

ARE MICROBES THE FUTURE OF FASHION?

# BIO MADE

## BIO TEXTILES DESIGN CENTER | EXHIBITION SPACE

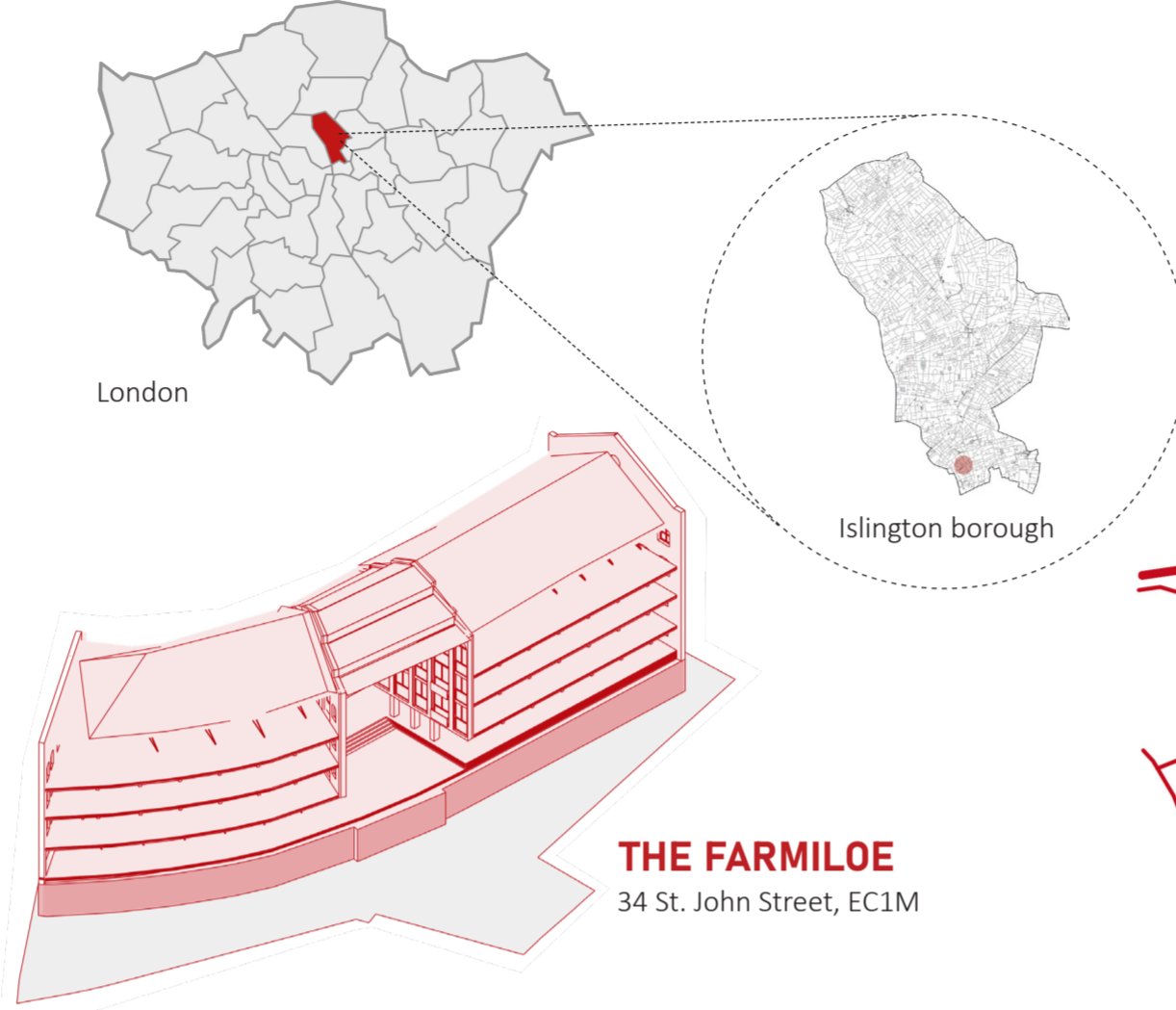
The integration of science within design practise is opening new possibilities to move towards a sustainable future. The bio-design field has the potential to change the way our clothes are sourced, produced, and consumed by incorporating living organisms to make materials that are biodegradable and require minimal resources, toxins, or water.

Its development is crucial for expanding its applications beyond fashion to other sectors such as architecture, medicine, etc.

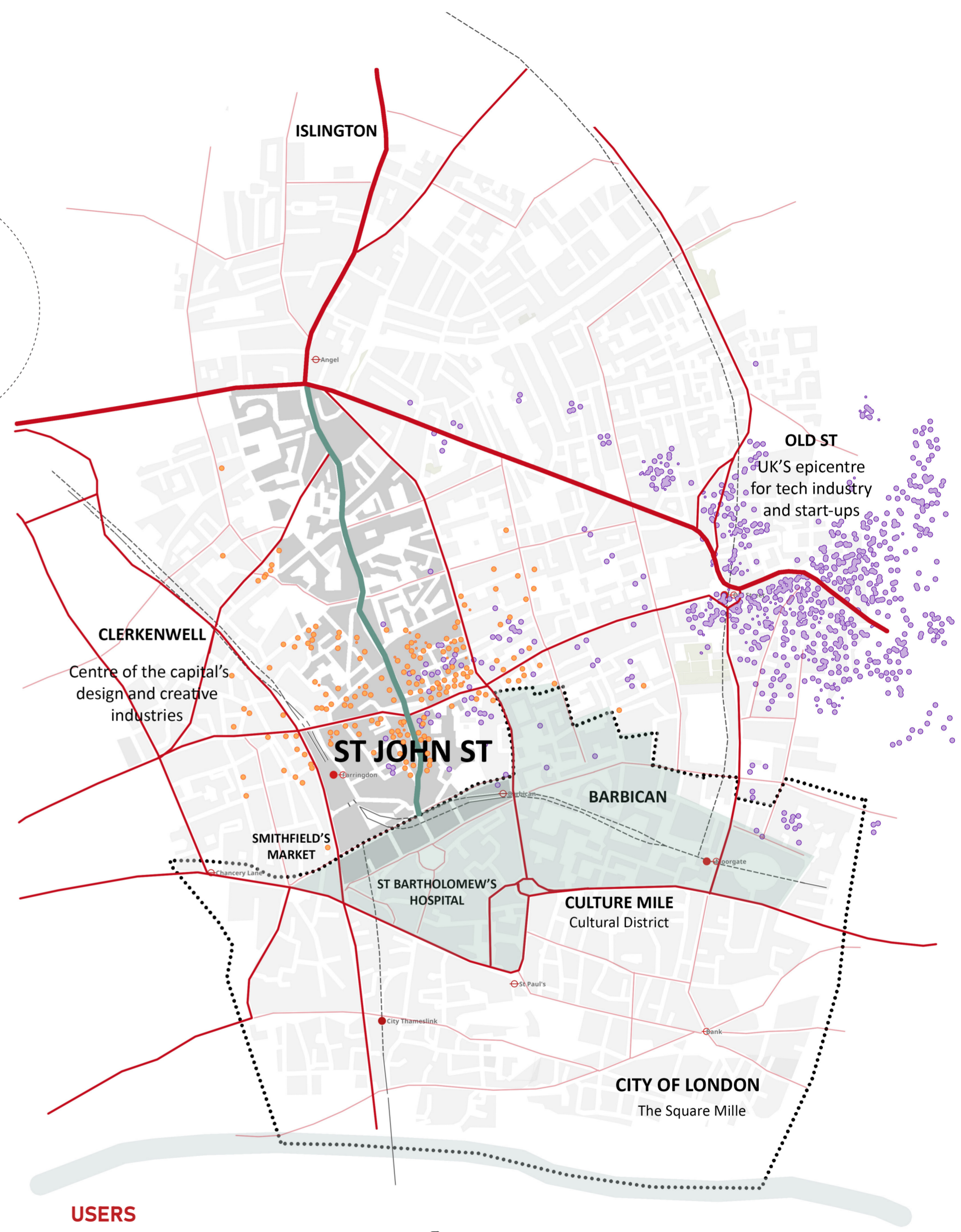
The majority of our garments are made in underdeveloped countries where environmental laws are weak or non-existent. The goal of this project is to localise fashion and provide a space where there are no barriers between producers and consumers to raise public awareness and positive change.

