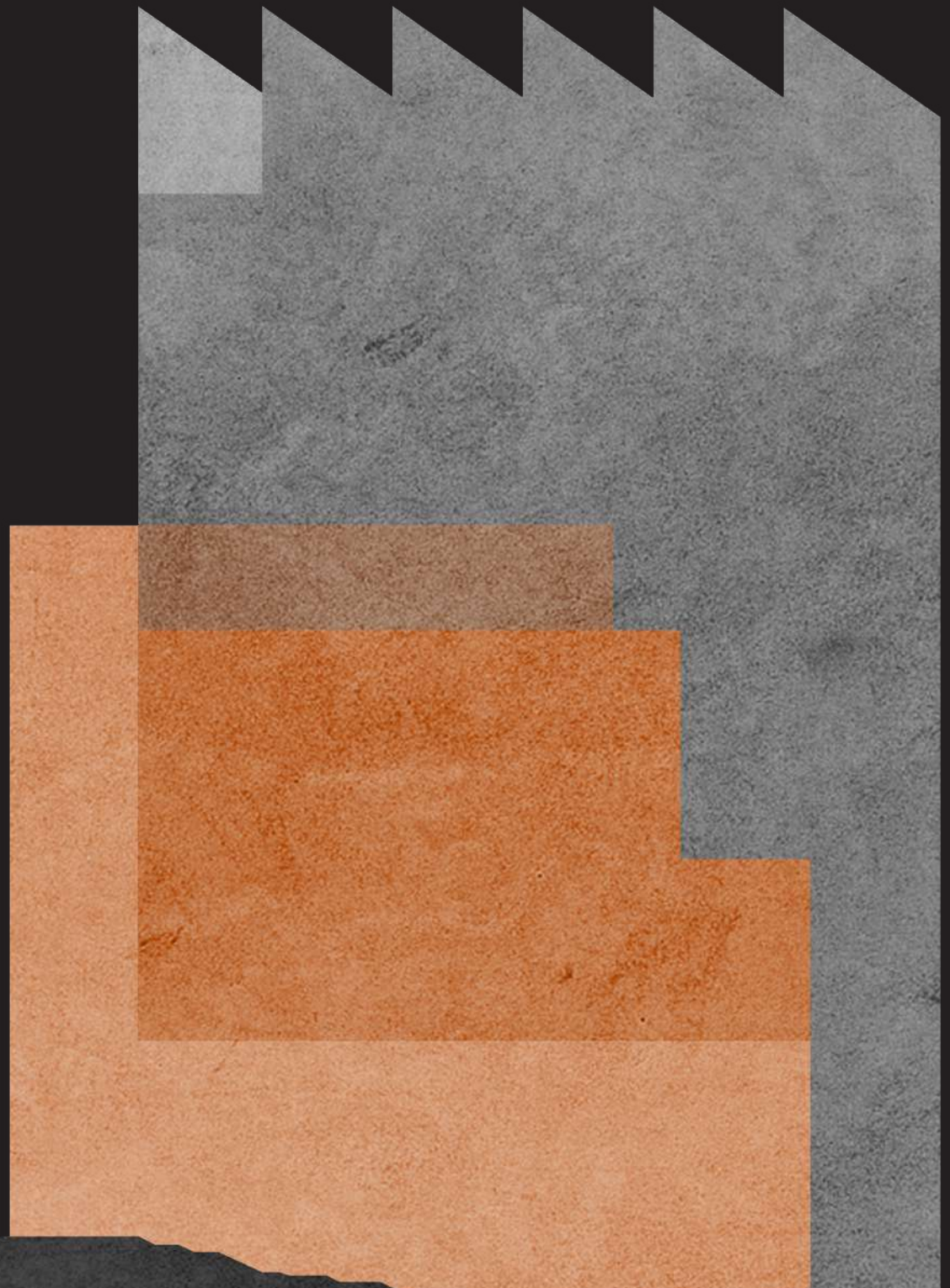




PLOT C

DESIGN AND ACCESS STATEMENT





Copyright © 2025 Allies and Morrison

No part of this document may be reproduced without the prior consent of the client. This document is prepared in support of the Sister - Plot C Development. Allies and Morrison and its collaborators are not responsible for nor shall be liable for the consequences of any use made of this Report other than that for which it was prepared by Allies and Morrison for the Client unless Allies and Morrison provide prior written authorisation for such other use and confirms in writing that the Report is suitable for it. It is acknowledged by the parties that this Report has been produced solely in accordance with the Client's brief and instructions and without any knowledge of or reference to any other parties' potential interests in or proposals for the Project.

Every effort has been made to acknowledge the source of photographs and illustrations; we apologise for any errors or omissions.

Document Control Register

Date	Issue	Notes
15/05/2025	P01	Planning Submission



Contents

1	Introduction and Project Background	2	4	The Proposal	54	5.9	Hollaway Forest	186
1.1	Document Introduction	3	4.1	Overview	55	5.10	Public Art Strategy	192
1.2	Project Team	4	4.2	Use and amount	56	5.11	Planting And Maintenance Approach	194
1.3	Project Description	5	4.3	Layout	58	5.12	Landscaping GA Drawings	200
1.4	ID Manchester SRF	6	4.4	Scale	88	6	Access	202
1.5	Sister Plot C	10	4.5	Appearance	91	6.1	Introduction	203
2	Site Context and Analysis	11	5	Landscape and Public Realm	112	6.2	Arrival and Landscape	204
2.1	Site Context	12	5.1	Introduction	113	6.3	Entrance	205
2.2	Site Analysis	18	5.2	Site Analysis	119	6.4	Horizontal Circulation	205
2.3	Existing Structures & Spaces	22	5.3	Design Development	128	6.5	Vertical Circulation	205
3	Design Evolution	28	5.4	Design Principles	132	6.6	Terraces	206
3.1	Overview	29	5.5	Sister Square Proposal	148	6.7	Changing Rooms	206
3.2	Existing Structures Optioneering	30	5.6	Altrincham Street	166	6.8	Welfare Area	206
3.3	Design Evolution	48	5.7	Hollaway Place	173	6.9	Sanitary facilities	206
			5.8	Mill Lane	180	6.10	Conclusion	207



1 INTRODUCTION AND PROJECT BACKGROUND

1.1 DOCUMENT INTRODUCTION

Allies and Morrison



BURO HAPPOLD

Purpose of the document

The Sister Plot C Design and Access Statement has been produced by architect and masterplanner Allies and Morrison, landscape architect SLA and accessiblity and inclusion specialist Buro Happold.

The Design and Access Statement is a technical report to accompany most planning applications. As a practice, we want to produce documents that clearly and concisely communicate our ideas in a structured format that meets technical and legal requirements and will be understood by the local authority and those the application affects.

This document has been prepared with reference to the following documents:

- “Design and Access Statements – How to write, read and use them” – CABE
- National Planning Practice Guidance [2018]

Document Structure

The document is arranged in six chapters which cover the following aspects of the proposed scheme:

Chapter 1 provides an introduction to the Design and Access Statement, the project team and planning applications documentation. It also provides a summary of the client brief and the project’s Strategic Regeneration Framework context.

Chapter 2 covers the site history and context, highlighting issues which the proposed development must address, from physical constraints to planning policy, and highlights opportunities that the proposed scheme could benefit from.

Chapter 3 tracks the evolution and optioneering of the design and how the consultation process has helped to inform the proposals.

Chapter 4 describes the proposed scheme in terms of amount, uses, layout [including access and servicing], scale and appearance.

Chapter 5 summarises the design proposals for the landscape and sets out principles for the incorporation of ecology and biodiversity measures within the proposed scheme.

Chapter 6 relates to means of accessibility into and within the proposed scheme, and illustrates the principles of inclusive design.

1.2 PROJECT TEAM



The University of Manchester



Applicants Partnership

The project is brought forward by ID Manchester Ltd, a joint venture between The University of Manchester and Bruntwood SciTech Ltd.

The University of Manchester

The University is a leading global institution at the forefront of innovation and learning. It is the UK’s most popular university for undergraduate applications, has more than 44,000 students, and is recognised internationally for the quality and quantity of its business collaborations. The University has recently been named top in both the UK and Europe, and second in the world, for social and environmental impact.

As Britain’s first civic university, the University was founded by, and for the people of Manchester. Contributing to the wellbeing, sustainability and prosperity of Greater Manchester is a fundamental part of the University’s purpose.

Bruntwood SciTech Ltd

A joint venture between Bruntwood, Legal & General and Greater Manchester Pension Fund, Bruntwood SciTech is the UK’s leading property provider dedicated to driving the growth of the science and technology sector. Bruntwood SciTech has unique experience working in strategic partnership with city councils, universities and NHS Trusts to drive inclusive, sustainable economic growth through investment in science and technology infrastructure.

Bruntwood is committed to creating thriving cities, with a belief that the best, most sustainable futures are those that are culturally vibrant, equal and environmentally-conscious. Bruntwood is a family-owned business born out of Manchester over 40 years ago. Now one of the most prominent employers in the city region, Bruntwood leads the way in creating innovative, people-centred workspaces.

Project Team

Applicants	ID Manchester Ltd and The University of Manchester
Architect	Allies and Morrison
Landscape and Public Realm	SLA
Planning and EIA	Deloitte
Heritage	SLHA
Townscape and Visual Impact	Layer Studio
Verified Views	Our Studio
Accessibility and Inclusive Design, Sustainability, MEP, Climate Change, Carbon, Air Quality and Human Health	Buro Happold
Structural and Civil Engineering, Transport and Waste	Civic
Ground Conditions	Civic Earth
Wind, Daylight, Sunlight, Overshadowing, Solar Glare	GIA
Noise	Sol Acoustics
Ecology, Biodiversity and Arboriculture	Tyler Grange
Consultation	Counter Context
Security	Crimewave
Fire Engineer	Alt Fire
Cost Consultant	Arcadis
Secure by Design	GMP

1.3 PROJECT DESCRIPTION

Sister Plot C

This Design and Access Statement has been prepared in support of the planning applications for Plot C at Sister [formerly ID Manchester], Manchester’s new innovation district, including:

- Detailed planning application for the demolition of existing buildings and the development of two linked workplace-led mixed-use buildings together with nature-led public realm and multi-use public square.
- Listed Building Consent application for alterations to and integration of the Grade II Listed Hollaway Wall into the proposed development.
- Listed Building Consent application for the redevelopment of 8no. arches of the Grade II Listed Manchester South Junction and Altrincham Railway Viaduct.

Plot C is located in the northeast of the ID Manchester Strategic Regeneration Framework [SRF] area and is the masterplan’s first major new-build phase. This prominent site at the gateway to Sister and the wider Oxford Road Corridor from Manchester Piccadilly offers the opportunity for a flagship development that signals the arrival of this new neighbourhood and establishes important connections with the surrounding city.

One of the largest new office developments in the city, Plot C will deliver critical mass - providing a range of workspace typologies totalling over 500,000 sq ft net across two linked buildings of 12 and 20 storeys, contributing significantly to the SRF’s targets of delivering over 2 million sq ft of commercial and innovation space and complementing the newly refurbished Renold Innovation Hub as part of Sister’s innovation ecosystem. It is also anticipated that Plot C will see the generation of approximately 4,000 new jobs, a substantial contribution to the SRF’s employment targets.

The proposed scheme also includes a new multi-use civic square for the city at the heart of the Sister masterplan, part of a transformed nature-led public realm that is fully accessible to all and activated by extensive active and community uses at ground floors.

Aerial photograph highlighting the Plot C site in the context of the framework area and the city



1.4 ID MANCHESTER SRF

1.4.1 VISION & STRATEGIC OBJECTIVES

SISTER WILL BE RECOGNISED INTERNATIONALLY AS ONE OF THE WORLD’S LEADING APPLIED INNOVATION DISTRICTS. HOME TO THE UK’S MOST EXCITING NEW IDEAS AND DISRUPTIVE TECHNOLOGIES, IT IS A PLACE FOUNDED ON THE BELIEF THAT IDEAS FLOURISH WHERE BUSINESS, EDUCATION AND COMMUNITIES COME TOGETHER.

SISTER WILL BE A WORLD-CLASS INNOVATION PLATFORM IN THE HEART OF ONE OF THE MOST EXCITING GLOBAL CITIES, ALL SET WITHIN AN ABUNDANTLY GREEN AND VIBRANT NEW NEIGHBOURHOOD. IT WILL HONOUR THE HERITAGE OF MANCHESTER WHILE DRIVING INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH FOR THE CITY REGION AND BEYOND.

The ID Manchester SRF sets out the vision and strategic objectives for Sister, together with a series of Place-Based Principles providing a road-map to achieve these, and an illustrative masterplan of how the place might look once complete. The key elements of the SRF are outlined here and over the following pages as these have provided the framework within which the proposals have been developed.

Section 3. The Vision

What IDM could deliver for the city

Over 10,000 new jobs created

Breathe new life into heritage assets

A bigger and revitalised Vimto Park

New civic square for Manchester

Over 2m sq ft commercial and innovation space

Nature-led public spaces with over 400 trees

Supporting the drive to Net Zero Carbon by 2038

Over 1,500 new homes

Section 3. The Vision

Pillars of success

A world-leading innovation district

IDM will build on the dynamism and confidence of Manchester as a city, the global reputation of the University as a research centre of excellence and the valued partnership of a leading property provider to multiple international businesses. By providing a platform to accelerate growth, partnership and collaboration, IDM will establish itself as the place where the world's most valuable ideas are transformed into reality. It will play a pivotal role in delivering competitiveness and prosperity to the city region and UK.

