

Donation Depot

Project Description

The Donation Depot is driven by one idea: making visible the hidden labour of charity retail. It examines a listed Victorian warehouse in Edinburgh's Granton as a community textile sorting centre for 7 local charities. A continuous sorting spine guides movement from donation to distribution, using a colour-coded, transparent wayfinding and sensory strategy to define spatial zones. Upcycled materials drawn from the donation stream are embedded throughout. The result is a space where architecture actively encourages participation, care, and collective responsibility within the circular textile economy.

Project Overview

A textile donation sorting centre serving seven charity organisations across Edinburgh, addressing the growing pressure placed on staff and volunteers within an overwhelmed donation system.

Set within the Granton Lighthouse Depot, a Category C listed building currently identified as at-risk, the design reuses an historic site once used for the storage, maintenance, and distribution of lighthouse equipment. This context informs the proposal, reimagining the depot as a hub for donation, sorting, repair, and redistribution.

A central "sorting spine" organises movement through the building, structuring a continuous process from donation to distribution. Donors are required to pre-sort items on entry, prioritising suitable contributions, while volunteers work within a shared sorting hall supported by repair, storage, and distribution spaces. The project makes visible the hidden labour behind charity retail.



Manifesto collage

Design Direction

Transparency, colour, and material are deployed as a unified spatial strategy. Strategic openings across floors and a perforated public-private bridge make the sorting process legible from every zone. A three-part colour system — red for unsorted, yellow for sorting, blue for distribution — functions simultaneously as wayfinding, cleanliness zoning, and a sensory narrative of transformation. Throughout, materials are drawn from the donation stream itself: compressed book pages, recycled denim acoustic panels, and cast-iron mesh referencing the depot's lighthouse heritage — so that the interior embodies the values it advocates.

National context

National donation context



339,000 tonnes

Of donated textiles diverted annually by UK charity shops (MDPI, 2023)

Scaling to individual shop



10,100 Charity shops (UK)
339000 tonnes ÷ 10000 = 33.9 tonnes per year per shop
0.65 tonnes per week

Regional network assumption



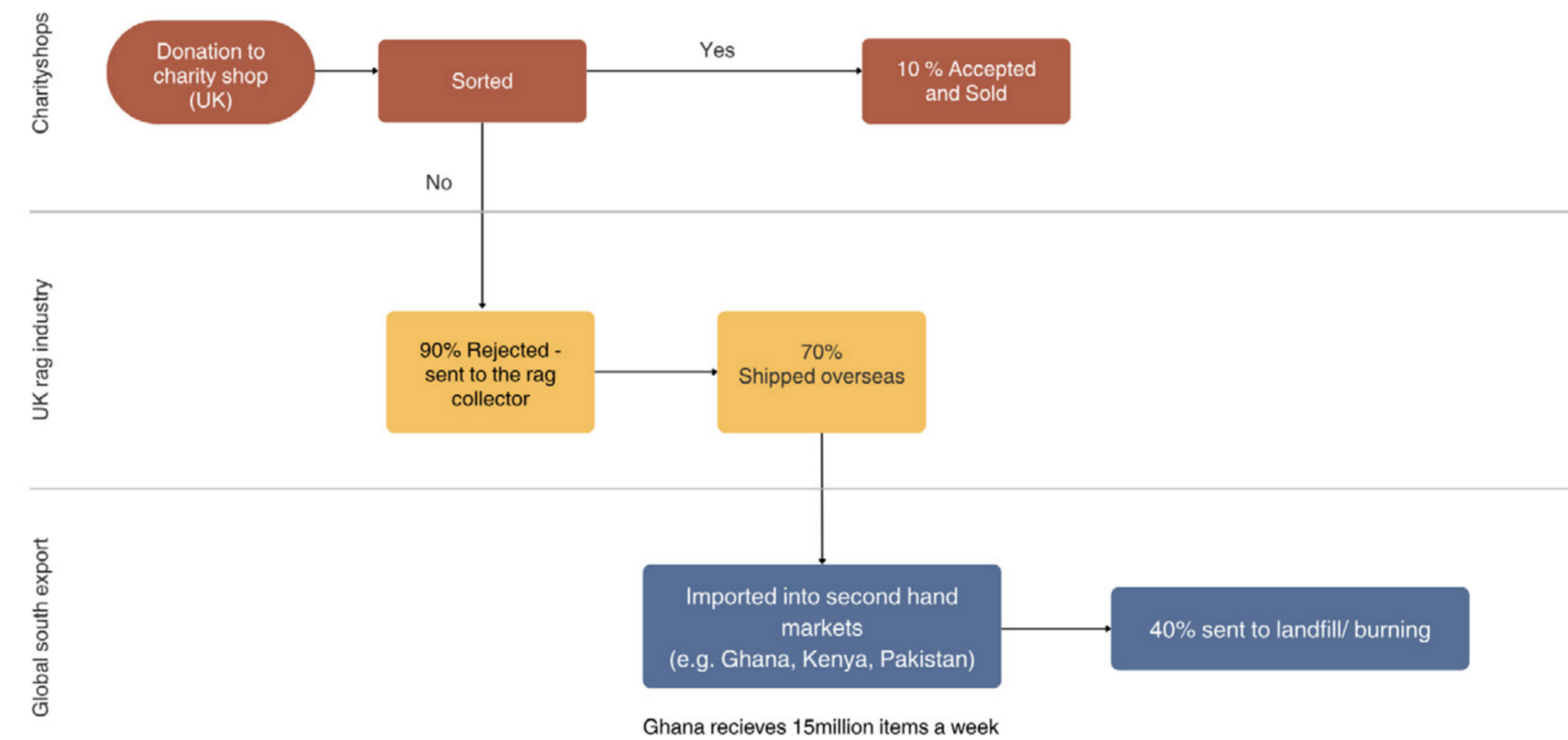
A network of 7 shops reflects the typical structure of chain charity retailers in Edinburgh