**BIO MADE** aims to foster innovation and promote sustainability. The redevelopment of the Farmiloe building includes exhibition spaces, a pop-up shop, and facilities for the creative industries of the area, comprised of studios, workshops, and laboratories.

### Site Location



**THE FARMILOE**  
34 St. John Street, EC1M



## THE ENVIRONMENTAL IMPACT OF FASHION



### RESOURCES

5 trillion liters of water are used by the fashion industry each year.



### POLLUTION

Toxic chemicals are used in the manufacturing process, such as in fabric dyeing and treatments.



### WASTE

Polyester, the most used fiber in garments takes up to 200 years to decompose.

## THE AREA



**CREATIVES & START-UPS**  
The site is in close proximity to Clerkenwell, with a high concentration of design businesses and start-ups close to Old St roundabout.

**SHOWROOMS**  
Over 80 showrooms of textiles, furniture and interiors span along St John St and Clerkenwell Rd.

**CULTURE MILE**  
Aims for the area to become a hub of creativity and innovation.

## USERS



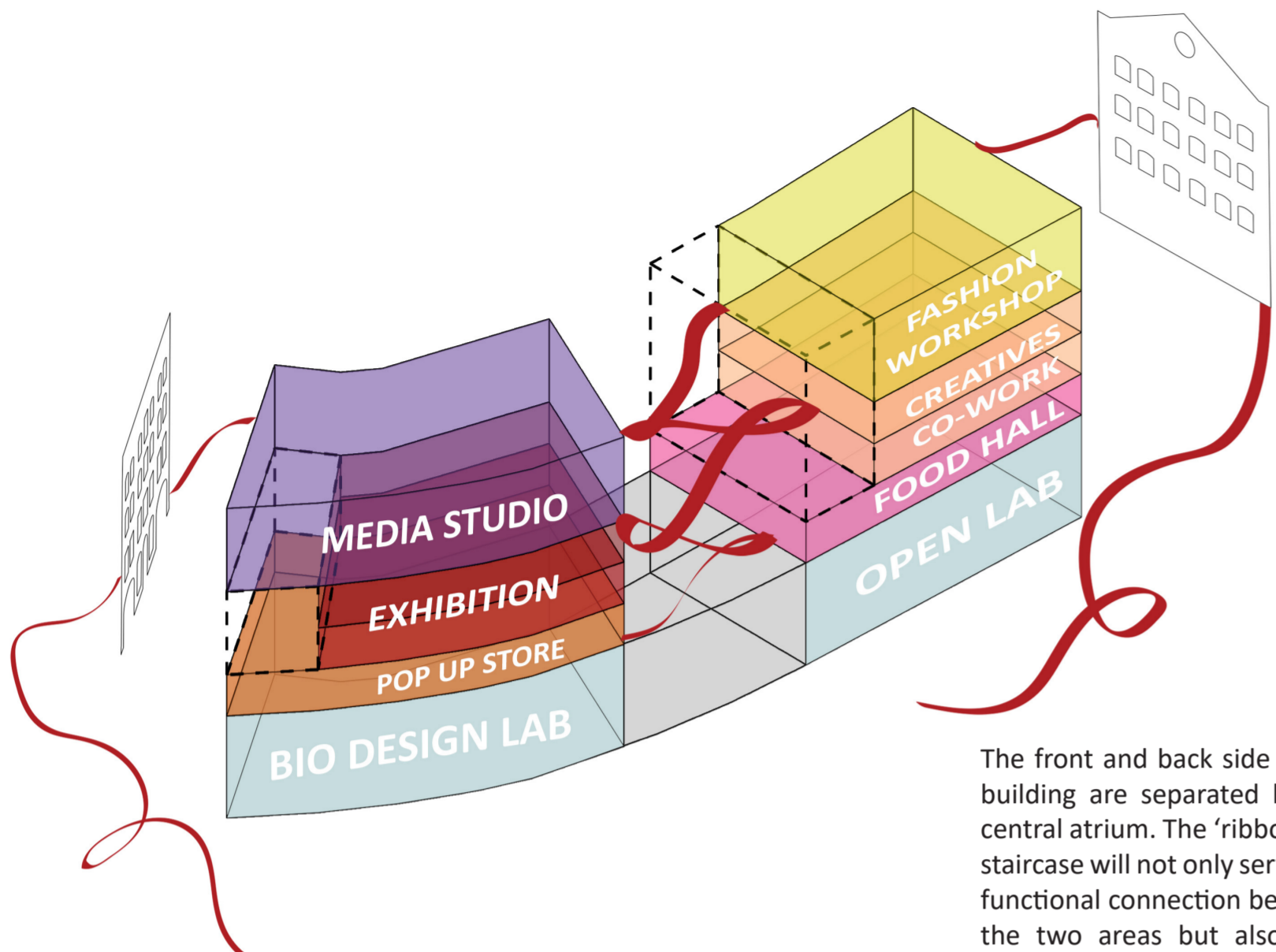
**CREATIVES**

**COMMUNITY**

**START-UPS**

# THE BUILDING

# CONCEPT

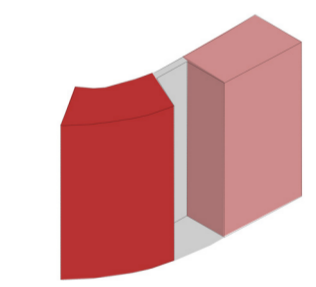


The front and back side of the building are separated by the central atrium. The 'ribbon' like staircase will not only serve as a functional connection between the two areas but also as a visually striking centerpiece of the building's design.



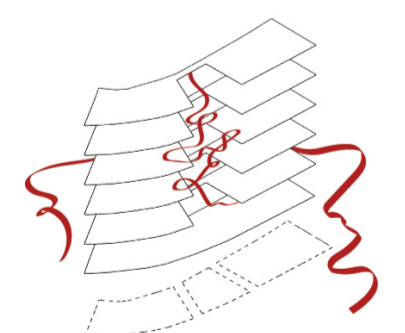
Working with microorganisms to address environmental issues and shift to sustainable means of production.

