Take Down project has grown, especially among local authorities who are dealing with the issue of Construction & Demolition wastes on a large scale and are actively looking for solutions. We intend to keep questioning and pushing back against current methods of practice and policy in Ireland, to encourage change. We will continue to find like-minded practitioners who are interested in rethinking the value system currently associated with our existing buildings. Our aim going forward would be to continue to utilise the information gathered during the past year and implement it into practice at Islander Architects.

We would like to thank all the project partners, collaborators and funders. A special thank you to Creative Ireland for giving us the platform to explore this topic, and to Tania, Dairne, Anne-Marie & Adele for their unwavering support, positivity and encouragement throughout.

We do not see this as a conclusion of the project, it is the initial call to action. We are keen to build upon this scaffold we have created for more sustainable practices and behaviours in the Irish construction industry.





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