Total weekly donation intake



5 tonnes per week
7 shops × 0.65 tonnes = 4.55 tonnes per week

International context



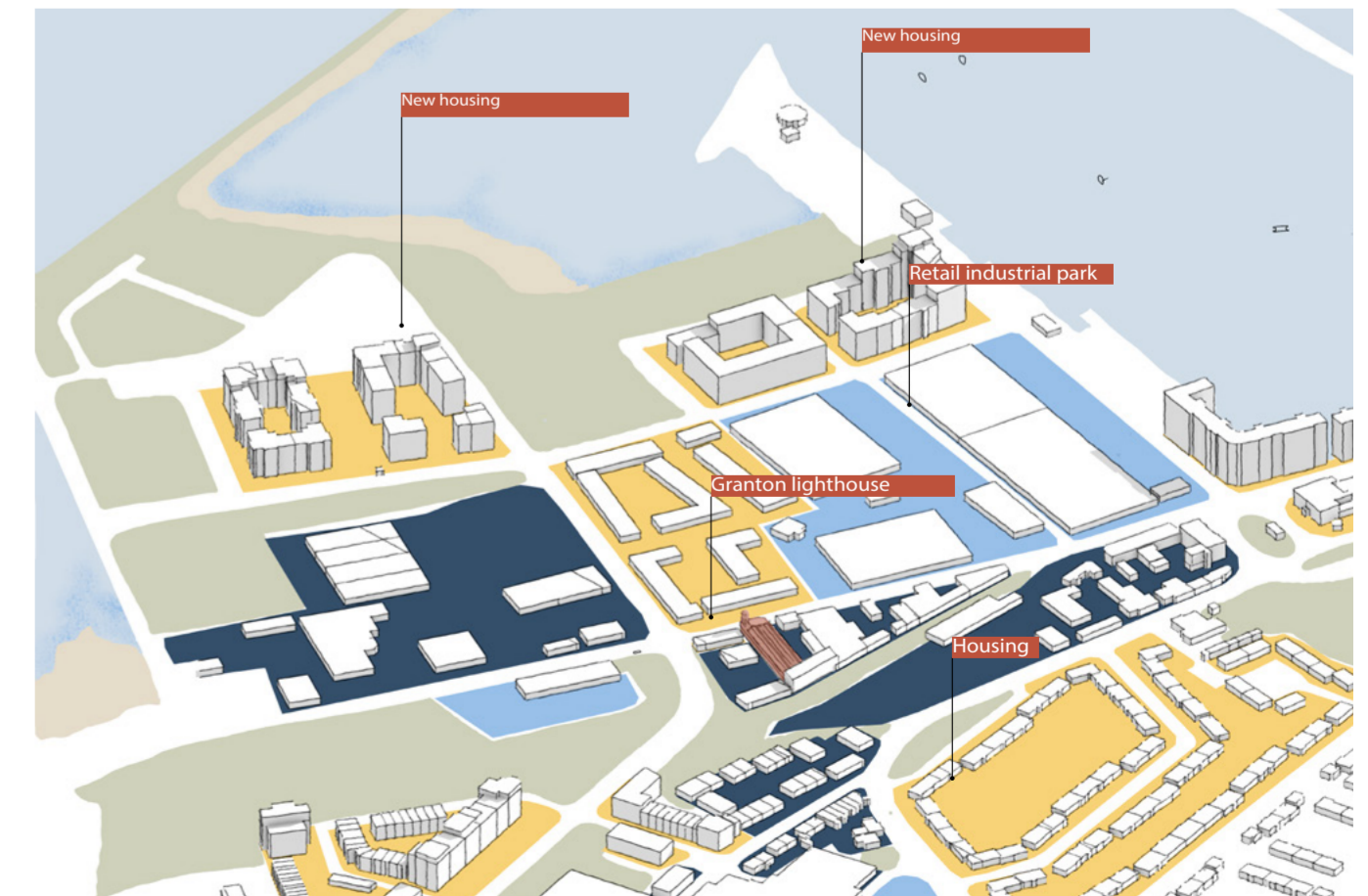
Donating to charity shops is widely perceived as a sustainable, community-focused act, offering donors a sense of social value through the belief that their unwanted items will be reused locally. However, the reality is far more complex. A significant proportion of donated textiles often cited at around 70% is not resold in local shops but instead enters global second-hand export markets.

This process is closely linked to the concept of waste colonialism, where western nations offload surplus or low-value waste onto countries in the Global South. While framed as reuse or recycling, these exports can overwhelm local economies, disrupt domestic textile industries, and contribute to environmental degradation when unsellable items are ultimately discarded. In this context, the charity shop becomes part of a larger, uneven global system of material circulation, where the perceived sustainability of donation masks the displacement of waste beyond local and national boundaries.

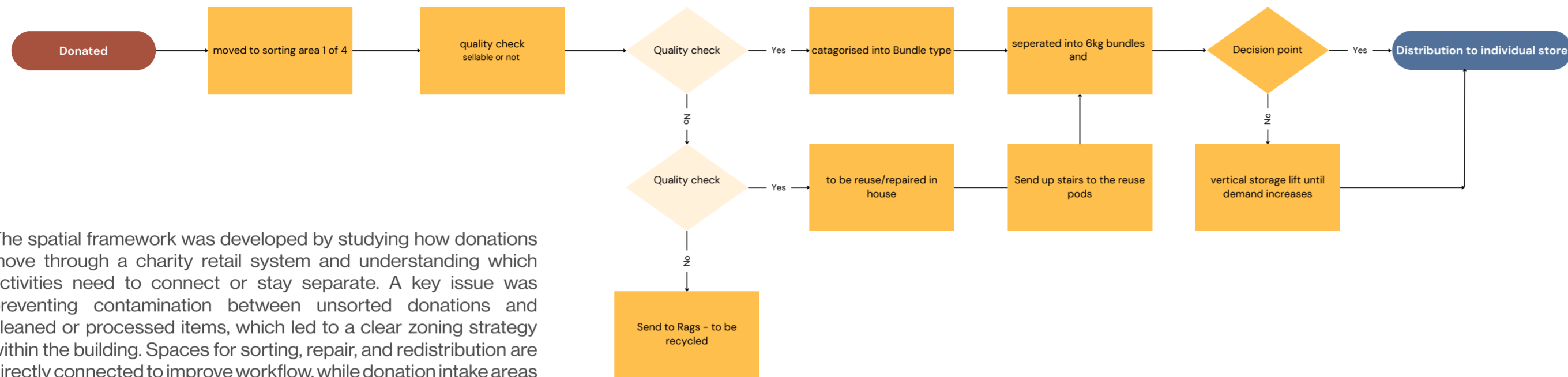
Site information

The Granton Lighthouse Depot, 20–22 West Harbour Road, Edinburgh EH5 1PN, is a Category C listed Victorian red-brick warehouse complex dating from 1860, currently identified as at-risk and awaiting regeneration by 2030. Originally serving as the Northern Lighthouse Board's central hub for storing, maintaining, and distributing lighthouse equipment, the building's industrial character and history as a workshop and distribution centre directly inform the proposal establishing a continuity of use rather than a break from it.