## MASSING



The site is divided into three parts

## CONNECTED

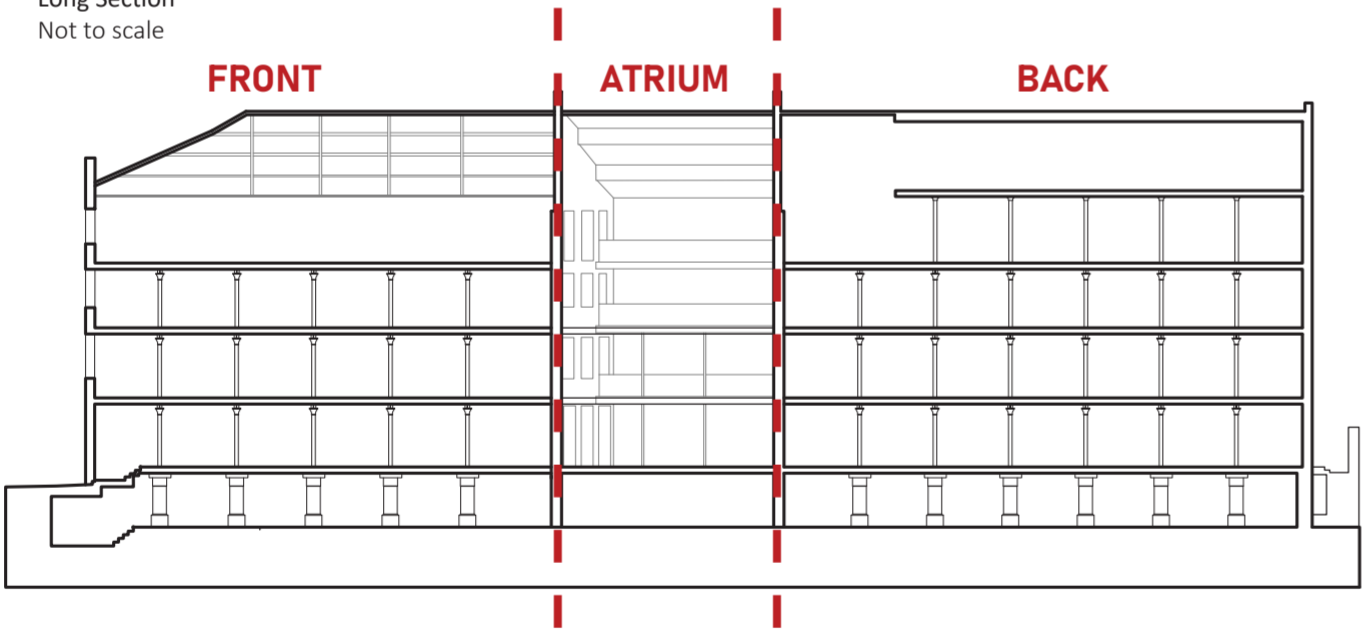


## BY A RIBBON



The Atrium - Internal Courtyard

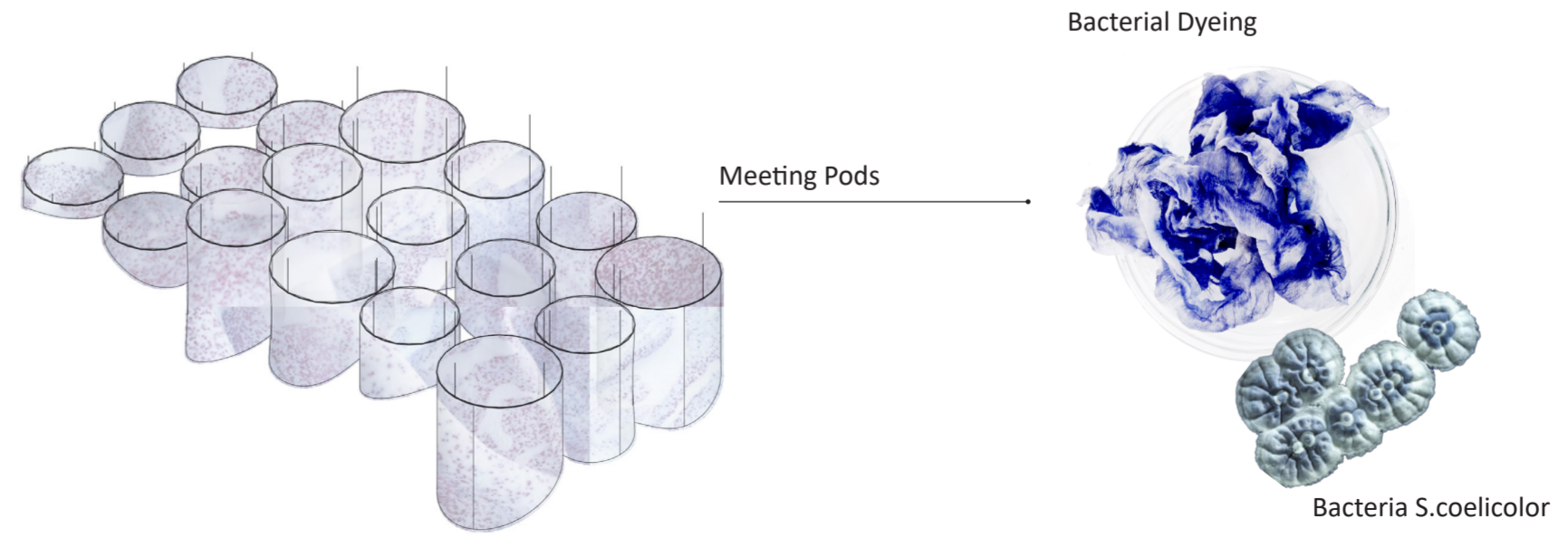
Long Section  
Not to scale



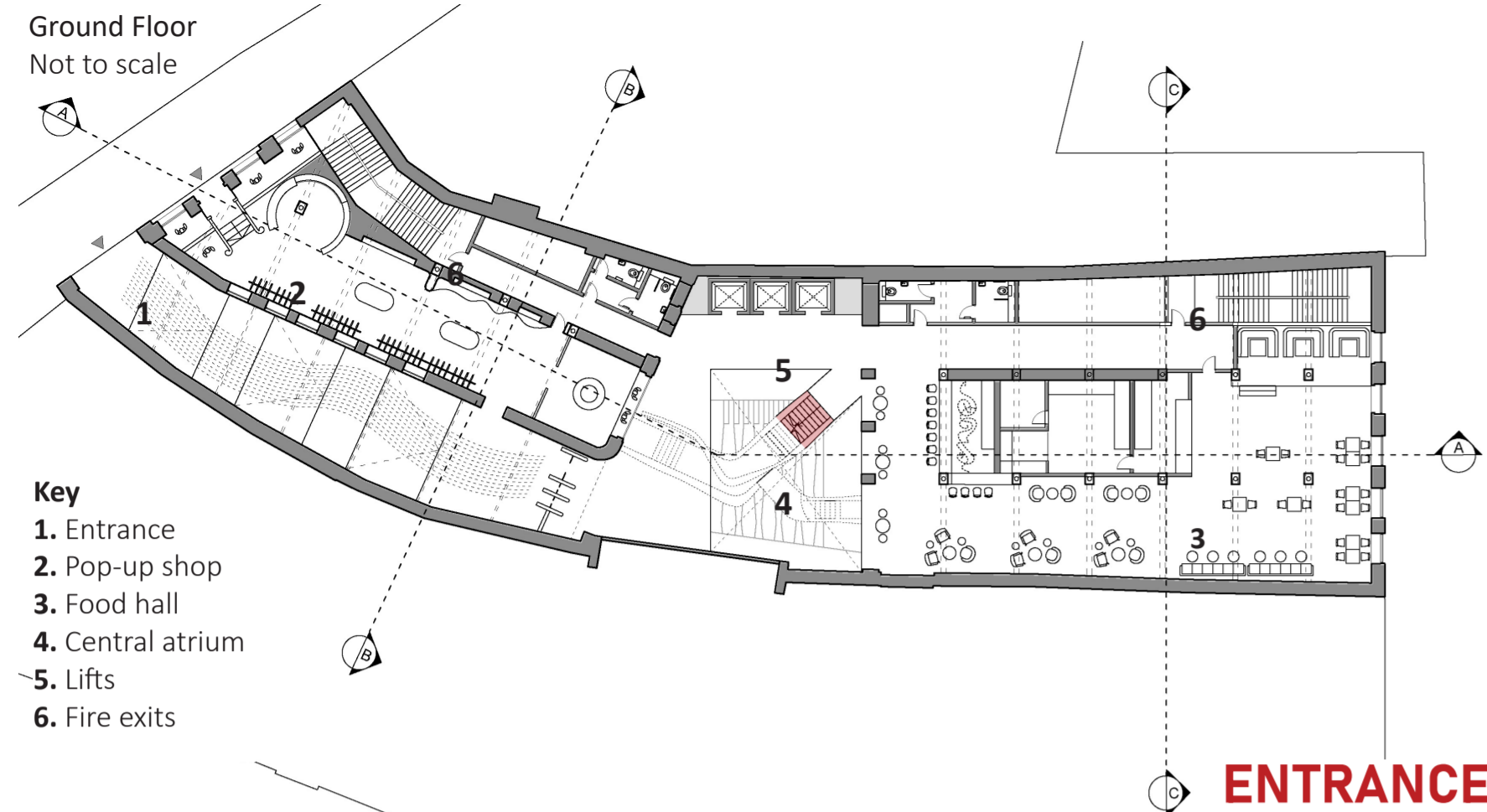
Short Section  
Not to scale



Bacteria *S.coelicolor* generates pigment molecules that can attach themselves to fibres without the use of chemicals.



# PROPOSAL



The ramped entrance features a bio fabric ceiling installation leading visitors into the central atrium.