An exemplar of urban regeneration

IDM will set a new standard for urban regeneration at scale, creating over 10,000 new jobs within over 4m sq ft mixed-use development, including over 1,500 new homes and over 2m sq ft commercial space. The public realm will create a canvas for a vibrant cultural and events programme, further enlivening this area of the city for residents, workers and visitors alike.

A place for collaboration, innovation and commercialisation

IDM will help to drive the region's focus on collaboration, innovation and commercialisation, its transition to a more productive and R&D intensive model of growth, and the creation of sustainable and resilient jobs and prosperity across the region and beyond. It will provide a new community for forward-thinking, like-minded individuals and businesses. A place where they can start or scale their UK HQ. A place they can call home, build their career, or just visit and enjoy. A place that shares their values as well as their ambition.

A platform for growth

IDM will build on the current and future strengths of the University creating impact through both the digital infrastructure and physical creation of place but also through the outputs it generates. It will be home to the most exciting new ideas and ventures and a tangible manifestation of the innovation ambition of the JV partners, Manchester City Council, Greater Manchester Combined Authority and the UK Government.

A commitment to inclusivity, diversity and creativity

IDM's vision is one of inclusive innovation – a fairer economic model, powered by Manchester's productive and progressive spirit, shaped by creativity and invention, and working to deliver a healthier, happier, fairer future for all. IDM will promote values of openness, diversity, collaboration and creativity. It will be an inclusive destination where diverse minds can collaborate, new ideas are welcomed, and local people feel ownership of the place.

Be distinctively Manchester

IDM will always be a place that is immediately identifiable as being "of Manchester" through the use and design of its buildings and public spaces. By staying rooted in the city, IDM will have a competitive edge in attracting global talent to the city and foster a sense of civic pride in the area.

Be sustainable and regenerative

IDM is committed to being a world leader in tackling the climate and ecological emergencies – planning for net zero carbon, building climate change resilience, bolstering green and blue networks, and reducing resource use and unnecessary waste, all of which are currently putting pressure on our planet.

Creating opportunities for local people

IDM will create opportunities for the people of Manchester and GM, through access to education, training and jobs; delivery of homes; encouragement of local businesses to establish and grow; stimulating cultural assets; and provision of high-quality public realm and blue and green infrastructure.

Extracts from ID Manchester SRF

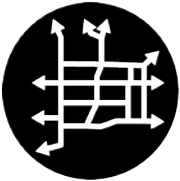
1.4.2 PLACE-BASED PRINCIPLES

The Place-Based Principles detailed within the SRF have guided the detailed development of the proposals for Plot C.



Human Collider

Anticipates an ecosystem of innovation with a wide range of commercial floorspace, including “large-footprint Grade A office space capable of accommodating corporate global HQ buildings”



Connected, open and accessible

Identifies interventions to create a place that is accessible to all including: a new wide pathway along Altrincham Street; creative, landscaped solutions to provide step-free accessible routes that address the large level changes across the site without the need to rely on lifts in the public realm - this could be achieved by introducing generous steps within the civic square, incorporating gentle slopes and seating, trees and green infrastructure; utilise the level change immediately south of the viaduct to introduce a concealed servicing tunnel underneath a widened Altrincham Street to serve buildings out-of-sight of the public realm; transforming the former bowling green into a civic-scale square forming the centre point of the innovation district. This principle also identifies the principle east-west routes through the site, including Altrincham Street; a north-south spine of shared spaces through the centre of the site; and welcoming, outward looking threshold spaces at the edges of the Framework Area, at the north-east corner improving the environment along London Road and links to Mayfield. Repairing the entry sequence to the ORC from Piccadilly for pedestrians and cyclists is a key intervention identified to knit the framework area back into the city.



A living landscape

Identifies the new civic square and Altrincham Street, the railway arches and London Road as principal areas of public realm in the Framework Area. Microclimate considerations should be taken into account, as should free access to nature, repairing blue and green links and improving biodiversity. Trees should be replaced at a ratio of at least 3:1 and new planting should include at least 70% native species.



A flexible framework for flexible buildings

Allows development to respond to specific occupier and market demands, whilst still delivering a coherent place and largely reflecting the layout of the existing campus. The framework acknowledges exceptions to this, “which obstruct the structure of the principal routes and spaces, are anticipated to need to be removed in any iteration of the masterplan to deliver placemaking priorities.” These include the Manchester Meeting Place and the Morton Labs. The siting and design of new buildings, choice of materials, and public realm framework should seek to harness the sense of place created by the former campus.



Platform for the future, built on foundations of the past

Aspires to secure the next stage in the Framework Area’s life, whilst celebrating the history which it is grounded in. This principle anticipates that, “buildings will need to be redeveloped to deliver the amount, flexibility and diversity of accommodation across the masterplan that will be needed for IDM to achieve its potential and maximise the benefits to the people of Manchester. By focusing retentions on the most important assets, the masterplan can support both their long-term retention and re-activation [and the costs associated with that], and the SRF’s overarching development and placemaking objectives.” With respect to the Hollaway Wall, the Principle acknowledges that, “In its current form and location, the Wall directly conflicts with the place-making priorities of successfully knitting IDM into the wider city, seamlessly integrating with Mayfield, and creating a better gateway to the ORC from Piccadilly Station. If Network Rail implemented the previously proposed Castlefield Corridor works, the extended viaduct would virtually meet the northern end of the Wall, closing off the route along Altrincham Street completely. It is also hinders the ability to transform London Road from a car-dominated highway into a welcoming, activated city street with a newly defined urban edge. The condition and setting of the Wall is also currently poor, as has been acknowledged by Historic England. As detailed proposals come forward, there is an opportunity to consider a range of options for the Hollaway Wall to determine the optimum design solution that delivers the placemaking priorities set out within this SRF. This could include opportunities to reduce the length of the wall, relocate it, encapsulate it within a building, or other options to break down the visual and physical barrier it presents.” With respect to the campus south of the viaduct, the SRF identifies the Renold Building as the most important asset with the potential to play an important role in the future place.



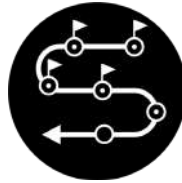
Curated Commons

Supports a variety of uses in across external and internal spaces, where thresholds encourage life to spill out into the public realm. Active frontages should be prioritised at ground and upper ground levels where these address principal routes. Leisure, food and drink are envisaged addressing the civic square, exhibition and gathering spaces addressing Hollaway Place, local amenities along London Road and Mill Lane.



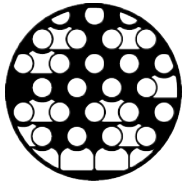
An identity that expresses purpose and place

Envisages an authentic place, borne from the purpose of the innovation district and the essence of the framework area and its surroundings. This could reflect the warmth of Manchester's material palette. Building forms and details could reference the area's modernist past and the essence of the former UMIST campus. Buildings should be inviting and interact with the streetscape, and make the place feel like an integral part of the city with no defined boundary or sense of exclusivity.



Creative meanwhile uses of buildings and spaces

Should be supported by the places created.



Critical mass

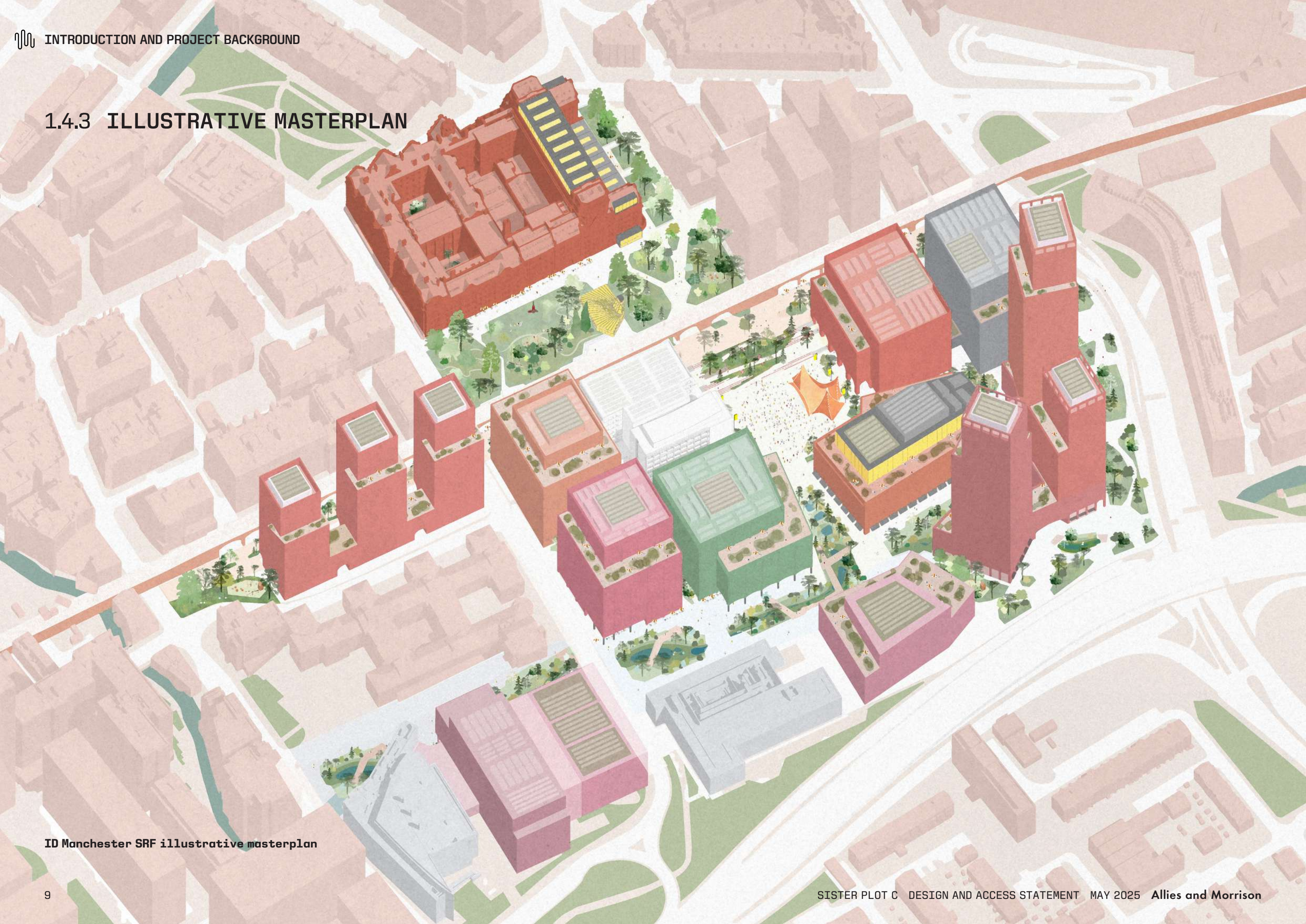
Notes that, in order for the innovation district to achieve its potential and maximise benefits to the people of Manchester, over 4 million sq ft floorspace should be delivered including over 2m sq ft innovation, commercial and research space. This principle also notes the need for more anchor tenants to complement the University, and the need therefore for, "large floorplate new build offices that redefine the scale of ambition seen in the city to-date." Scale should radiate from the centre of the masterplan, stepping down towards the civic square and Renold building. Buildings at thresholds to the Framework Area can be more assertive, creating landmarks to identify and draw people into IDM. This include the north-east corner, which will be the first visual signifier when arriving into the Oxford Road Corridor from Piccadilly.



Sustainable and regenerative

Identifies factors that should be taken into account in determining whether buildings should be removed, redeveloped or adapted, including: embodied and operational carbon; historical or architectural significance building condition, including its structure, fabric and internal accommodation; feasibility of re-purposing buildings for viable long-term uses; relationship to other place-making priorities; and ability to support the critical mass and flexibility of floorspace needed to make IDM a successful innovation district. Buildings and public realm should be designed to support physical, mental and social health of occupants, and to support biodiversity.

1.4.3 ILLUSTRATIVE MASTERPLAN



ID Manchester SRF illustrative masterplan

1.5 SISTER PLOT C

1.5.1 CLIENT BRIEF

The Client Brief calls for a transformative development that embodies the SRF’s Vision and Objectives, guided by its Place-Based Principles. It aims to deliver flagship commercial buildings to anchor the innovation district and establish the public realm framework for the wider masterplan. Key components of the brief are as follows:

CRITICAL MASS

c.500,000 sq ft net Grade A commercial office space provided by two buildings whose delivery can be phased, capable of accommodating a flexible range of workplace typologies from start-ups and SMEs to large enterprises and HQ accommodation to drive Sister’s innovation ecosystem. Efficient typical floorplates of c.20,000 sq ft net are essential to meeting this demand.

A CITY-SCALE LANDMARK

Create an address on London Road that signposts Sister and the Oxford Road Corridor beyond, interfacing with Piccadilly Station and Mayfield.