Of the depot's 1,730 m², 1,312 m² are reimagined as a community-focused Donation Depot: a centre for donation, sorting, repair, and redistribution serving seven Edinburgh charity shops. Situated in Granton, a predominantly working-class neighbourhood with above-average unemployment and no existing charity retail provision, the project responds directly to local social need. The site is not incidental to the design. Its heritage, its risk status, and its community context are what make the intervention necessary.



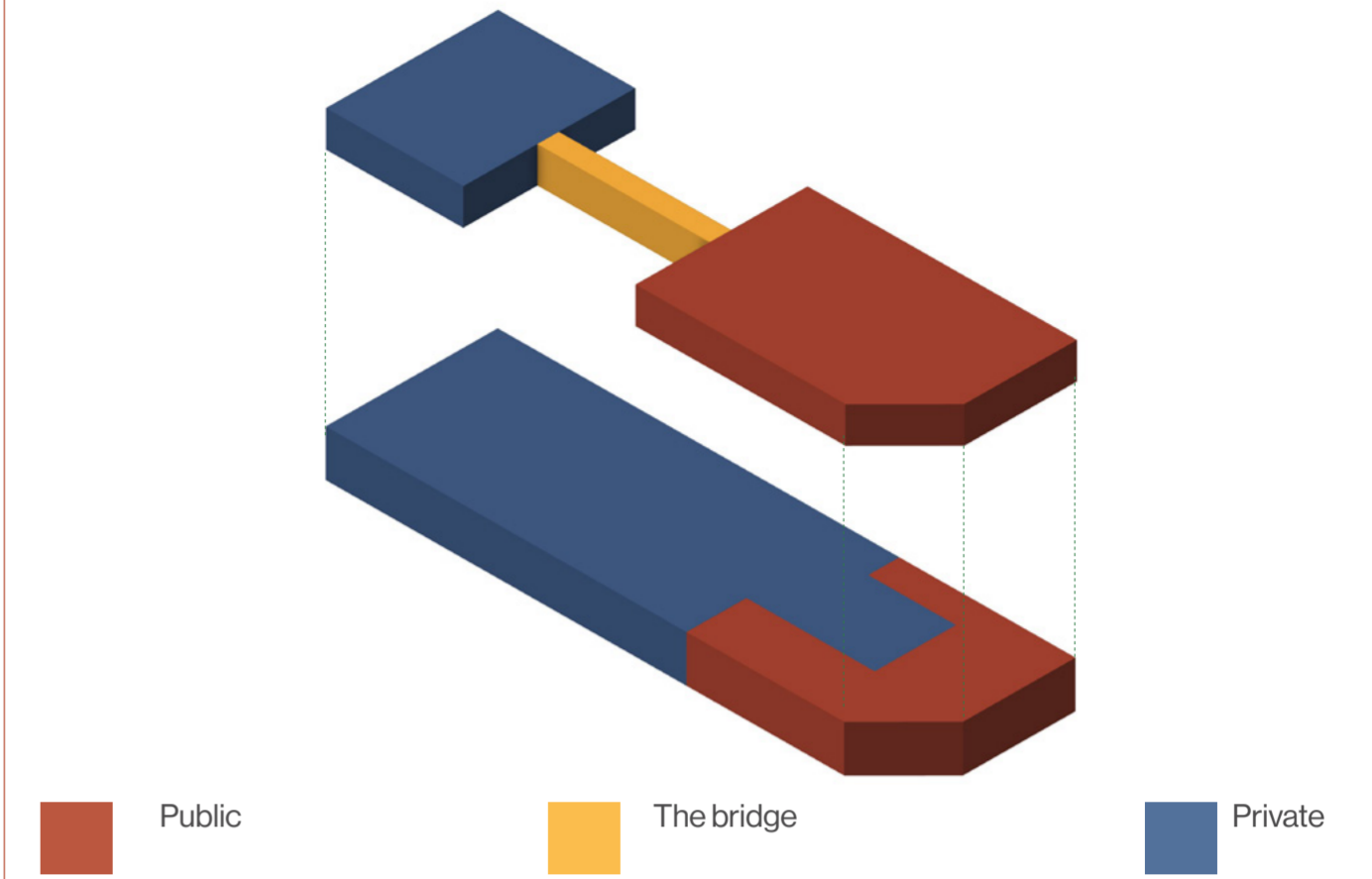
Organisation and sequencing



The spatial framework was developed by studying how donations move through a charity retail system and understanding which activities need to connect or stay separate. A key issue was preventing contamination between unsorted donations and cleaned or processed items, which led to a clear zoning strategy within the building. Spaces for sorting, repair, and redistribution are directly connected to improve workflow, while donation intake areas are kept separate from organised stock.