# POP-UP

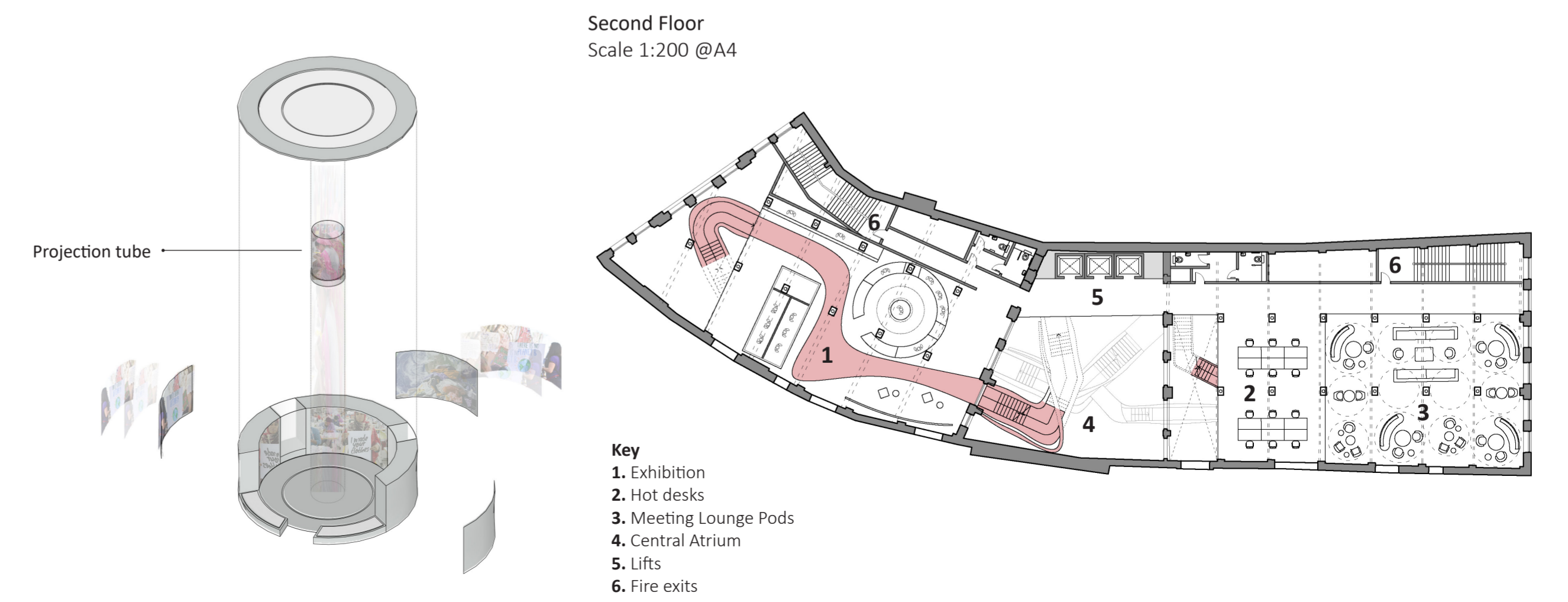


The pop-up shop is where bio garments produced in house are put on sale, appealing to the creative industries of the area.

# EXHIBITION



Interactive displays raise awareness as visitors are encouraged to rethink their relationship with fashion and consider sustainable choices



# BIODESIGN FACILITIES

# GROW LAB



The lab becomes part of the exhibition, the glazed walls allow visitors to see the collaboration between science and design.