A NEW CIVIC-SCALED SQUARE

A generous multi-functional space for Sister and the wider city addressed by the revitalised Renold Innovation Hub. The square must be capable of hosting a variety of events, from markets to concerts, and be fully accessible from Altrincham Street.

UNLOCKING CONNECTIVITY

Establish key routes and spaces at the heart of the masterplan area that are accessible to all, including the eastern portion of Altrincham Street, a diagonal NW-to-SE route to the University campuses and Oxford Road Corridor, and a new E-W link between the Square and London Road.

PEDESTRIAN ORIENTED PUBLIC REALM

Pave the way for a car free masterplan with a hidden servicing tunnel connecting from London Road beneath the buildings and a widened Altrincham Street.

CELEBRATING KEY HERITAGE ASSETS

Giving positive new roles to listed assets on the site and key heritage buildings in its immediate setting, and capturing the essence of the former campus in the scheme.

MARKET LEADING SUSTAINABILITY

Prioritising whole life carbon considerations and minimum targets of NABERS 5*, BREEAM Excellent and EPC A.

ENCOURAGING COLLISION

A concentration of shared social spaces and flexible uses to encourage meeting and collaboration between a diverse mix of people and companies.

CONNECTED TO NATURE

Plentiful planting within the public realm and upper levels of the buildings to support people’s well-being, habitats, biodiversity, and climate change mitigation.

THE MANCHESTER ROOM

A diverse collection of engagement spaces for the community, welcoming local people of all ages and backgrounds to Plot C and Sister.



2 SITE CONTEXT AND ANALYSIS

2.1 SITE CONTEXT

2.1.1 LOCATION

The site is located in Manchester City Centre at the north-east of the ID Manchester Strategic Regeneration Framework (SRF) area and former UMIST campus, bound by the Deansgate-Castlefield Viaduct to the north, London Road to the east, and existing former campus buildings to the south and west (The Mill and the Renold Building respectively).

The proposal for Plot C will be the first major new build phase of the masterplan now known as Sister, establishing a vital gateway to this new neighbourhood and wider Oxford Road Corridor area from the adjacent Manchester Piccadilly Station, as well as the residential communities of Brunswick and Ardwick to the south of the site and Mancunian Way.

This improved connectivity will better link Piccadilly and the main campuses of the University of Manchester and Manchester Metropolitan University, a short distance south-west of the site.

The site sits within the wider context of regeneration in the south of the city centre, adjacent to three other strategic framework areas: Circle Square, Mayfield and Ardwick Green.

The site is also located within the Whitworth Street Conservation Area, with the north aspect of the Plot C boundary (the Viaduct) forming the Conservation Area's southern boundary.

-  Plot C Site Boundary
-  ID Manchester SRF area



2.1.2 PHYSICAL CONTEXT & BOUNDARY CONDITIONS

Despite the site's central location and adjacency to Piccadilly Station, it is currently disconnected from the surrounding city, bounded on two sides by major transport infrastructure.

London Road defines the site's eastern boundary, rising from beneath Mancunian Way towards Piccadilly. Existing structures at this end of the site - the Moffat Building, Morton Laboratory and Listed Holloway Wall - form an extended barrier to the road and verge, with the Wall also acting as a retaining structure addressing a large level change down from east to west.

The Viaduct forms the northern boundary to the site connecting Piccadilly and Oxford Road stations and beyond, with existing steps and a ramp through its arches providing access to the site from Vimto Park to the north. Altrincham Street runs parallel along its southern aspect, but is interrupted by vehicular routes at both eastern and western ends of the site connecting to London Road and Sackville Street respectively, discouraging pedestrian access and movement. There is an abrupt level change along the south of Altrincham Street down to a service road and the Bowling Green landscape area, negotiated only by the central existing Butterfly Stairs that bridge over the service road.

The recently refurbished Renold Building with its recognisable zig-zag facade addresses the Bowling Green and defines the site's western boundary. The Mill forms the southern site boundary, with the adjoining Manchester Meeting Place [MMP] largely enclosing the Bowling Green on this side from the rest of the former campus to the south.

The Barnes Wallis and Wright Robinson Building in the centre of the site addresses the east of the Bowling Green, and is surrounded by service roads to the east, south and north, connecting across to Altrincham Street via a bridge link over the service road.

A summary of analysis of the existing buildings on site is included later in this chapter.

 Plot C Site Boundary



Barnes Wallis and Wright Robinson Building from Altrincham Street



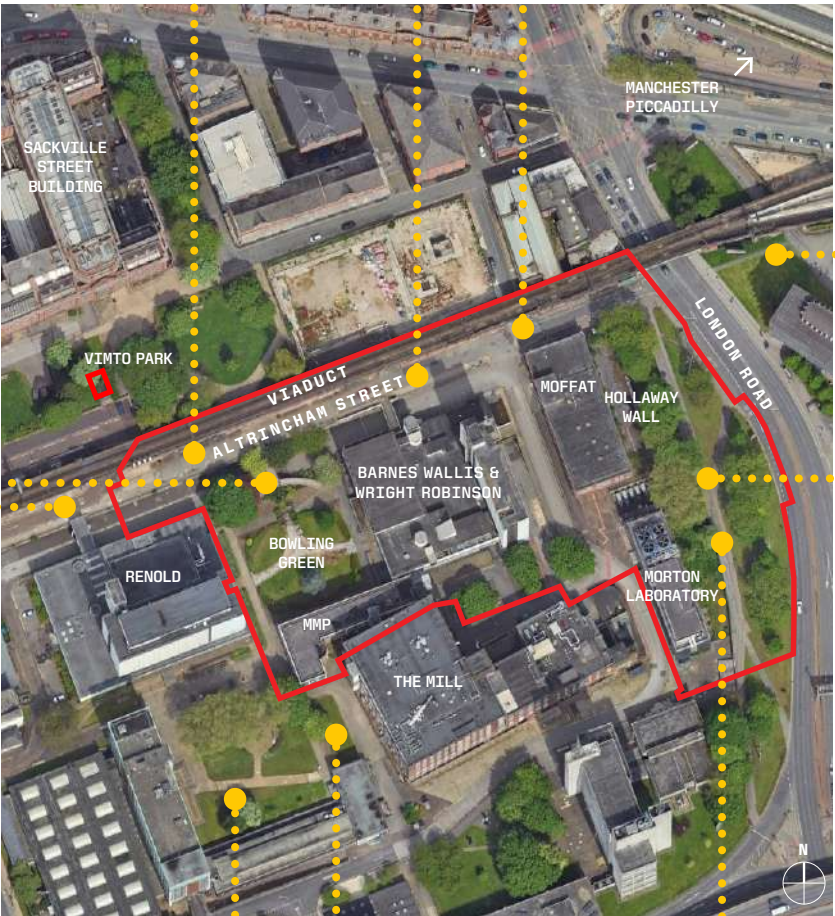
Level change along Altrincham Street



Eastern end of Altrincham Street



Renold Building and Manchester Meeting Place around the Bowling Green



Western section of Altrincham Street



View to site from the east across London Road



Existing pedestrian and cycle route adjacent London Road



Renold Building, Manchester Meeting Place and the Mill on approach from the south west



Renold Building, Manchester Meeting Place and the Mill on approach from the south



Morton Laboratory, Holloway Wall and retaining walls to London Road verge

2.1.3 HISTORIC DEVELOPMENT

Layers of History

The Plot C site and wider SRF area has a rich, layered history. The area developed around the River Medlock in the 19th century, with the early character of the area largely developed with linear blocks of warehousing and dwellings. The majority of these structures were demolished in the early 20th century to enable the aspirations for the UMIST site to come forwards. As part of these substantial works, the River Medlock was culverted.

The northern boundary of the Plot C site came to be defined by the construction of the Manchester & Altrincham Railway Viaduct in the mid-19th century [c.1846-1849], this now provides a definitive boundary to the Whitworth Street Conservation Area, and a clear division of character between the original Sackville building / Vimto gardens to the north, and the modernist campus to the south.

The earliest phase of the masterplan for the campus arranged principal buildings around courtyards/lawns and the central bowling green. The recently refurbished Renold Building [originally completed in 1962 by Cruikshank and Seward] formed the centrepiece of the campus and enclosed the western side of the central space. It is this phase of development that characterises much of the Plot C site today.

The Hollaway Wall, designed by Antony Hollaway, was completed in 1968 to the north-eastern aspect of the campus site, just south of the railway viaduct.

In recent years, the University has decanted its educational and research functions from the site and wider campus to the newly built MECD building on Upper Brook Street, leaving the existing buildings vacant.

For further information and historic map regression, please refer to chapter 5 of this document and the Heritage Statement.

Modernist University Campus

Victorian Industrial City

Medlock River Valley



2.1.4 HERITAGE CONTEXT

Whitworth Street Conservation Area

The north aspect of the Plot C boundary [viaduct] runs parallel to the Whitworth Street Conservation Area boundary, with the Plot C site falling partly within the designated boundary. The Conservation Area, which was designated in 1974 and extended in 1985, is uniquely Mancunian in character; its physical form being established by the wealth of fine Victorian and Edwardian buildings erected between 1850 and 1920, many of which are listed. They reflect the historical importance of the textile industry in the city.

The primary character of the area is canyon-like streets with tall imposing warehouse buildings of a monumental scale to either side, which tower above the pavement, giving a distinctive quality that is only to be found in this part of Manchester.

The palatial Grade II listed Sackville Street building forms a key element of the Whitworth Street streetscape and is an important positive contributor to the Conservation Area.

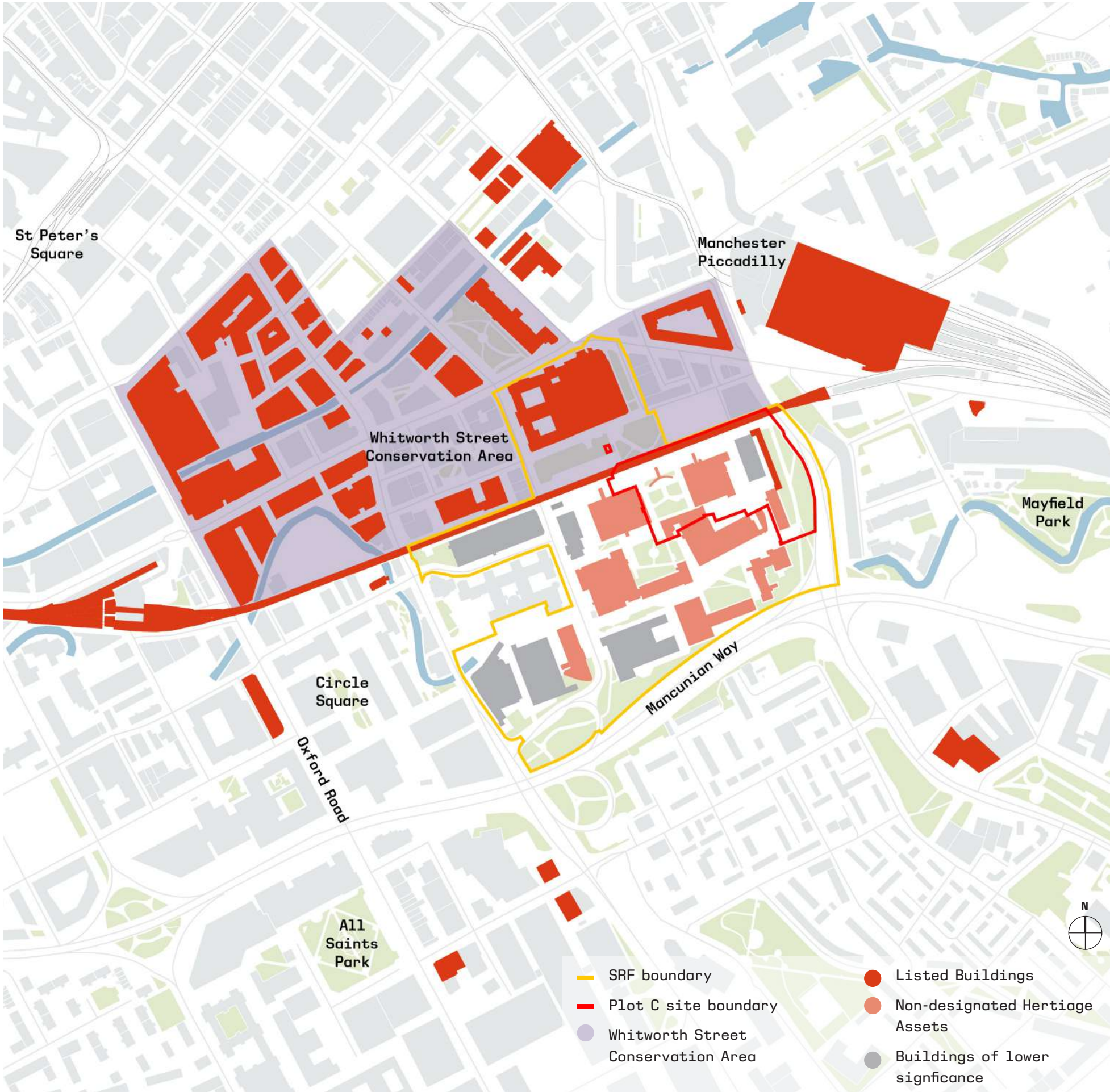
Campus south of the viaduct

There are nine buildings and structures south the viaduct that are considered to be non-designated heritage assets. The most important of these is the Renold Building, which is currently subject to a spot-listing application and has recently re-opened as the innovation hub at the heart of the masterplan. Items of public art are also located across the campus, the majority of which are considered to be non-designated heritage assets.