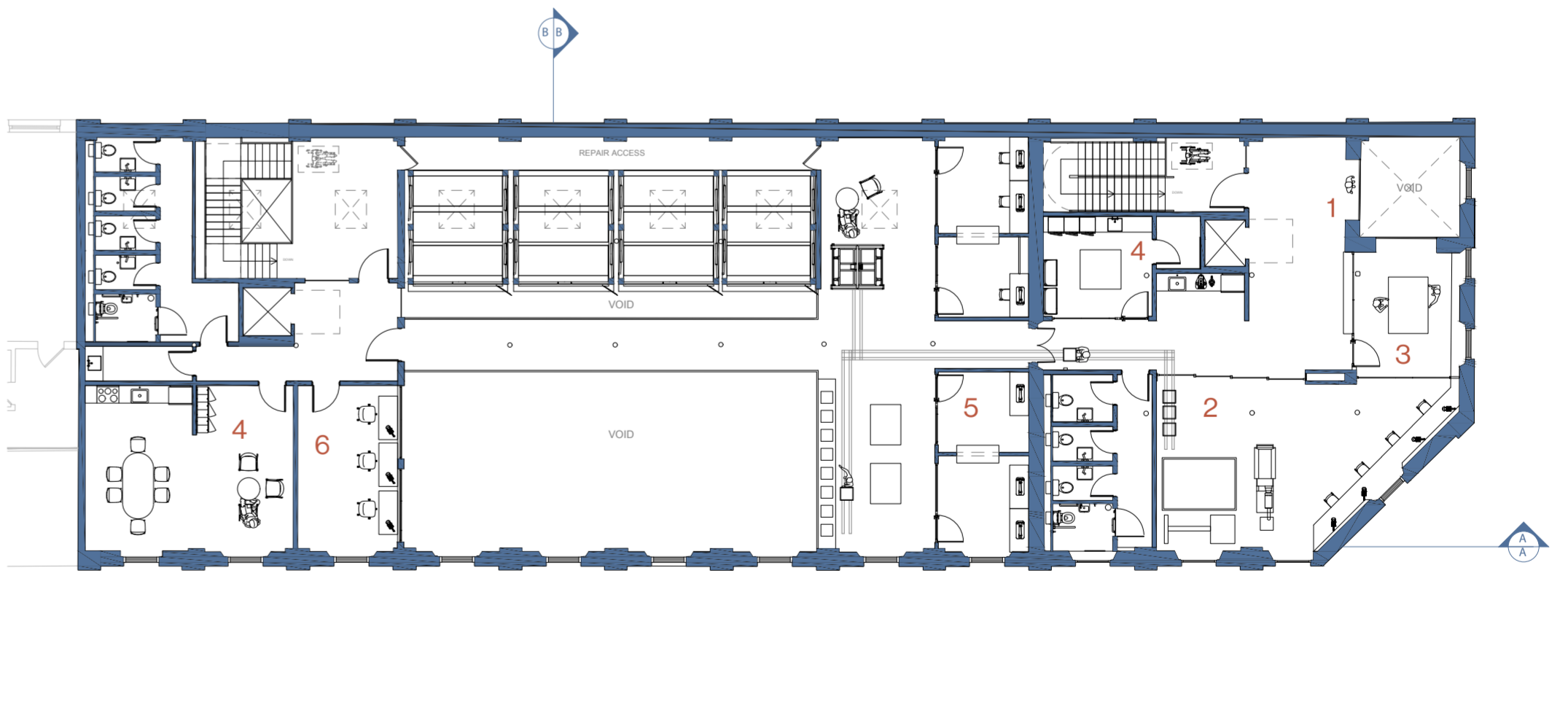
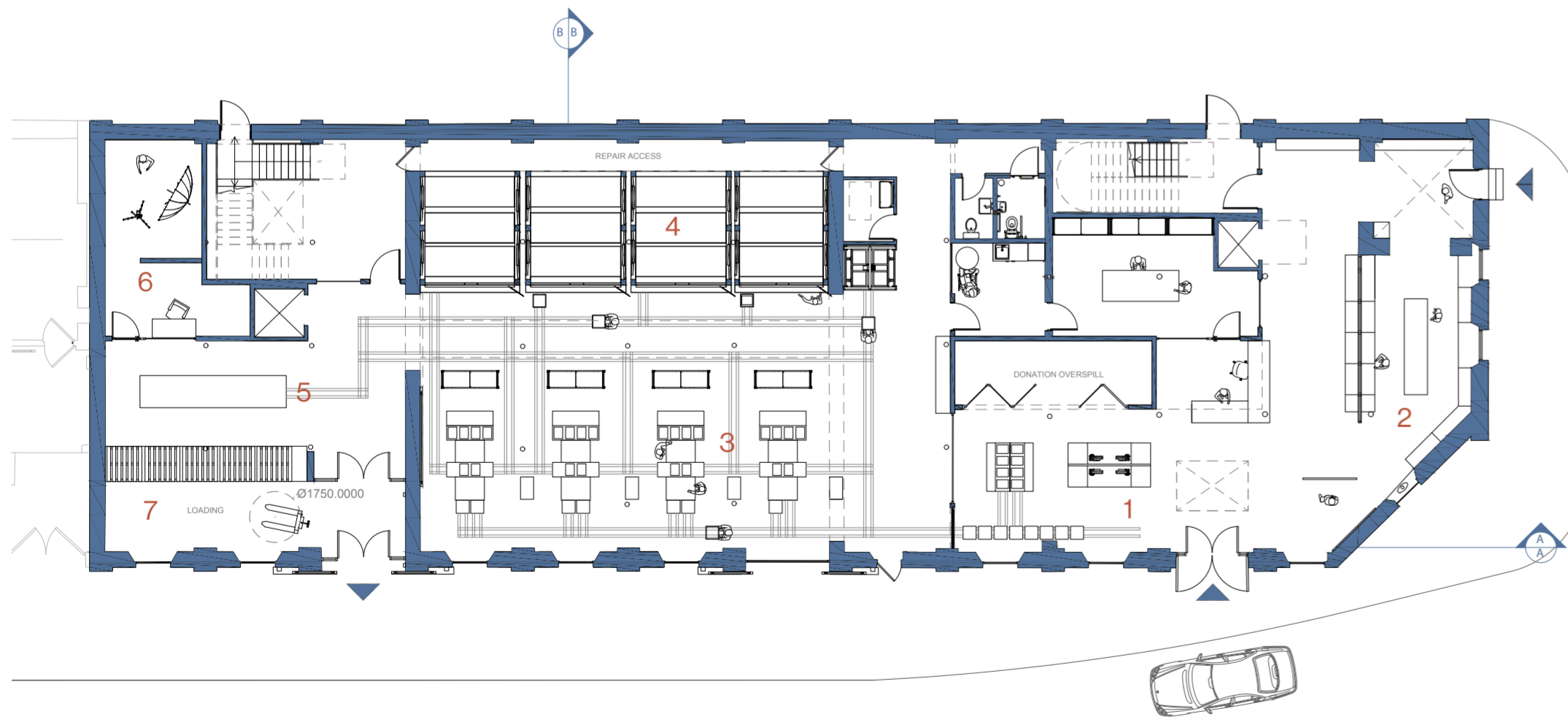
As the project developed, the focus moved away from traditional retail spaces and toward the larger problems facing charity organisations. Charity shops are increasingly overwhelmed by large amounts of low-quality and often unhygienic clothing donations, creating pressure on staff, volunteers, and waste systems. In response, the proposal prioritises spaces for sorting, reuse, recycling, and distribution rather than sales.