# FASHION WORKSHOP

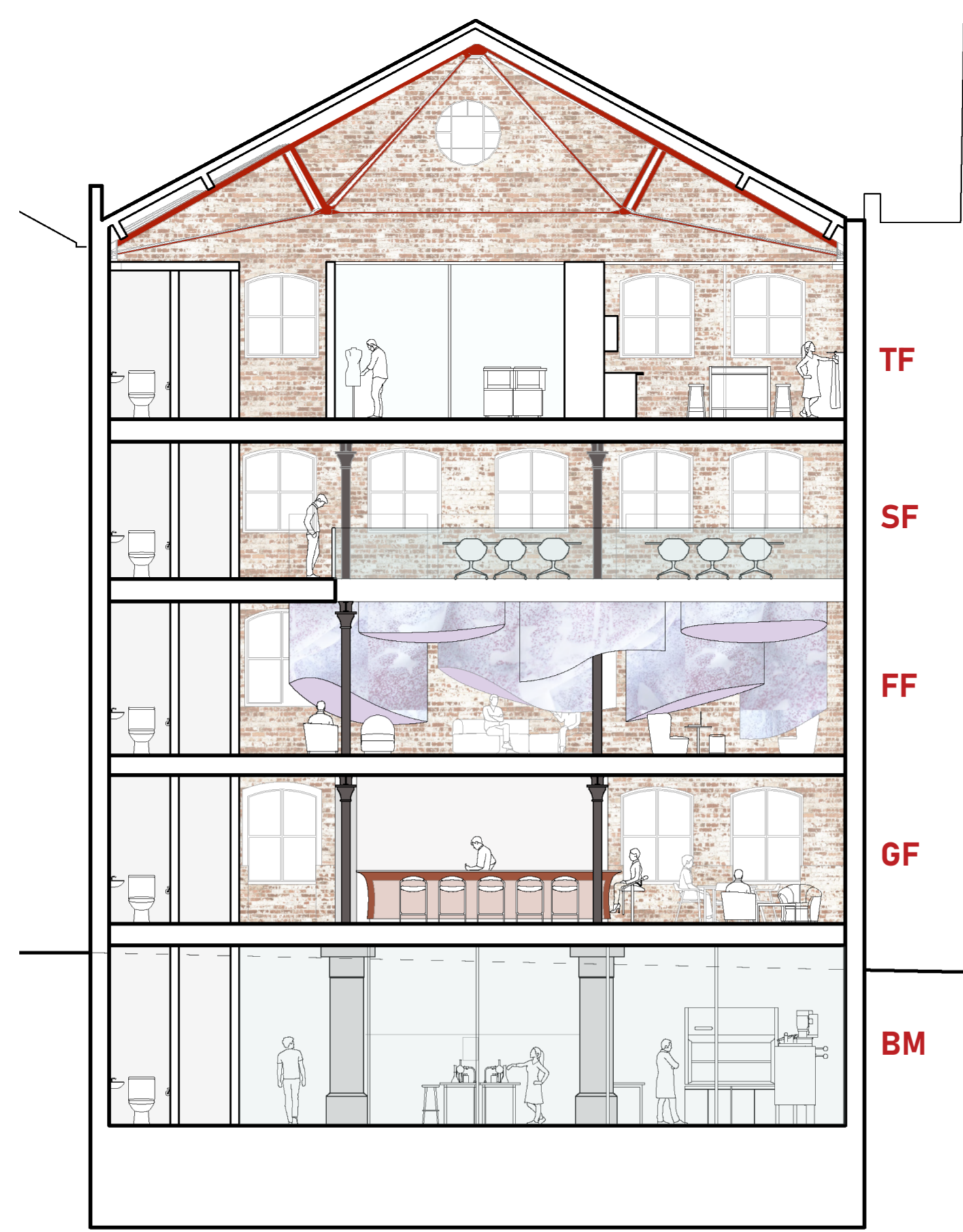


The shared facility is a dedicated space for designers to create, with areas for pattern cutting, printing, and sewing

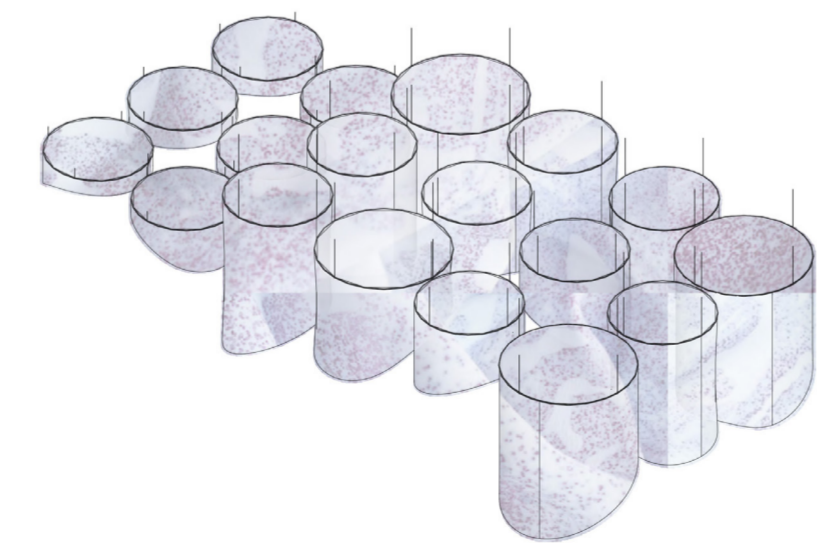
# BIO MEETING PODS



The fabric pods create zones within the space and give a sense of privacy to each meeting area.