Plot C site

The site sits at the northeast corner of the former UMIST campus and features a number of existing structures including two Grade II listed structures [The Hollaway Wall and Manchester South Junction and Altrincham Railway Viaduct] and four buildings and structures considered to be Non Designated Heritage Assets (NDHAs). These existing buildings and structures are covered in more detail later in this chapter.

There are four other pieces of public art within the Plot C site that are considered to be NDHAs. Please refer to the public art strategy in Chapter 5 for further information on how these have been integrated within the public realm proposals.



Heritage context plan diagram

2.1.5 MATERIALITY AND CHARACTER CONTEXT

The site’s built context features two predominant types of buildings. The first are the red brick ones, powerful legacies of Manchester’s 19th Century growth, that create a cohesive and memorable character to the Whitworth Street Conservation Area to the north. While they vary in style and detail, all are strong, solid buildings in brick and stone.

The second are the former campus’ Modernist buildings, each broadly representing one of two different approaches; the International Style or Brutalism. The Renold is in many ways the epitome of and an International style building; white, refined, abstract. The Hollaway Wall is pure Brutalism, full of post war pathos, grounded, heavy, dark and textured.

Both types of Modernism, and the older red brick buildings, share two things in common: firstly, they are all made largely from earthy materials; brick, stone and concrete. They all feel reassuringly solid. Secondly, across the site, and beyond, chimneys, towers, pop-ups, roofs and angular facades form rich and distinctive skyline silhouettes.



Red brick buildings in the Whitworth Street Conservation Area



Site context materiality plan diagram

Key description

— SRF Boundary

— Plot C site boundary

● Red brick

○ Concrete, other colours

● Brick other colours

● Stone

● Ceramic/ faience

○ White concrete

● Metal cladding/ curtain walling



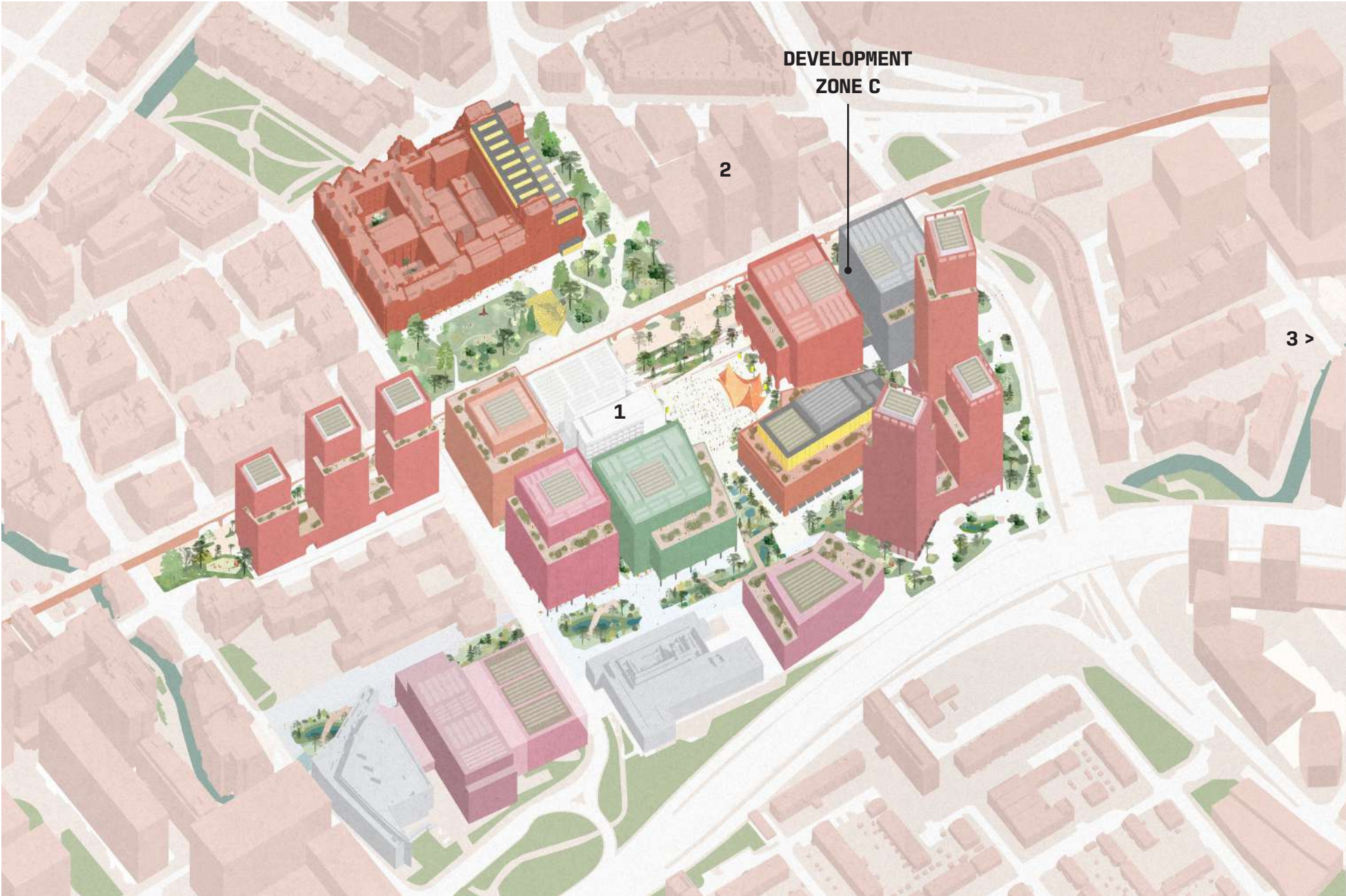
Former campus Modernist buildings and structures

2.1.6 RECENT AND EMERGING CONTEXT

The proposed scheme has been developed in relation to a number of development sites in the vicinity of Plot C that are either under pre-application development, consideration, consented, under construction, or have recently been completed. These include but are not limited to the following projects adjacent the site:

- 1. Renold Innovation Hub** - recently refurbished key heritage asset for the masterplan bounding the Plot C site to the west, consisting of a 2-storey podium and 6-storey tower above with its iconic zig-zag facade addressing the square at the heart of the masterplan.
- 2. Echo Street** - three connected towers of student residential accommodation rising to 16, 22 and 28 storeys, currently under construction at time of planning application.
- 3. The Poulton and The Republic** - consented workplace buildings at Mayfield rising to 10 and 13 storeys respectively.

Illustrative future phases of the Sister masterplan have also been considered throughout the design process, as well as wider regeneration in the south of the city at Great Jackson Street, First Street and Circle Square, with Sister strategically positioned to continue this arc of regeneration and improve connections through to Piccadilly and Mayfield.



ID Manchester SRF Illustrative Masterplan



1- Renold Innovation Hub
Space Invader



2- Echo Street
Sheppard Robson



3- Mayfield, The Poulton
Bennetts Associates

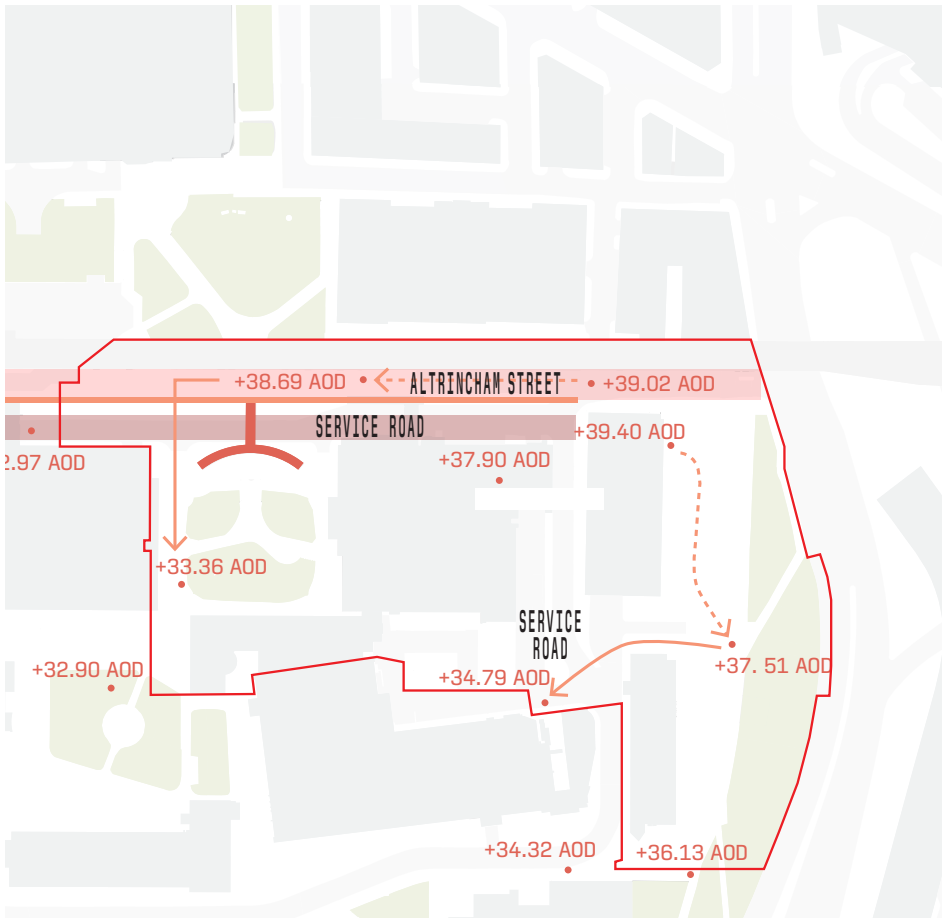


3- Mayfield, The Republic
Morris + Company

2.2 SITE ANALYSIS

2.2.1 CONSTRAINTS

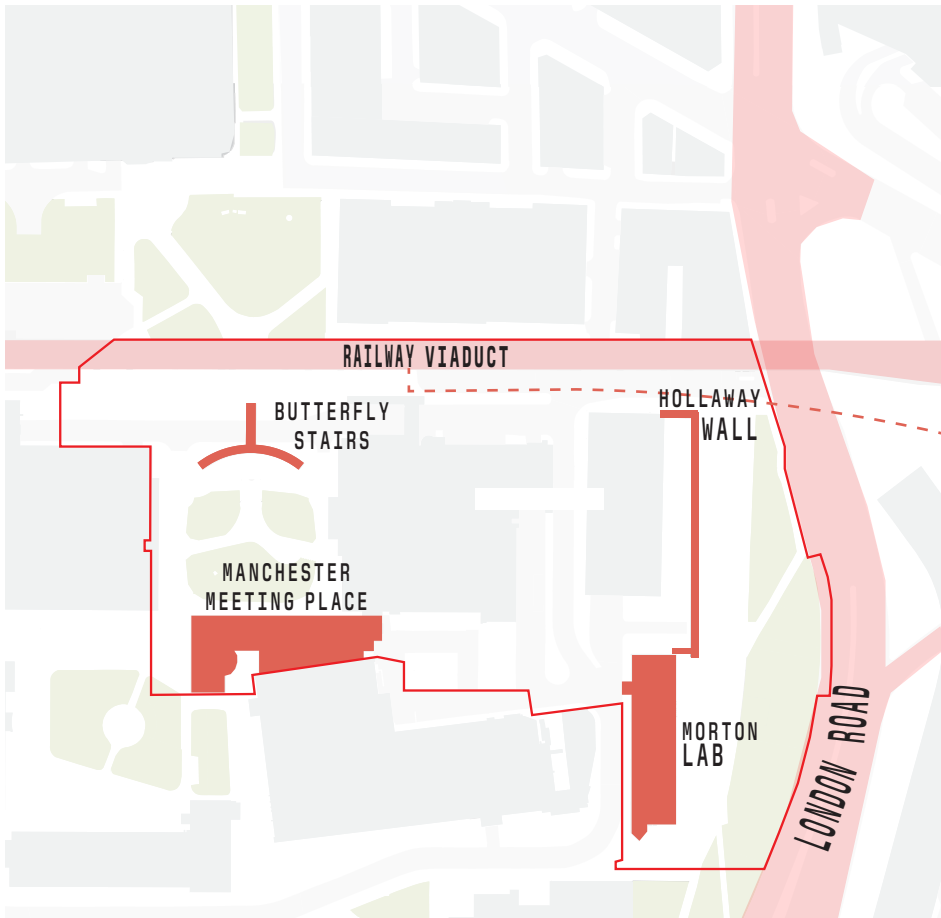
Development on Plot C needs to contend with a variety of the key on-site constraints identified within the SRF.



Levels

There are significant level changes from north-to-south, particularly from Altrincham Street down to the Bowling Green and east-to-west, from London Road down to service road level. This topography creates challenges for permeability, accessibility and inclusivity; but also opportunities to create interesting spaces, hidden servicing routes, and drainage solutions.