Public vs private strategy



The Bridge functions as a dual-purpose circulation route and observation deck, acting as a physical and symbolic link between the public and private sectors of the Depot. While the private side remains a secured staff zone via key-card access, the bridge's visual permeability creates a 'blurred boundary.' By positioning the public alongside the active sorting areas, the design demystifies back-of-house operations. This transparency serves as a silent invitation to the community; by making the labour of sorting visible and celebrated, the architecture signals that the centre is a participatory space, encouraging visitors to transition from donors to active volunteers.

General Arrangement drawings



- 1- Donation drop-off
- 2- Retail
- 3- Sorting
- 4- Automated storage
- 5- Distribution
- 6- Online retail photography
- 7- Loading

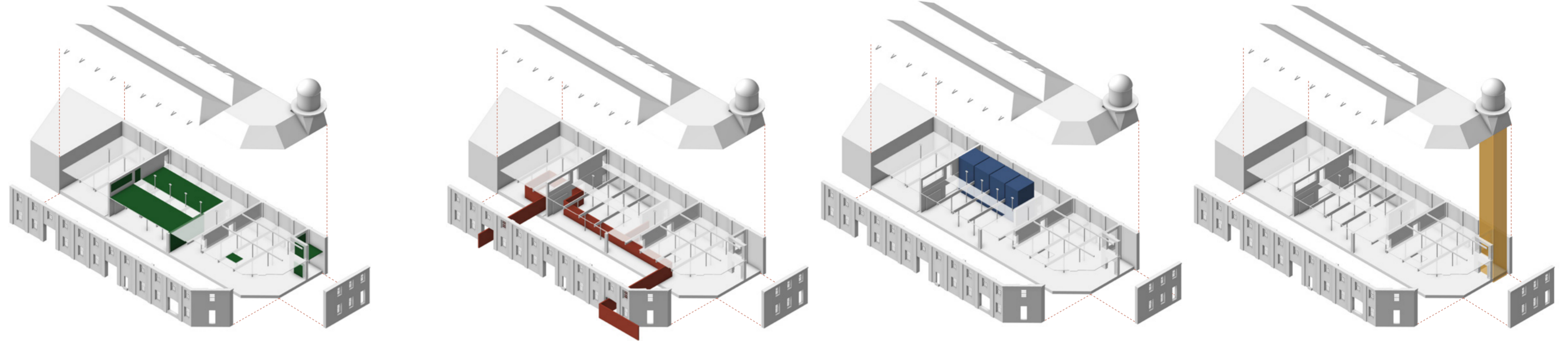
- 1- Lighthouse viewing
- 2- Fibre Recycling
- 3- Fibre workshop
- 4- Laundry
- 5- Reuse pods
- 6- Managers office
- 7- Volunteer and staff break room

Spatial strategy

The design strategies illustrated here demonstrate how an initial focus on sectional visibility and spatial connectivity has been translated into a series of interventions operating across multiple scales, from strategic openings to circulation routes informed by theories of transparency as a tool of wayfinding and participation.

The insertion of the Four Beacons (Vertical Lift Storage Modules) functions both as essential infrastructure and as a conceptual wayfinding device, using light, movement and transparency to celebrate the journey of donated goods throughout the building.

A continuous sorting circulation spine weaves through the length of the depot, creating visual connections between donors, volunteers and staff. By exposing the otherwise hidden processes of sorting and redistribution, the design fosters a sense of collaboration, encourages community participation and promotes greater awareness of donation quality through increased transparency.



■ Openings to create visibility

Strategic openings create visual connections across floors, allowing visitors to observe the sorting and redistribution process while making the building's work flow more transparent and legible.

■ Sorting spine Circulation

Circulation follows the building's linear form, guiding visitors through the donation-to-distribution journey and reinforcing themes of visibility, process, and reuse.

■ The storage beacons

Four illuminated storage modules express the circular economy, guiding donors and volunteers while enhancing visibility and awareness throughout the building.

■ The light well

The lighthouse void links donation, retail, and reuse spaces, acting as a light well and social connector that strengthens community engagement and visibility within the building.

Sorting Spine

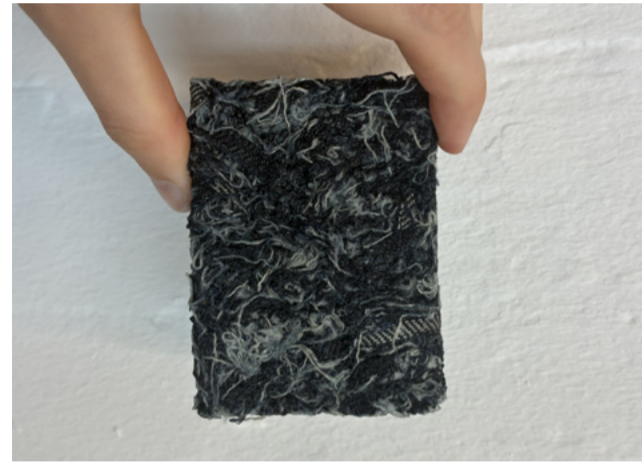
Long section following the sorting spine from Donation to distribution



Materials



Around half of donated books are discarded, creating an opportunity to transform this waste stream into a valuable material resource. By compressing and bonding discarded pages into durable sheet panels, the project creates an interior wall finish that reflects the building's ethos of reuse, repair and material recovery.