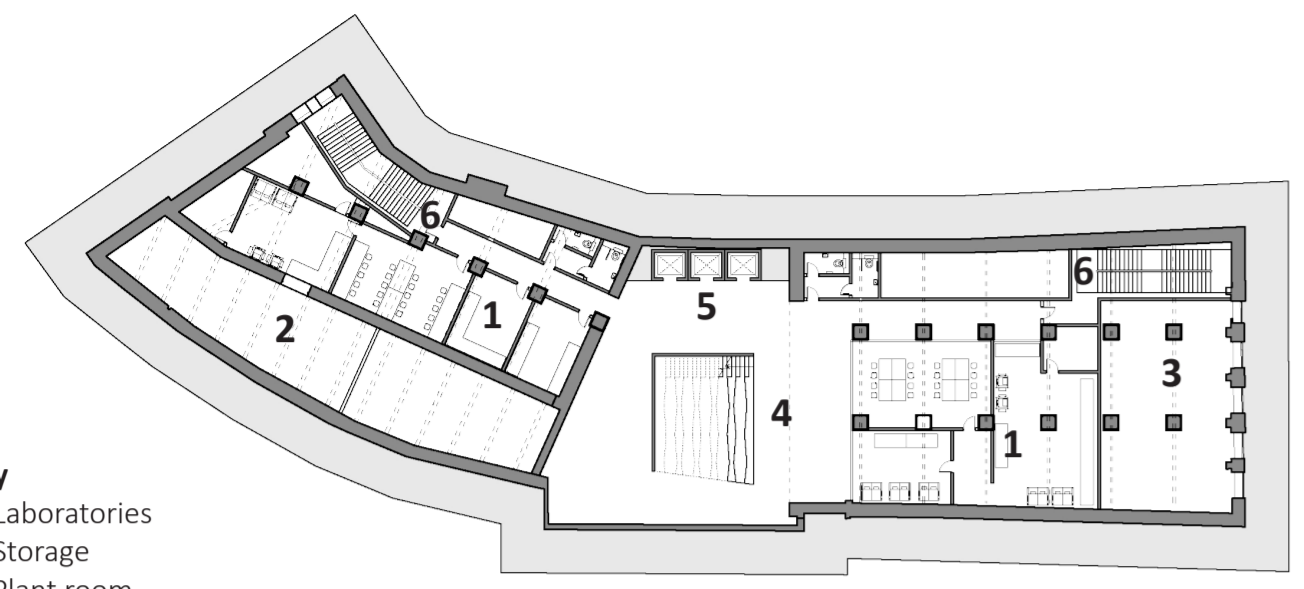


Section CC  
Scale 1:100 @A3



Bio fabric meeting Pods

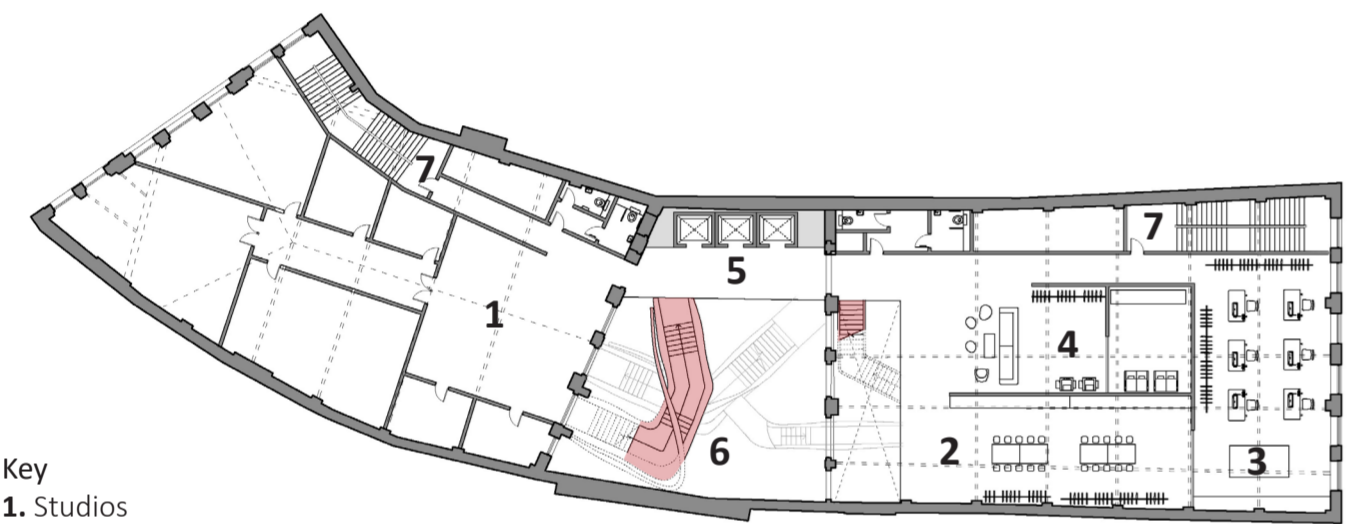
Basement  
Scale 1:200 @A4



**Key**

- 1. Laboratories
- 2. Storage
- 3. Plant room
- 4. Stair seating
- 5. Lifts
- 6. Fire exits

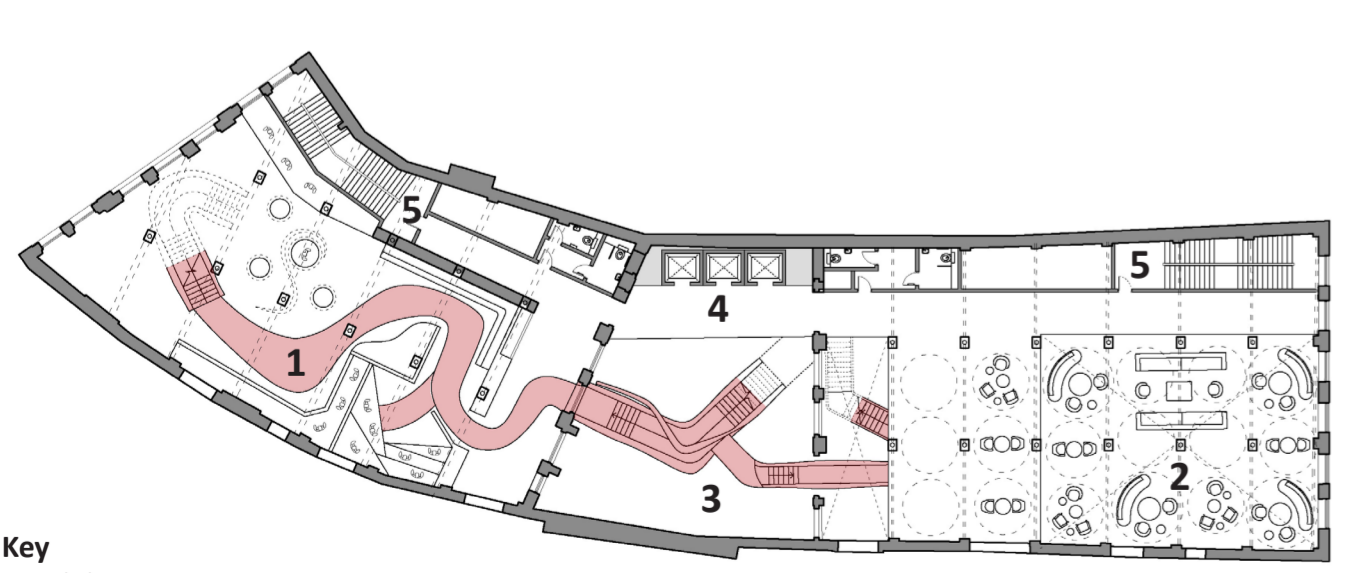
Third Floor  
Scale 1:200 @A4



**Key**

- 1. Studios
- 2. Pattern cutting
- 3. Sewing area
- 4. Printing
- 5. Lifts
- 6. Central Atrium
- 7. Fire exits