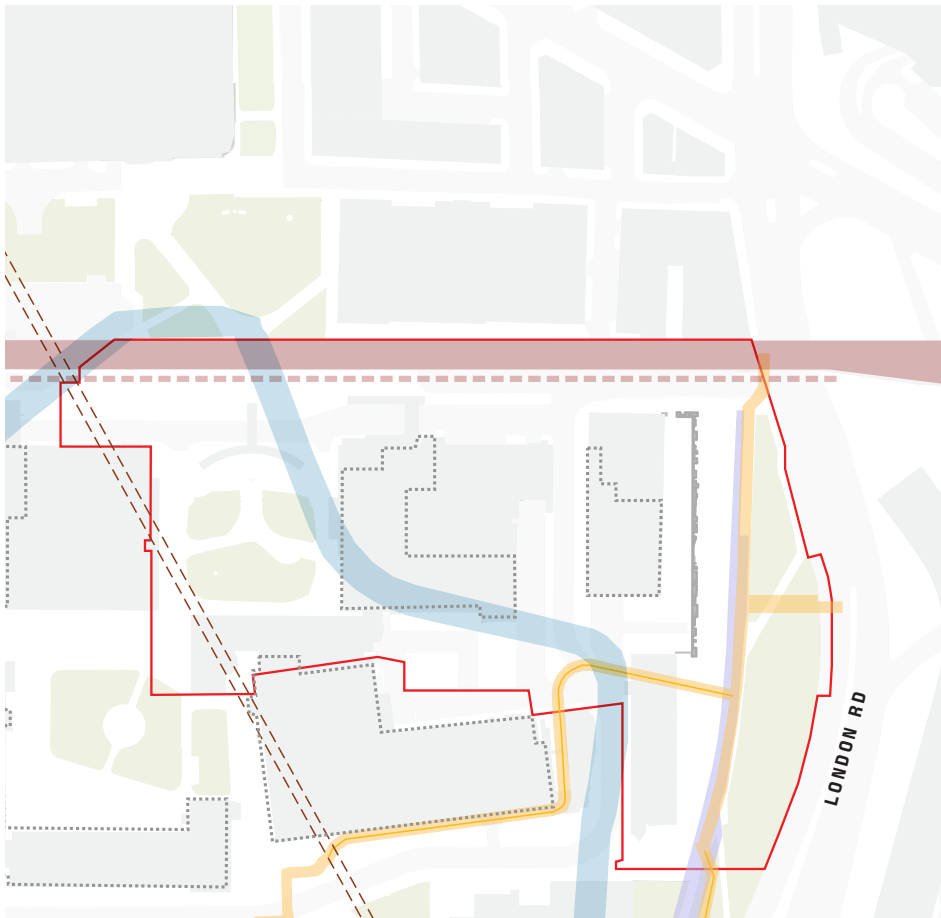
- Plot C site boundary
- Site Levels
- Retaining Wall
- Butterfly Steps
- Service Road



Barriers to movement

The Hollaway Wall and Morton Laboratory form a continuous defensive barrier between the landscape buffer to London Road and the rest of the site to the west, with access through only available at Altrincham Street to the north. This limited access would be further compromised by potential future extension of the viaduct. The Butterfly Stair and Manchester Meeting Place also limit masterplan connectivity northeast-to-southwest through to the University campuses and Oxford Road Corridor. Whilst the Butterfly Stairs address the change in levels, they are not accessible to those with mobility needs.

- Plot C site boundary
- Transport Infrastructure
- Existing barrier structures
- Potential viaduct extension

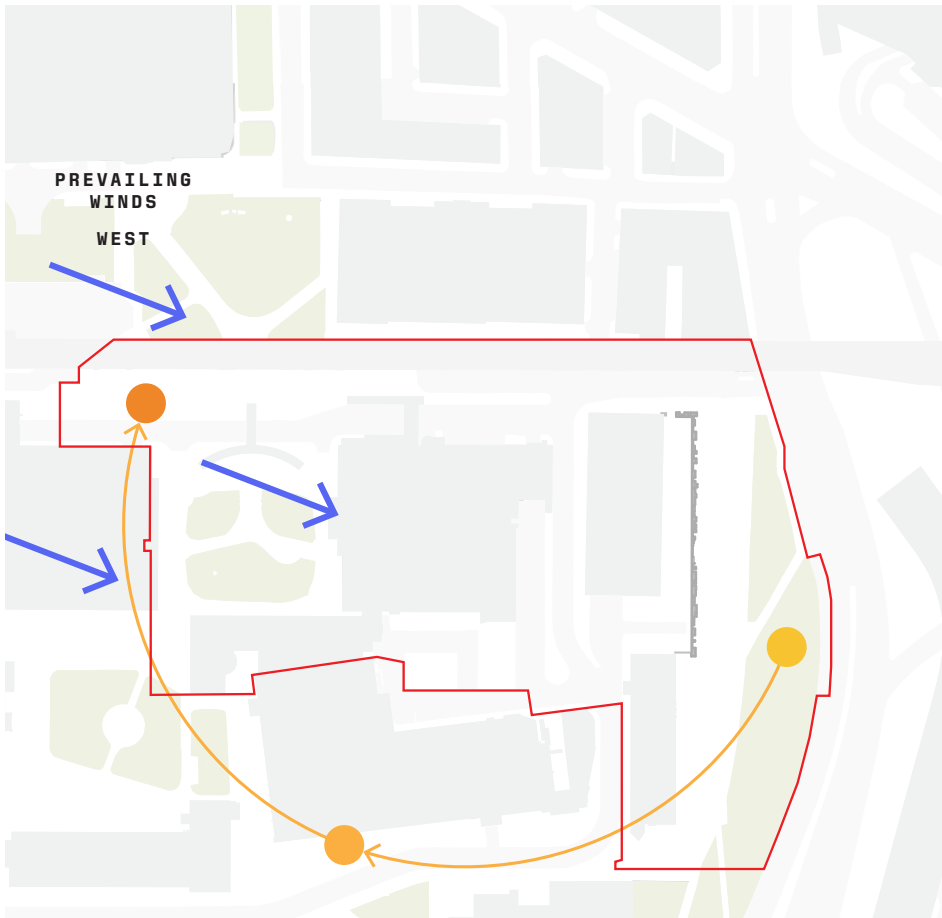


Utilities and Easements

Utilities and associated easements running north-south adjacent London Road form a key constraint to potential developable land / extent of planting along this prominent aspect of the site.

- Plot C site boundary
- 3m gas main easement
- Former river course
- BT Tunnel
- Gas wayleave
- Existing basements

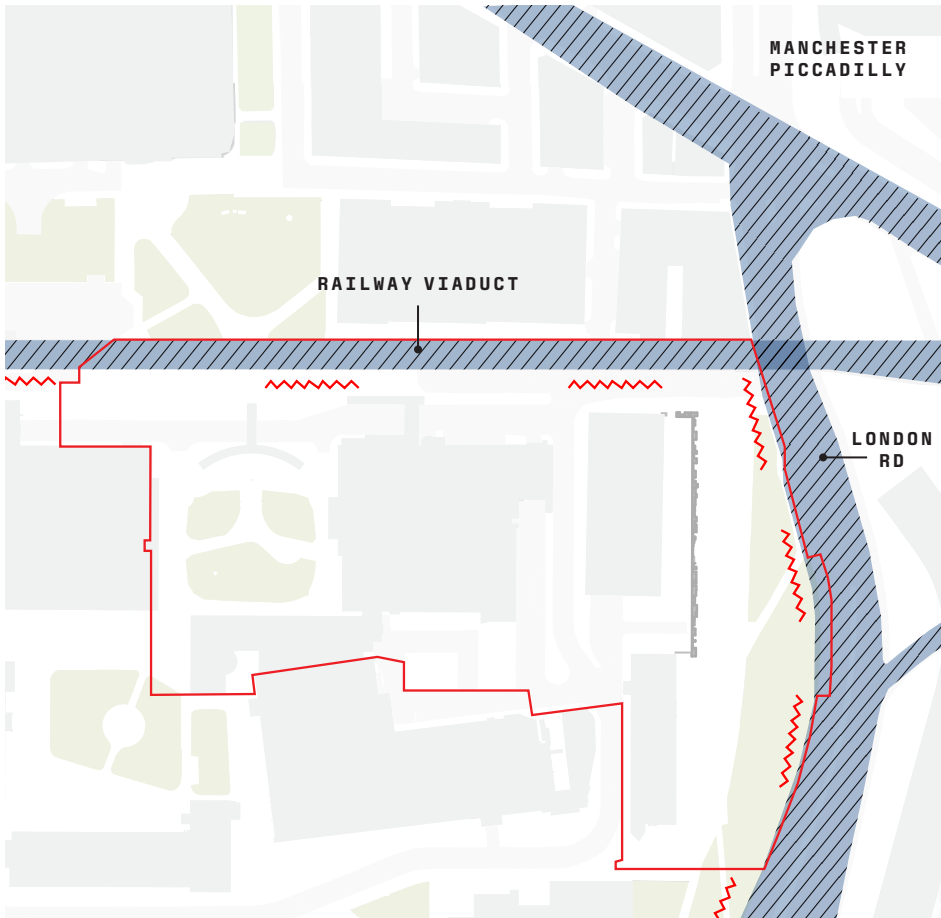
2.2.1 CONSTRAINTS



Orientation

The site is exposed to all environmental conditions, including prevailing westerly winds, and particularly easterly winds across the open London Road. The Mill and Renold Building overshadow the site to some degree, particularly in the early afternoon and late afternoon respectively.

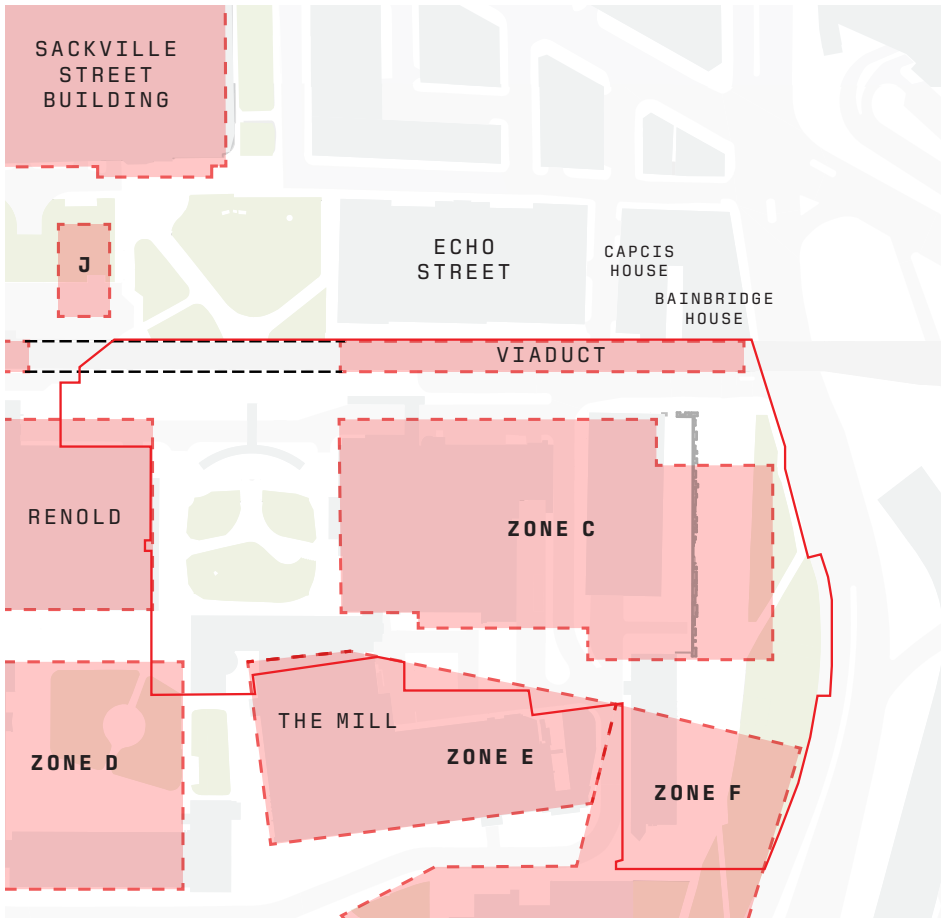
- Plot C site boundary
- Prevailing winds
- Sun orientation



Noise and air quality

London Road and the Railway Viaduct, as well as Mancunian Way further south, are busy pieces of transport infrastructure that contribute significantly to noise levels experienced on the site, while also presenting air quality challenges through concentration of emissions.

- Plot C site boundary
- Noise and emissions source



Neighbouring buildings and masterplan development zones

Relationships to neighbouring existing and emerging buildings such as the Renold Building to the west, Echo Street to the north and the Mill to the South, as well as masterplan development zones such as zones E and F to the south, should consider factors including access, routes and spaces, views and environmental conditions.