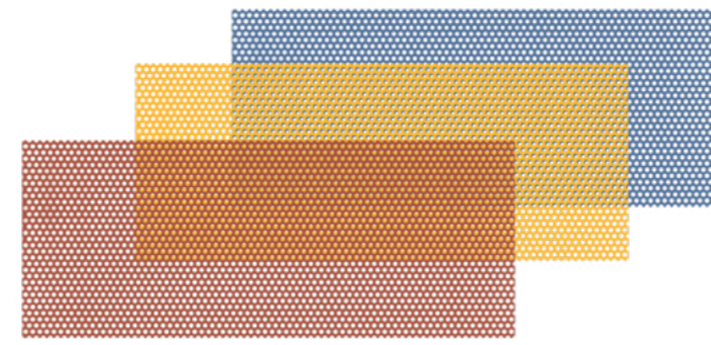


The building's poor acoustics, combined with the structural qualities of discarded denim, inspired the reuse of textile fibres as compressed acoustic panels. Produced within the building's fibre recycling area, these panels demonstrate how donated materials can be transformed into valuable interior products. They are integrated throughout the space as hanging acoustic signage and infill panels between the existing roof trusses.



Perforated aluminium is paired with recycled denim acoustic panels to improve the building's acoustic performance while maintaining visual transparency. Inspired by the cast-iron detailing found throughout the Granton Lighthouse Depot, the material is used across signage and the public-private bridge to create a consistent architectural language.

Colour and transparency



Red for unsorted donations, yellow for sorting, and blue for distribution translate the operational workflow into a clear sensory and spatial language. The colour strategy functions simultaneously as wayfinding, cleanliness zoning, and a visual expression of the donation process, making complex systems immediately legible to users.

This approach supports volunteers who may only participate occasionally, allowing them to intuitively navigate the sorting process without extensive training. Layered with powder-coated perforated aluminium screens, the colour-coded interventions create varying degrees of transparency, enabling staff, volunteers and donors to visually track the progression of donated goods through the building. As items move through each stage, the architecture makes processes of care, repair and redistribution visible, reinforcing participation and collective responsibility.



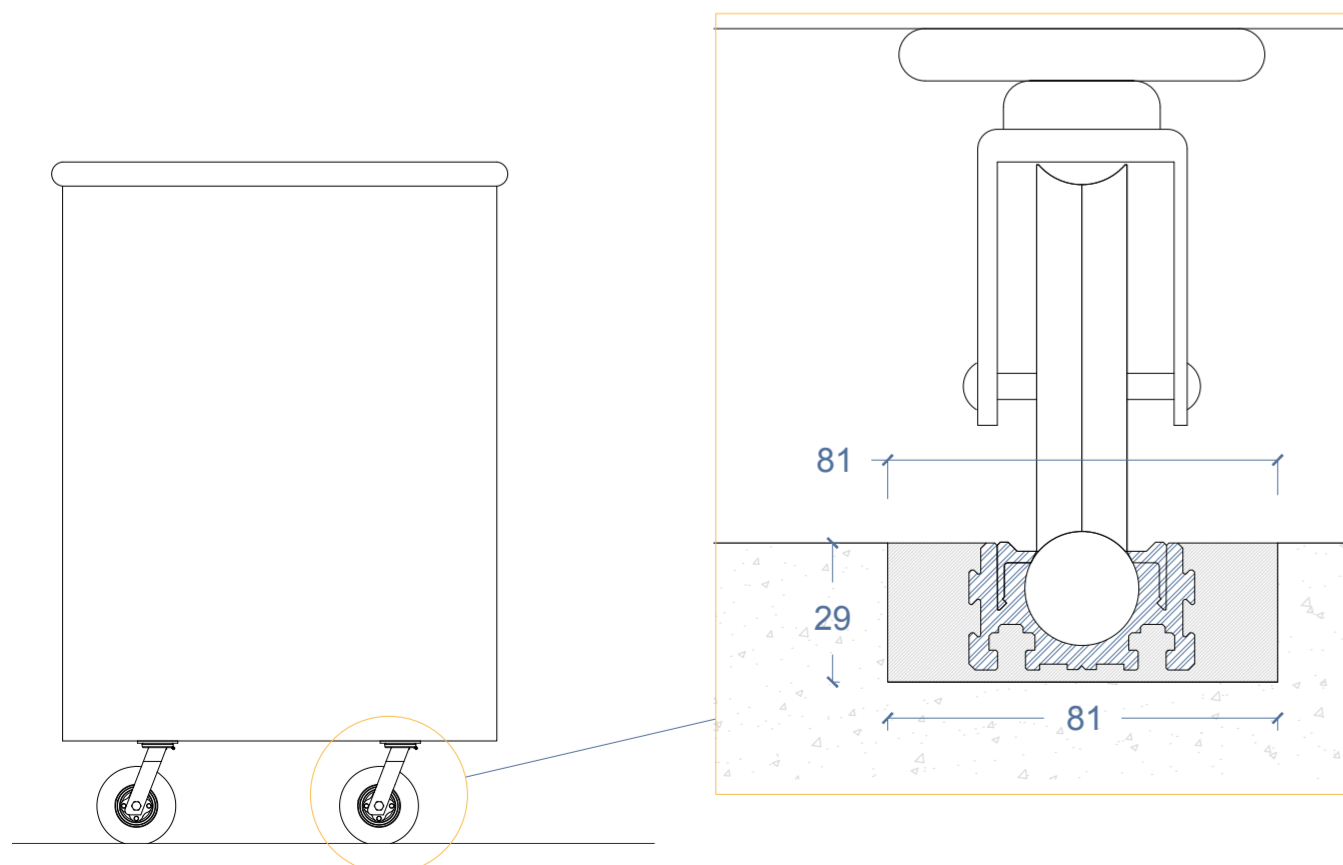
Sorting bay 3 model

Sectional model of Sorting Bay 3 explores the sorting spine as a spatial gradient, transitioning from unsorted material input to organised distribution. Transparency and layered colour are used to reveal stages of processing, making the flow legible as both structure and narrative.