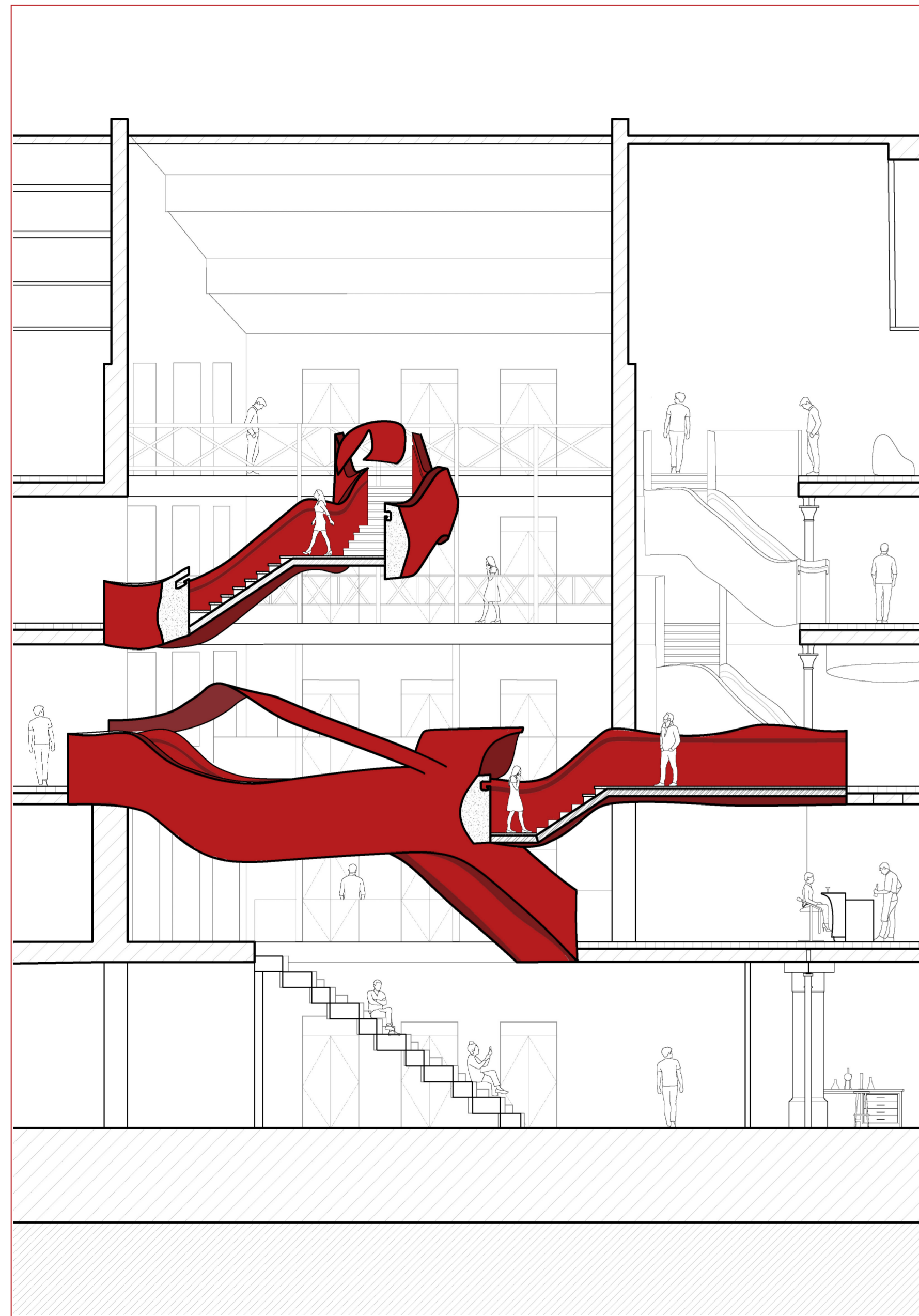
First Floor  
Scale 1:200 @A4



**Key**

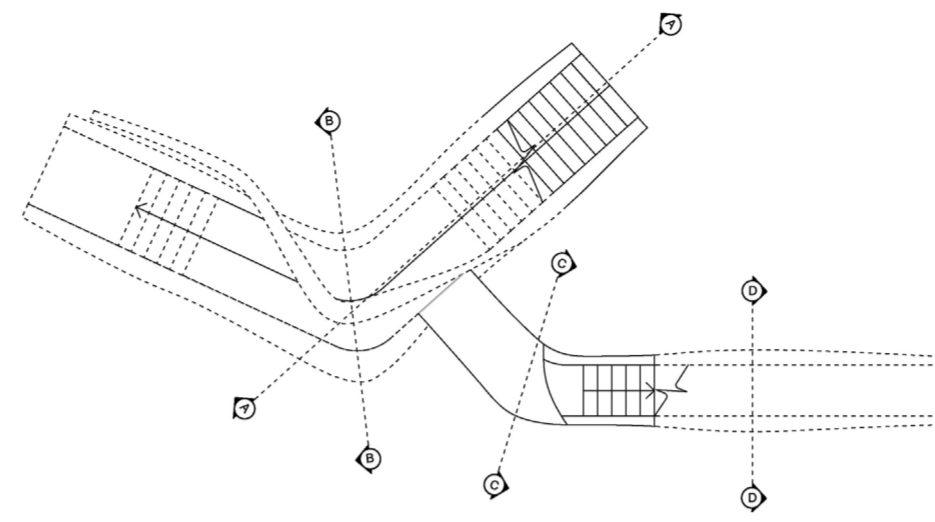
- 1. Exhibition
- 2. Meeting Lounge Pods
- 3. Central Atrium
- 4. Lifts
- 5. Fire exits

# THE RIBBON



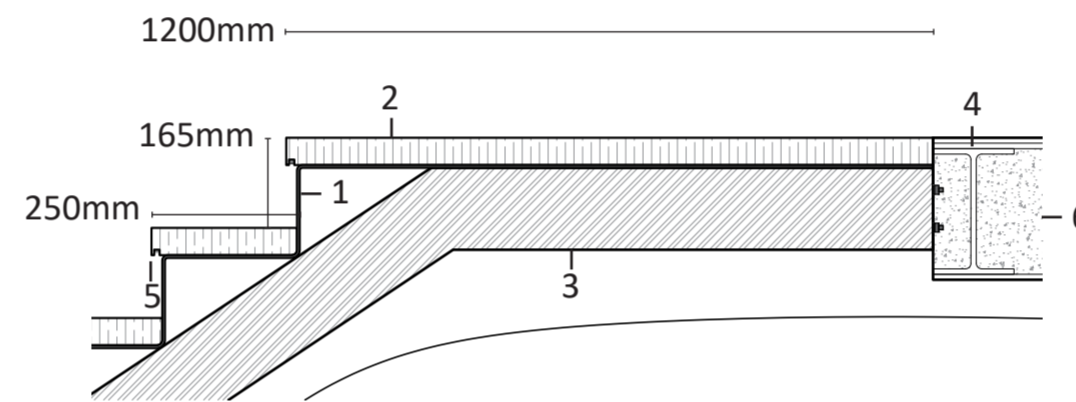
Section AA Detail  
Scale 1:50 @A3

Staircase Plan View  
Not to scale



## DETAILS

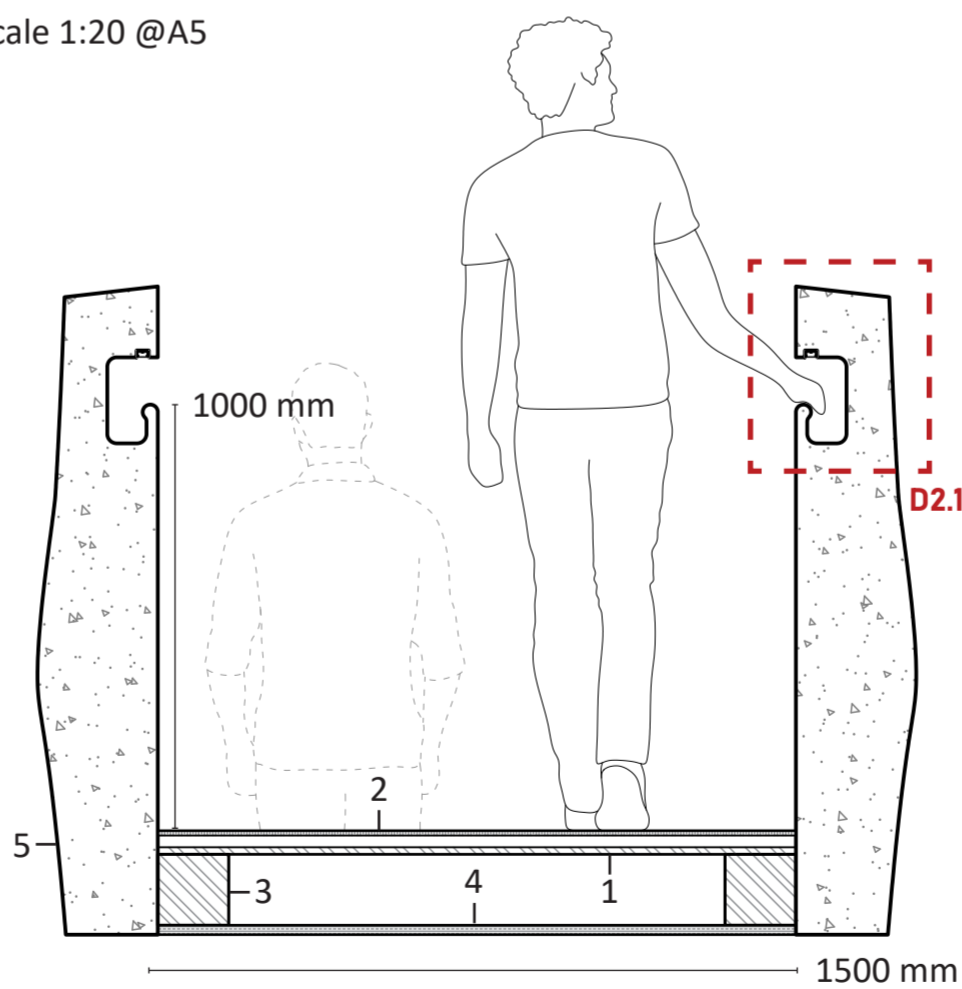
Scale 1:5 @A5



### DETAIL 1. STAIR TO FLOOR SLAB CONNECTION

1. Welded steel sheet 12 mm
2. Steel tread 25 mm
3. Tubular stringer 150mm
4. I-Beam
5. LED lighting below tread 10 mm
6. Floor slab