- Plot C site boundary
- Masterplan development zone

2.2.2 OPPORTUNITIES

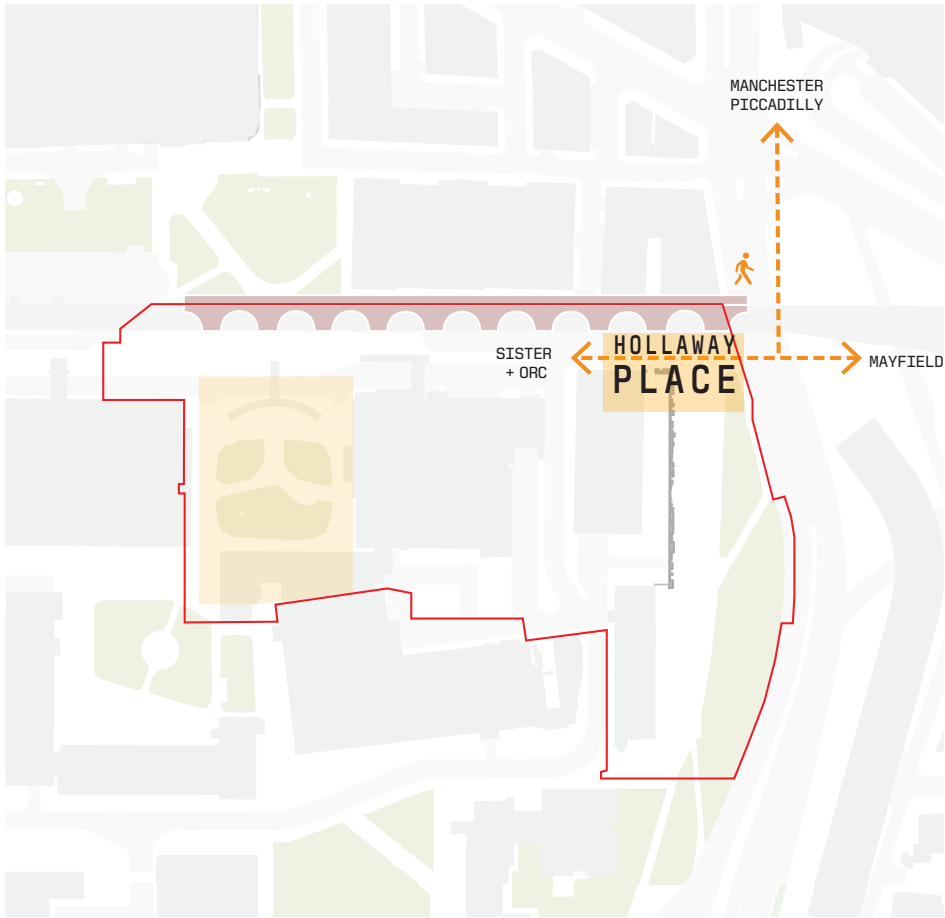
Plot C presents the opportunity to realise some of the most important place-making priorities identified within the SRF, starting the process of knitting the Framework Area back into the urban fabric of the city and creating the conditions to support the successful delivery of the wider masterplan.



A new civic-scale square

Sister Square, the principle public space at the heart of the masterplan, is a central component of the brief and a key public interface with Plot C and the newly refurbished Renold Innovation Hub. The square needs to be of a scale and design capable of hosting a variety of public functions and activities.

Addressing the level change to create a generous and fully accessible link between the northern and southern areas of the wider site could transform the space and unlock the important north south spine route of the masterplan.



A new gateway to Sister

The creation of a generous arrival space at the north east threshold of the site - Hollaway Place- serves as a vital gateway, welcoming visitors arriving from Manchester Piccadilly directly to Sister and the Oxford Road Corridor.

A large, welcoming space animated by highly visible entrance lobbies and engaging shop fronts would invite footfall and encourage interaction with Plot C and Sister.

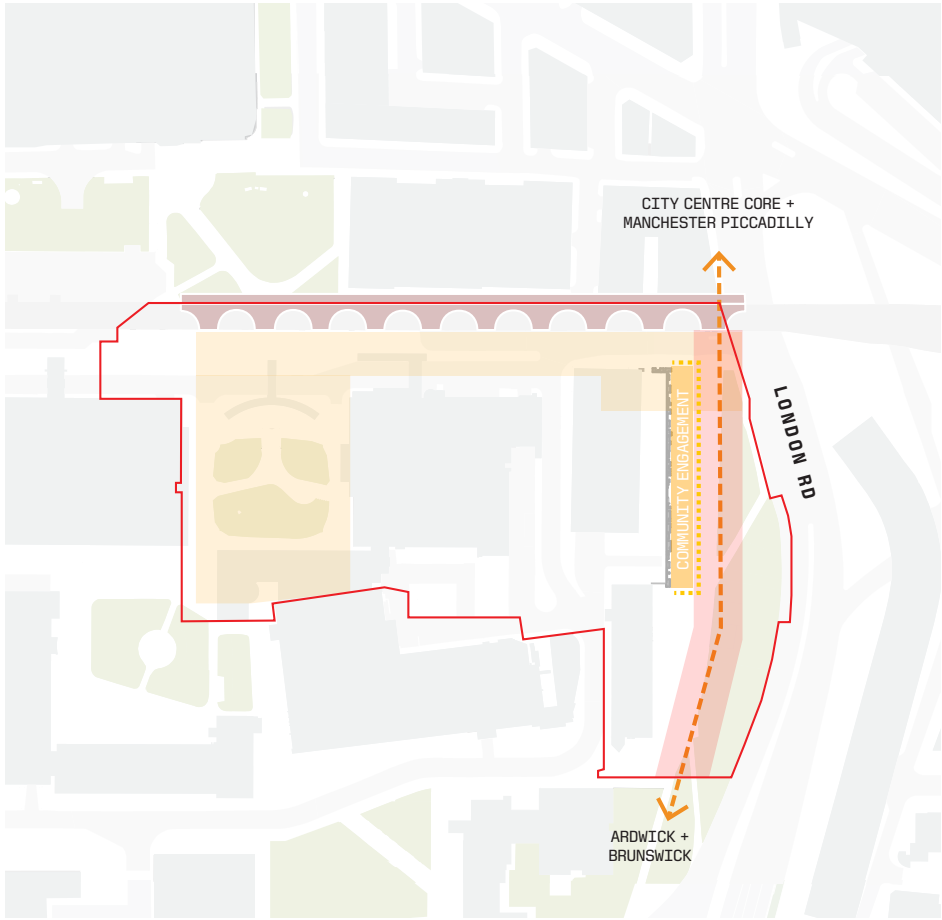


A transformed Altrincham Street

The widening of Altrincham Street is a key move for the masterplan, drawing pedestrians and cyclists through Sister from the Oxford Road Corridor to the west and Piccadilly and Mayfield to the east, connecting Plot C and the framework area with the surrounding city.

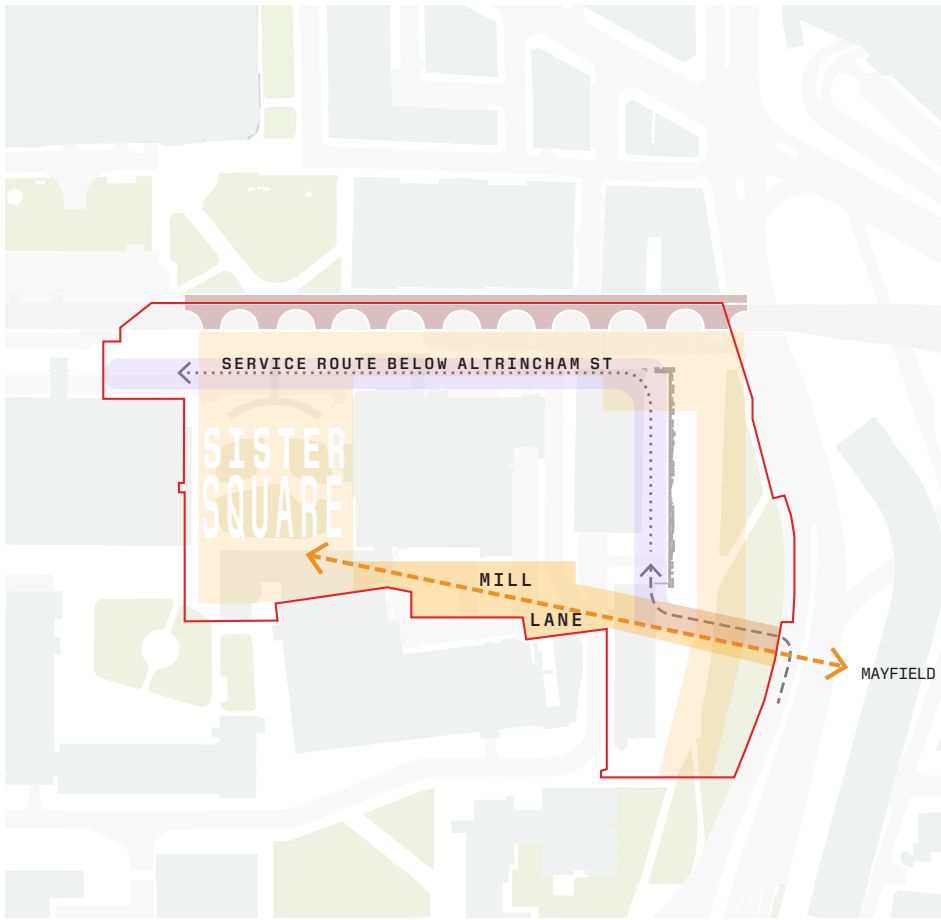
A significant portion of this principal east-west route is to be delivered as part of Plot C, capping what would become a hidden service route below. Re-activated railway arches and active ground floor uses could spill out and animate this generous route on both sides.

2.2.2 OPPORTUNITIES



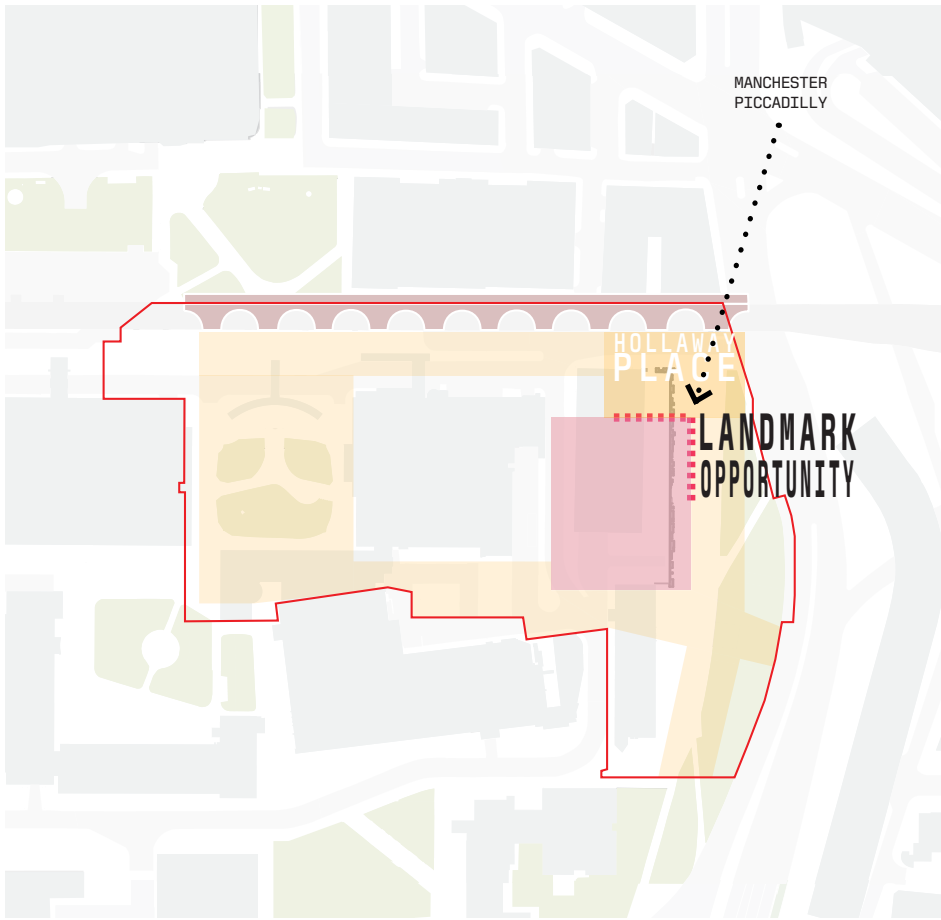
A humanised London Road

Potential to improve pedestrian and cycle links between Piccadilly and neighbouring residential areas to the south through a revitalised public realm, and create the opportunity for engagement with the local community along Plot C's prominent eastern aspect .



A new east-west route

A new east-west route to the south of the site - Mill Lane - offers improved connectivity between Mayfield, London Road and the heart of the Sister masterplan. It also presents the most suitable location for discreet servicing access that could utilise the site's level changes to connect to a concealed servicing tunnel underneath a widened Altrincham Street, serving Plot C and future phase buildings out-of-sight from a pedestrian-oriented public realm.



Landmark opportunity

The SRF identifies opportunities to deliver tall buildings across the Framework Area, particularly where addressing key threshold spaces. The north east of Plot C is a key strategic location for a landmark building to act as the first visual signifier of Sister when arriving into the Oxford Road Corridor from Piccadilly Station.

2.3 EXISTING STRUCTURES & SPACES

2.3.1 LISTED STRUCTURES

There are a number of existing buildings and structures on the site, ranging from nationally significant Listed structures through to Non-Designated Heritage Assets (NDHAs) and finally buildings of lower / no heritage significance.