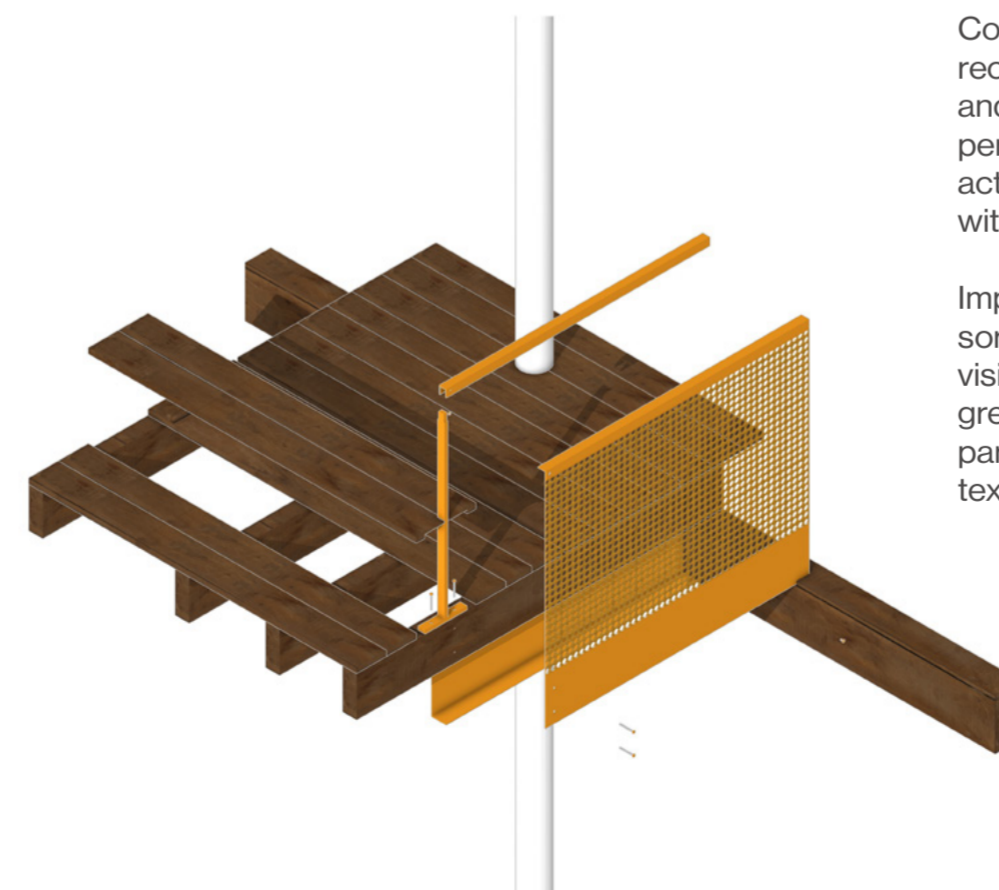
Details that aid experience

Not to scale

Assisted donation trolley rails



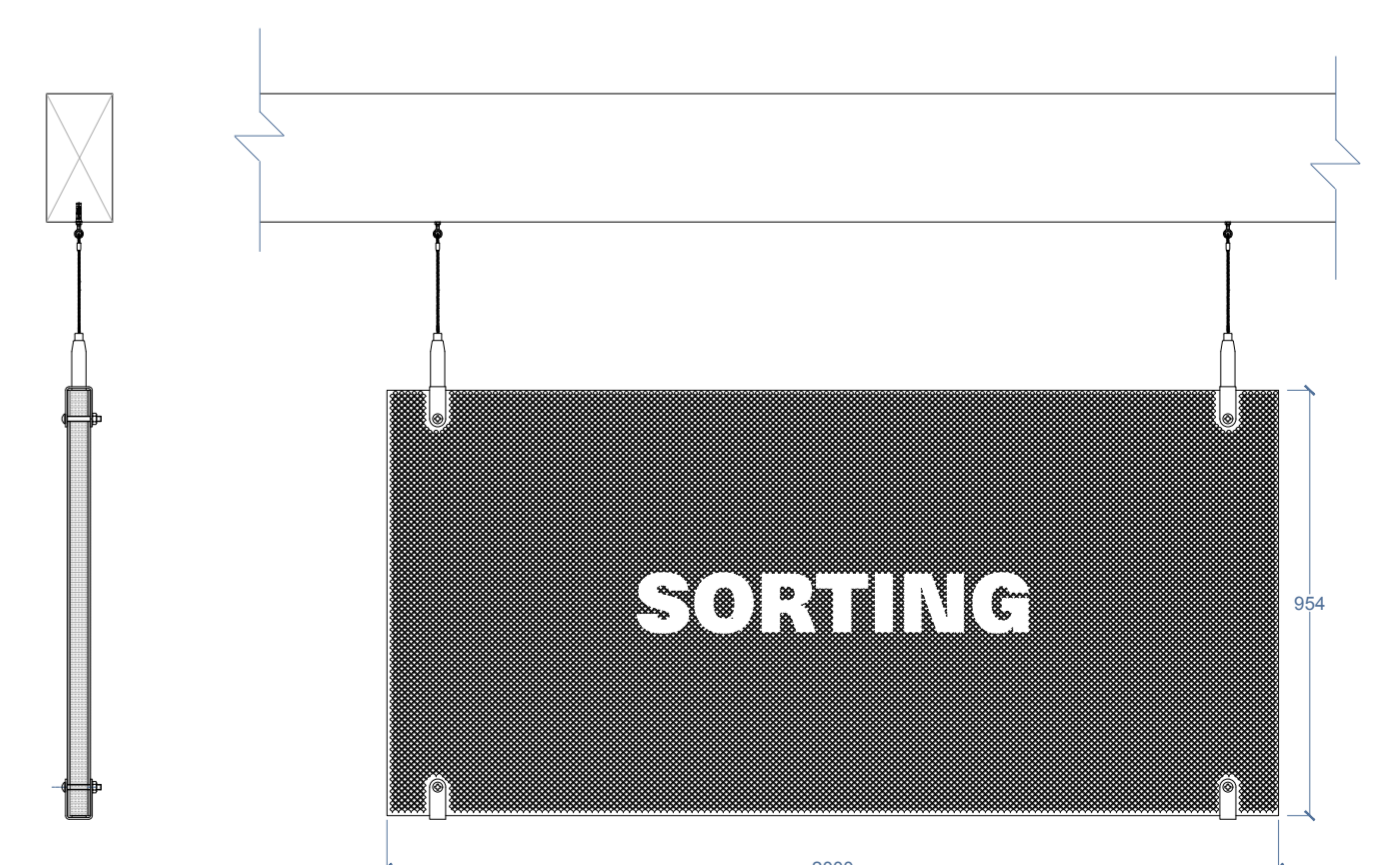
Public vs private bridge



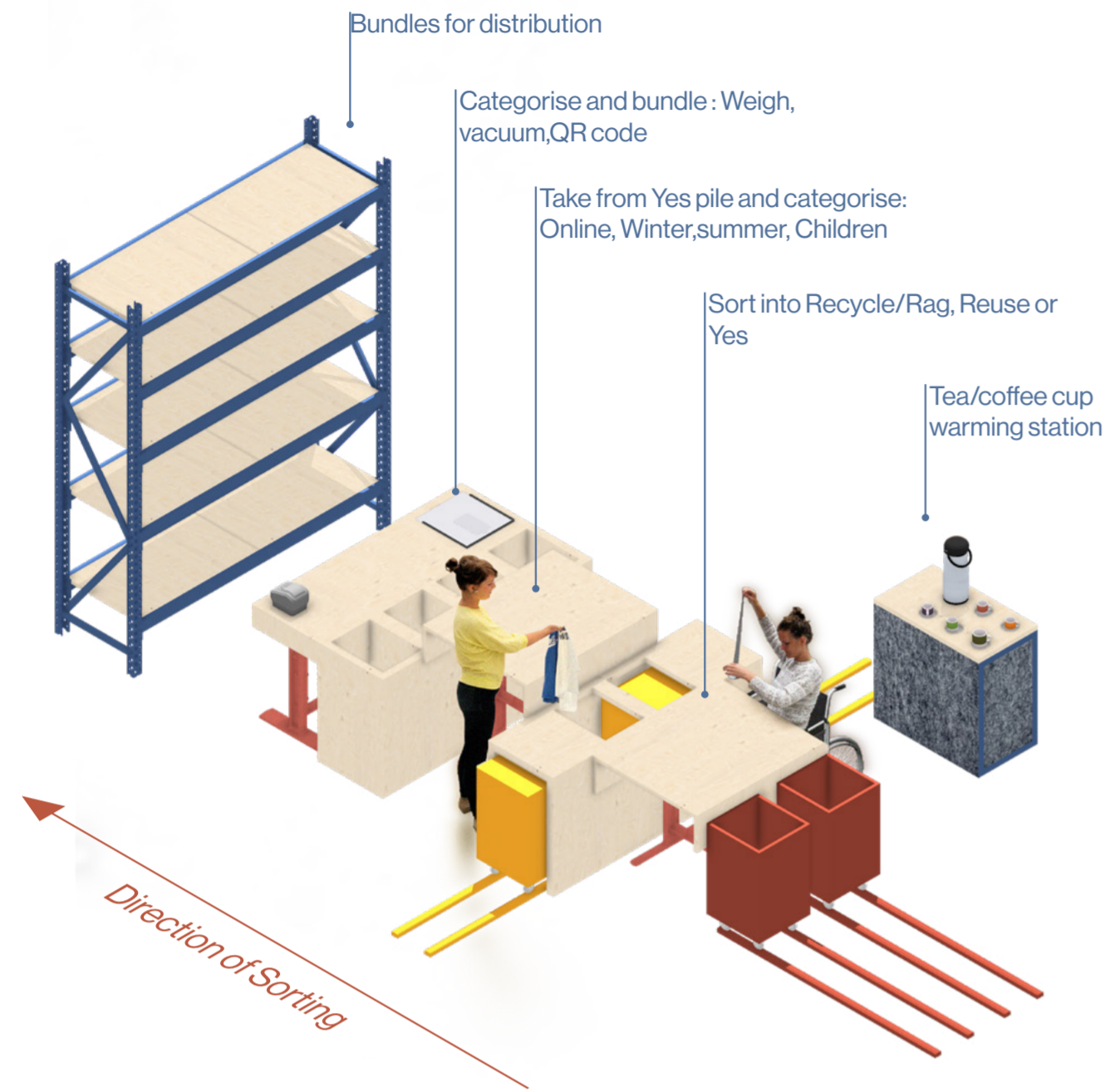
Concept: Built from reclaimed timber beams and clad in illuminated perforated metal, the bridge acts as a visible landmark within the depot.

Impact: It reveals the sorting process to visitors, encouraging greater awareness and participation in the circular textile economy.

Wayfinding acoustic signage



The sorting hall



The sorting system is organised across three linear tables designed to support collaborative working in groups of five to six people. Each table is height-adjustable between 700 mm and 1100 mm, ensuring accessibility for wheelchair users, elderly participants, and those who prefer to stand.

At the first station, the "Yes / No" table, donated items are assessed and separated into two streams: unsuitable items are directed to rag or fibre recycling within the reuse hub, while items suitable for resale are passed along to the next stage. At the categorising table, accepted donations are sorted into four groups: premium, winter, summer, and children's items.

Once a category bin is full, items move to the final station, the bundling table, where they are compressed into 6 kg vacuum-sealed bundles. These bundles are then placed on the adjacent blue distribution shelving, ready for collection and delivery to retail locations, or transferred to the automated storage system if not immediately required.



Sorting Hall Render

Activities



Donation drop-off

The Donation Drop-off area serves as a public interface where visitors weigh and record their contributions, utilizing digital interfaces for Gift Aid registration. To maintain intake quality, donors are actively redirected from low-value items toward the upstairs reuse and recycling hub. Strategic visibility into the main Sorting Hall demystifies the 'back-of-house' operations, fostering community awareness and engagement.



Sorting Hall Axo

Natural light falls across 4 height-adjustable sorting bays, each supporting collaborative groups of five to six. Denim acoustic panels soften the industrial acoustics of the Victorian roof structure, while the yellow zoning makes the active sorting area immediately legible. Donations arrive unsorted and leave as compressed, vacuum-sealed bundles. Trolley rails and tea warming stations punctuate the workflow, reducing physical strain without removing the social quality of the work.



Reuse pods

The Reuse Pods directly intercept unsellable textiles from the Sorting Hall, diverting them into a creative local stream. Accessible to the public via a booking and induction service, these spaces empower the community to mend, upcycle, or repurpose garments. Whether repairing items for personal use or refurbishing them for donation.