Scale 1:20 @A5

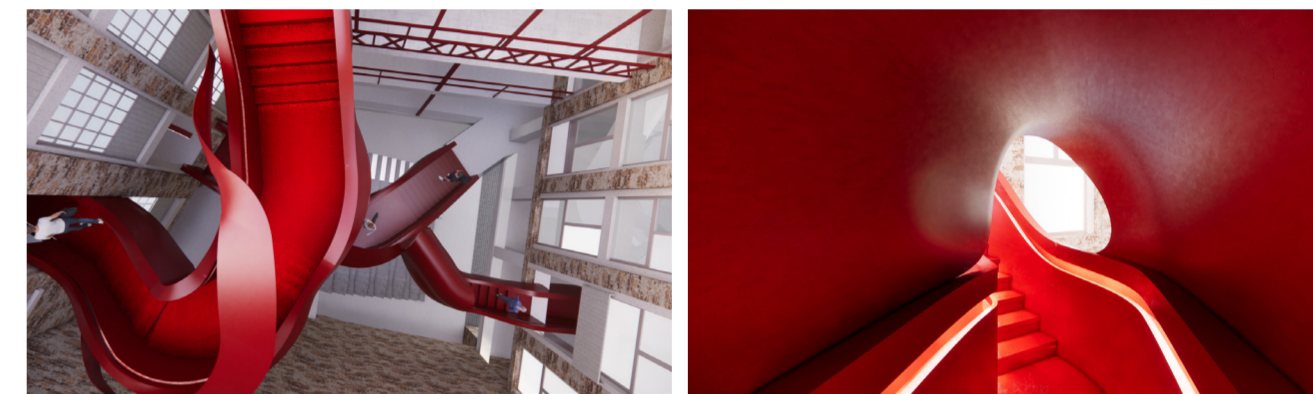


### DETAIL 2. SECTION BB DETAIL

1. Welded steel sheet 12 mm
2. Steel tread 25 mm
3. Tubular stringer 150mm
4. LED screen
5. Concrete ballustrade



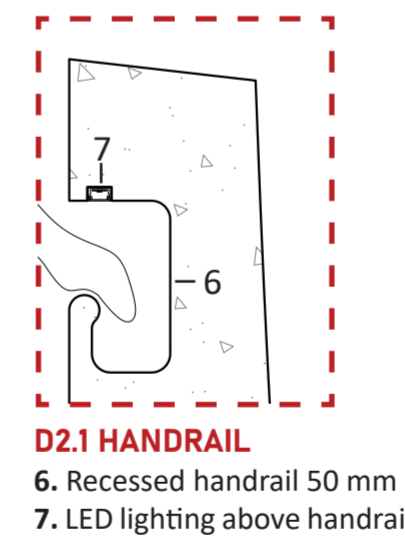
The 'ribbon' inspired staircases are located at the central atrium providing easy access between floors.



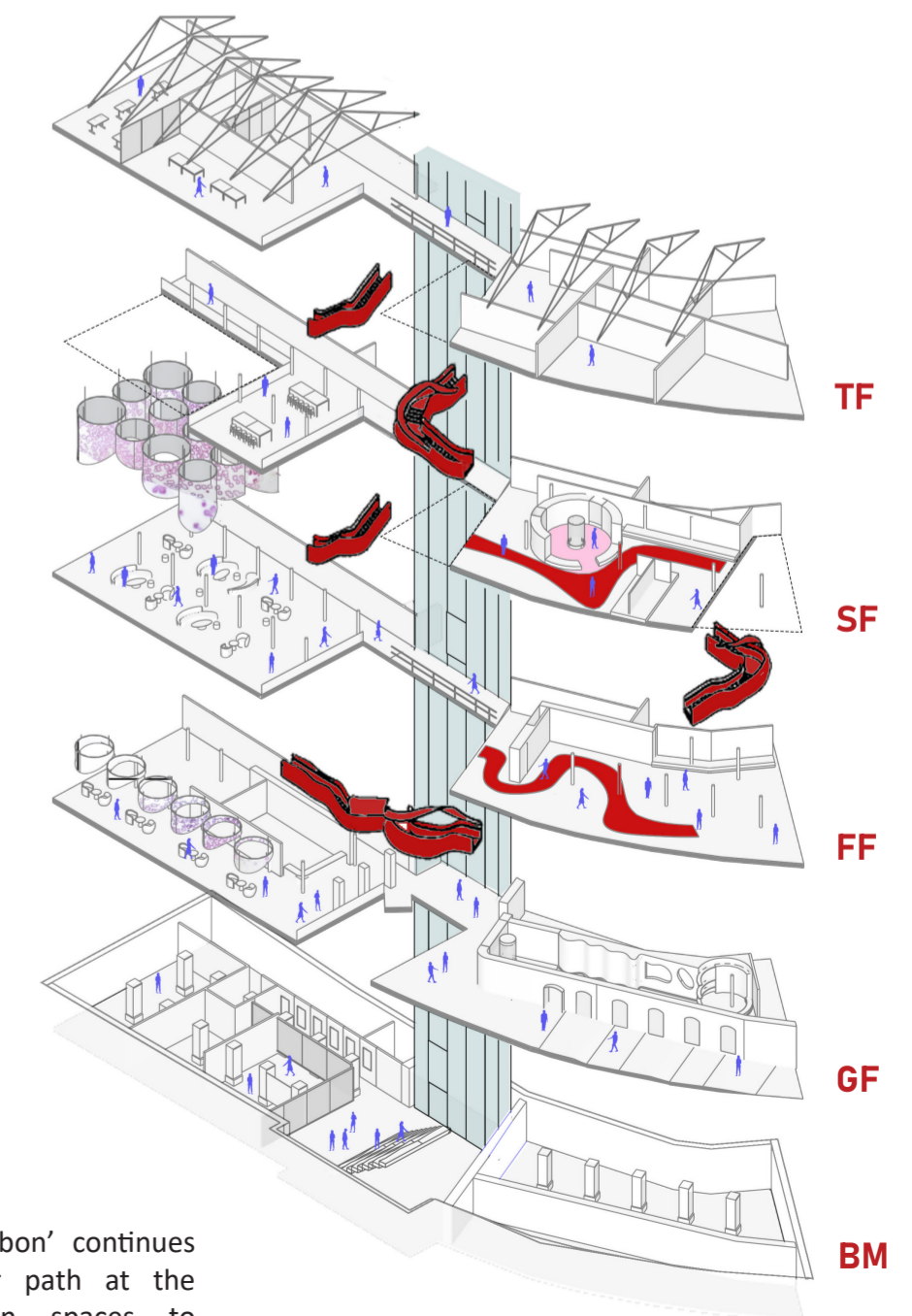
The central atrium's staircases overlay to connect both sides of the building. The stair leading to biodesign facilities is partly covered to discourage the public from taking the 'junction'.

## CIRCULATION

Scale 1:5 @A5



- D2.1 HANDRAIL**
6. Recessed handrail 50 mm
  7. LED lighting above handrail



The 'ribbon' continues as floor path at the exhibition spaces to guide the user's journey.