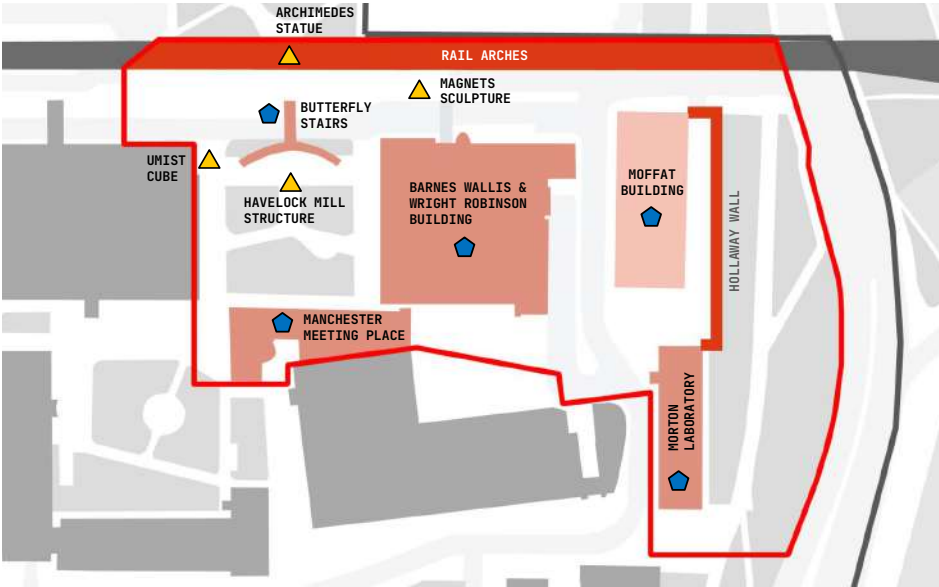
This section provides an overview of the existing structures, buildings and public realm that exist within the Plot C site boundary. A more in depth appraisal of the buildings and structures is included in the heritage report.

This page introduces the two Listed structures that enclose the north / northeast corners of Plot C - The Hollaway Wall and The Manchester South Junction and Altrincham Railway Viaduct.



Hollaway Wall, 1968

The Hollaway Wall is a Grade II Listed reinforced concrete structure designed by artist Antony Hollaway in collaboration with architect Harry M Fairhurst. Located on the eastern edge of the site fronting London Road, the wall is 70m long, returning at its north and south ends to enclose a service yard behind. These returns abut the existing Moffat and Morton Laboratory buildings. A gate in the northern return provides access through the wall. The outer surfaces of the wall are deeply modelled with a boardmarked finish, in contrast to the planar boardmarked rear faces. The structure extends to 5.1m high at the north and 9.2m at the south as the topography drops along London Road, with the structure functioning as a retaining wall.



Key plan

- Grade II Listed Structures
- NDHAs
- Lower significance
- Certificates of Immunity
- NDHA public art



Manchester South Junction and Altrincham Railway Viaduct, 1846-9

The Grade II Listed Manchester South Junction and Altrincham Railway Viaduct constructed by David Bellhouse Junior in the mid 1800s is a 1^{3/4} mile long urban viaduct running from Manchester Piccadilly Station in the east through to Castlefield in the west where it branches in two. The viaduct is a prominent feature on the site to the north side of Altrincham Street and is predominantly built of red brick with small sections of blue brick, sandstone dressings and cast iron details. It features a total of 224 brick arches [13 within the Plot C boundary] averaging a height of 30ft and span width of 28ft, most of which can be categorised as either pedestrian/vehicular routes or infill commercial/storage units.



2.3.2 NON-DESIGNATED STRUCTURES

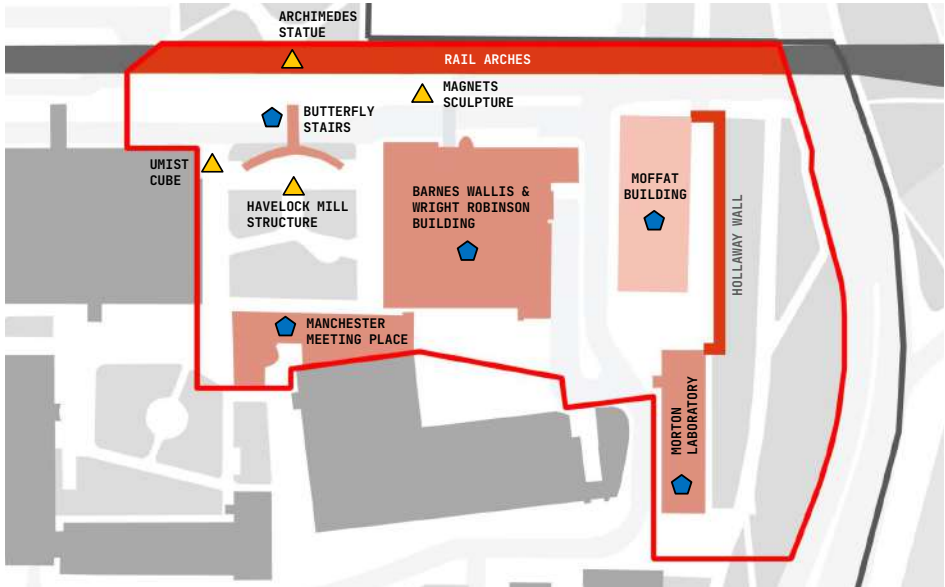
The heritage appraisal of existing structures on site has identified three buildings and one structure within the Plot C boundary that could be considered as Non Designated Heritage Assets - the Barnes Wallis/Wright Robinson building, Morton Laboratory, Manchester Meeting Place and the Butterfly Stairs.

The remaining structure, the Moffat building, is considered to be of a lower or negligible heritage status.

Certificates of Immunity [CoI] have been granted by the Secretary of State for all of the non-designated structures on site as illustrated by the blue icons below.

This page introduces these existing non-designated structures.

There are also four pieces of public art within the site that are considered to be NDHAs; the Archimedes statue, the Generations of Possibilities (Magnets) sculpture, the Havelock Mill structure and the UMIST Cube sculpture. Please refer to the public art strategy in Chapter 5 for further information on how these have been integrated within the public realm proposals.



Key plan

- Grade II Listed Structures
- NDHAs
- Lower significance
- Certificates of Immunity
- NDHA public art



Barnes Wallis Building (NDHA)

The Barnes Wallis Building, designed by architect W.A.Gibbon was purpose built as the UMIST ‘Student’s Union Building’. It extends to three storeys plus basement and is expressed as the podium element alongside the WRT. The building is accessed at lower ground level from the Bowling Green and at upper ground level via a bridge over the service road from Altrincham Street.



Wright Robinson Tower (NDHA)

The Wright Robinson Tower adjoins the Barnes Wallis Building and was purpose built to house student accommodation. It extends to fifteen floors above lower ground level and contains 172 dorm rooms. It is accessed from the east via Lower Albion Street and connects through internally to Barnes Wallis.



Moffat Building

The Moffat building sits at the key entrance point to the site from Piccadilly Station and Mayfield in the east. It was designed by architect H. Fairhurst and until recently housed the University’s Eye and Vision Science departments. It has a partial basement and two further floors. Its main entrance is located at the northwest corner.



Morton Laboratory (NDHA)

Morton Laboratory is located at the eastern periphery of the UMIST campus, at the south end of the Hollaway Wall. It extends to five storeys with a partial roof pop up and formerly housed the UMIST Chemical Engineering Pilot Plant, evidenced by the exposed ductwork and large fans at roof level. It is accessed via Lower Albion Street. It was designed by architect H.M.Fairhurst and built in 1966.



Manchester Meeting Place (NDHA)

Located at the centre of the UMIST campus, Manchester Meeting Place defines the southern extent of the Bowling Green. Originally a three storey block, the building was extended in 1965 eastwards to connect with Barnes Wallis and an extra floor was added. Its entrance is located on the northwest corner accessed via a colonnade.



Butterfly Stairs (NDHA)

The butterfly stair was constructed in 1963 to the design of Thomas Worthington & Sons. The stair is built of reinforced concrete with a sweeping metal balustrade, extending from Altrincham Street onto the lower level of the central Bowling Green. The stair features an elongated upper platform that bridges over the service road below.

2.3.3 PUBLIC REALM

A diverse range of spaces exist between buildings within the Plot C boundary, including streets, service roads, green spaces and parking areas.

This page introduces the primary spaces relevant to the Plot C proposals.



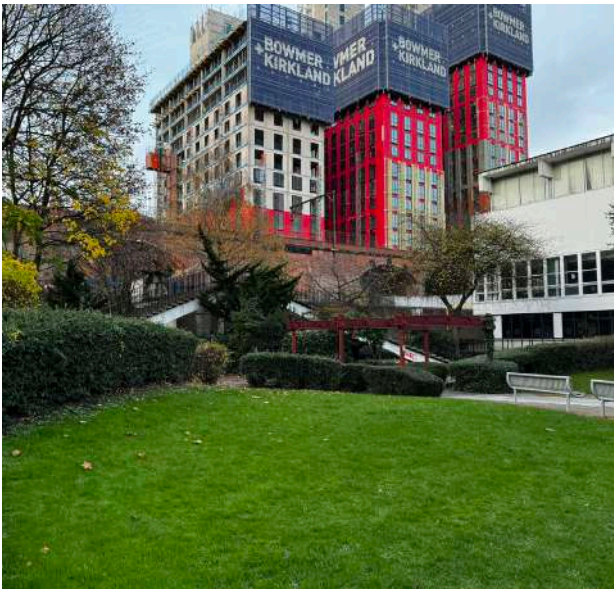
Altrincham Street

Altrincham Street spans the full width of the masterplan and is bordered by the viaduct to the north and an open air service road to the south. It marks a 5.2m level change north - south and is a shared pedestrian and vehicular zone. It is characterised by open and infilled arches to the north and views across the UMIST campus to the south.



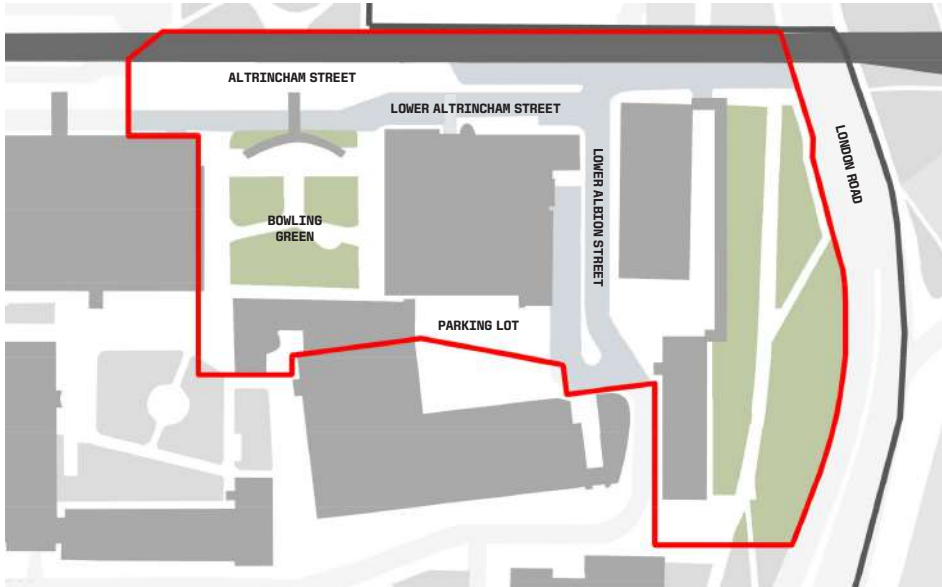
Lower Altrincham Street

An open air service road currently facilitates servicing of the buildings immediately south of Altrincham Street. The Butterfly Stairs span over the road, managing the separation of pedestrians from the heavy goods vehicles and cars that regularly use this route. The road is on-show to people enjoying the adjacent Bowling Green.



Bowling Green

The former Bowling Green at the centre of the UMIST campus is a generous green space enclosed by The Barnes Wallis, Renold and Manchester Meeting Place buildings. A number of circulation routes diverge in this area and are funnelled northwards via the Butterfly Stairs.

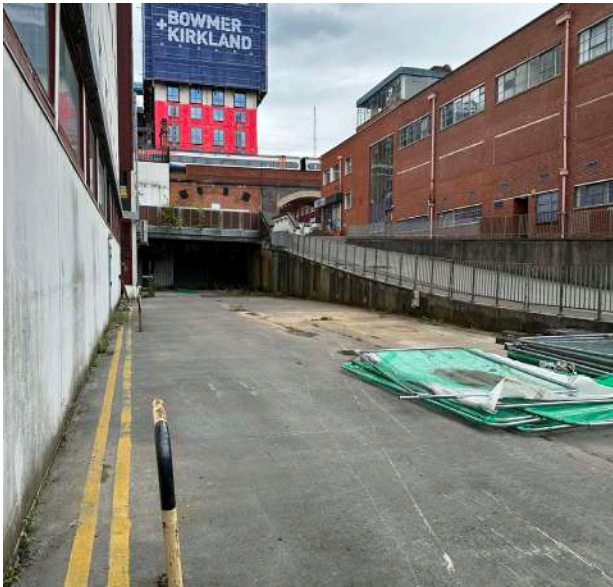


Key plan



London Road

London Road is predominantly characterised by a busy, sweeping dual carriageway connecting central Manchester with the Mancunian Way. Its western edge features an expanse of grass with a number of mature trees in front of The Hollaway Wall and Morton Laboratory.



Lower Albion Street

Lower Albion Street provides servicing access to buildings to the centre and south of the UMIST campus including the Mill and Morton Laboratory. It is mostly a tarmac surfaced vehicular route, not suited to pedestrian movement.



Barnes Wallis parking lot

A parking area occupies the space between the south facade of the Barnes Wallis Building and the north facade of the Mill. This is a vehicular focused space.

2.3.4 EXISTING BUILDING ANALYSIS

The existing buildings across the site and their redevelopment constraints and opportunities were assessed holistically by the design team, considering a number of factors including those defined under SRF Principle 9: Sustainable and Regenerative:

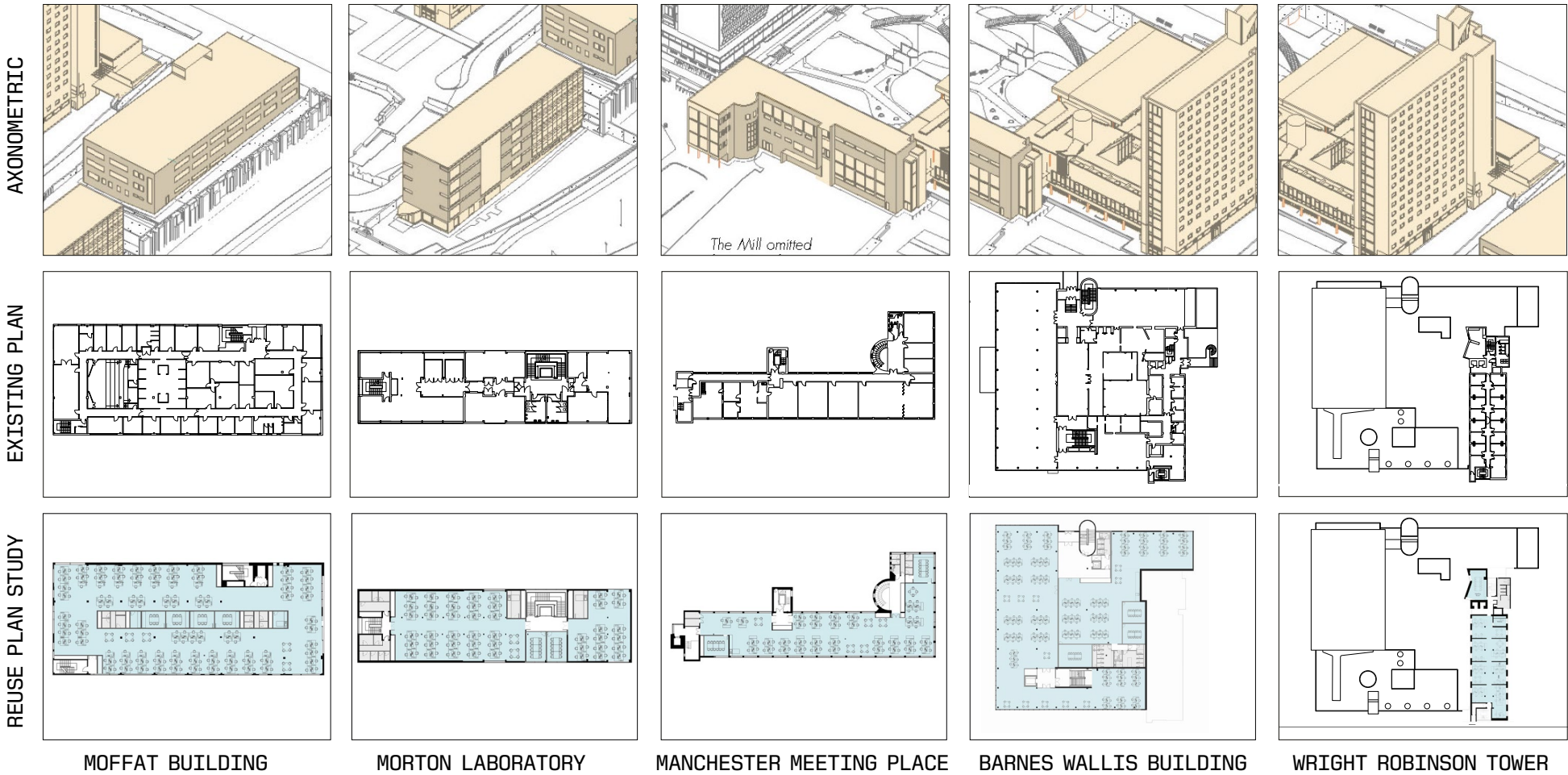
- Embodied and operational carbon
- Historical or architectural significance
- Building condition, including its structure, fabric and internal accommodation
- Feasibility of re-purposing buildings for viable long-term uses, prioritising commercial use in response to the client brief
- Relationship to other place-making priorities
- Ability to support the critical mass and flexibility of floorspace needed to make Sister a successful innovation district

For the purposes of this exercise, Barnes Wallis and Wright Robinson Tower have been appraised as separate entities, despite being connected, as they are considerably different with respect to floorplate size, floor to floor heights and facade openings.

These studies provided thorough insights into the potential re-use of each building, but clearly demonstrated that greater levels of intervention would be required in order to meet the brief requirements for a critical mass of c. 500k sq ft net of Grade A commercial office space with flexible typical floor plates of c.20k sq ft net, ambitious operational and whole life carbon targets, as well as the creation of key routes and spaces for the wider masterplan as explored further overleaf.

SRF PRINCIPLE 9 FACTORS

		MOFFAT BUILDING	MORTON LABORATORY	MANCHESTER MEETING PLACE	BARNES WALLIS BUILDING	WRIGHT ROBINSON TOWER
SRF PRINCIPLE 9 FACTORS	Embodied and operational carbon	Operational carbon of existing building exceeds requirements of modern occupiers. Deep retrofit needed to reduce to acceptable levels, requiring significant cost and embodied carbon expenditure.	Operational carbon of existing building exceeds requirements of modern occupiers. Deep retrofit needed to reduce to acceptable levels, requiring significant cost and embodied carbon expenditure.	Operational carbon of existing building exceeds requirements of modern occupiers. Deep retrofit needed to reduce to acceptable levels, requiring significant cost and embodied carbon expenditure.	Operational carbon of existing building exceeds requirements of modern occupiers. Deep retrofit needed to reduce to acceptable levels, requiring significant cost and embodied carbon expenditure.	Operational carbon of existing building exceeds requirements of modern occupiers. Deep retrofit needed to reduce to acceptable levels, requiring significant cost and embodied carbon expenditure.
	Historical or architectural significance	The building is of low significance and does not yield sufficient interest to be considered an NDHA, although elements are attached to the Grade II Listed Holloway Wall.	Does not meet threshold for listing. Identified as NDHA.	Does not meet threshold for listing. Identified as NDHA.	Does not meet threshold for listing. Identified as NDHA.	Does not meet threshold for listing. Identified as NDHA.
	Feasibility of re-purposing buildings for viable long-term uses	May be possible to re-purpose building for other uses, including low density below 'Grade A' commercial and/or flexible retail.	May be possible to re-purpose building for other uses, including low density below 'Grade A' commercial and/or flexible retail.	May be possible to re-purpose building for other uses, including low density below 'Grade A' commercial and/or flexible retail.	May be possible to re-purpose building for commercial or retail uses but would require significant interventions due to façade condition.	Viable uses that meet modern standards unfeasible due to compromised floor-to-ceiling clearances and floorplate constraints.
	Relationship to other place-making priorities	Sits at key arrival point to the site and its footprint obstructs an otherwise appropriately scaled public arrival space.	Obstructs the key access point from London Road for both pedestrians and servicing.	Constrains ability to deliver square of sufficient civic-scale and blocks east-west access connections.	Potential to support active ground and upper ground floor uses addressing the square.	Positive place making attributes as a landmark building but severely constrains key commercial development zone.
	Ability to support critical mass and flexibility of floorspace required	Scale, layout and siting severely constrain ability to deliver critical mass of floorspace and flexible floorplates.	Scale, layout and siting severely constrain ability to deliver critical mass of floorspace and flexible floorplates.	Building would not deliver significant density of floorspace but could form ancillary use.	Cannot structurally sustain extension over two storeys. Building footprint and siting may constrain ability to deliver critical mass.	Not considered suitable for viable re-use. Location in centre of commercial plot severely constrains ability to deliver critical mass of commercial floorspace.



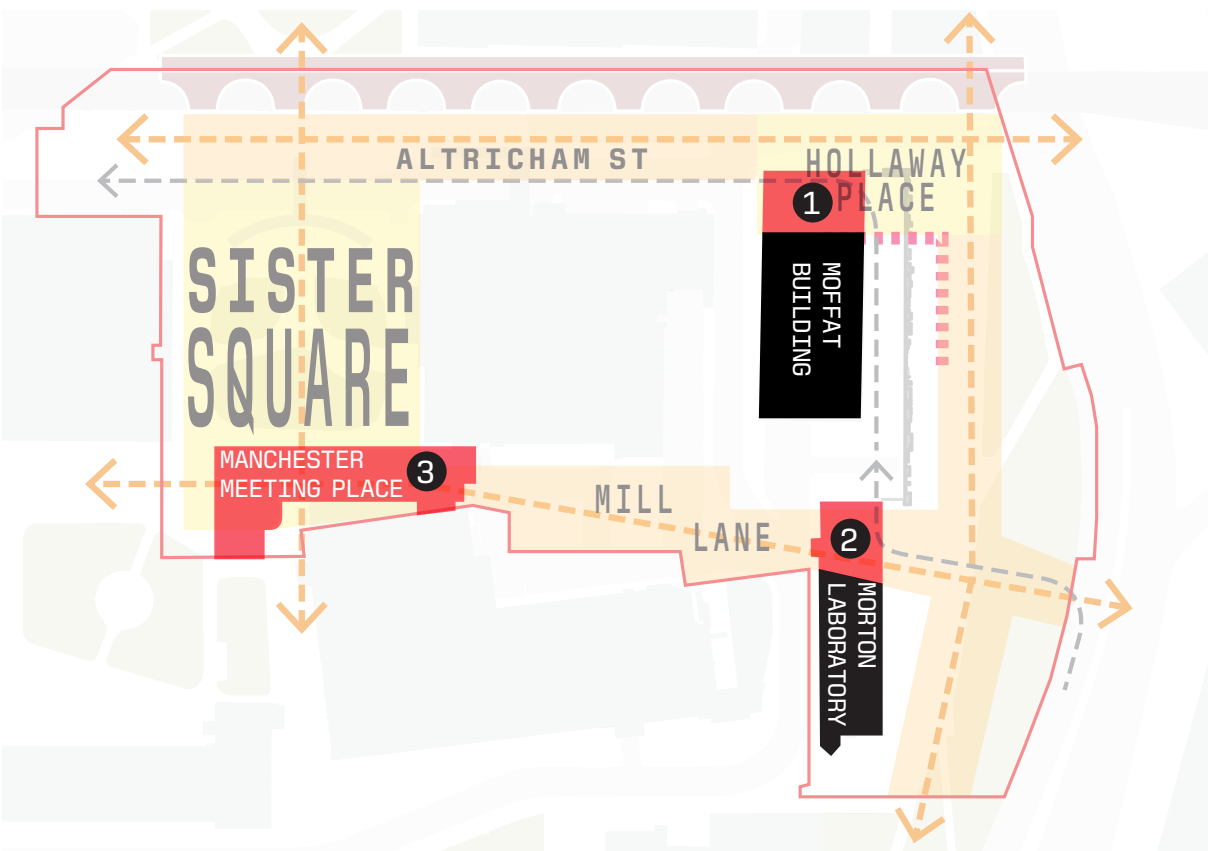
2.3.4 EXISTING BUILDING ANALYSIS

The framework of development zones defined in the SRF was based largely on the layout of the existing campus, supporting a delivery strategy where decisions for removal or retention of existing buildings can be made when each development zone comes forward, informed by in-depth analysis.

Exceptions to this were identified, where existing buildings obstruct the structure of principal routes and spaces and were anticipated to require removal in order to deliver the masterplan’s place-making priorities.

Structures associated with Plot C that were anticipated to be removed were the Morton Laboratory, Manchester Meeting Place and the Butterfly Stairs, with subsequent site analysis also identifying the Moffat Building as obstructing the creation of key gateway space Holloway Place.

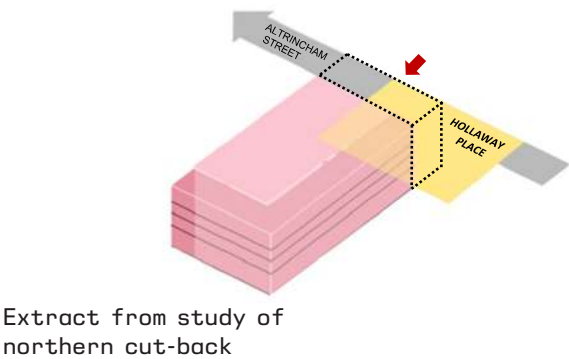
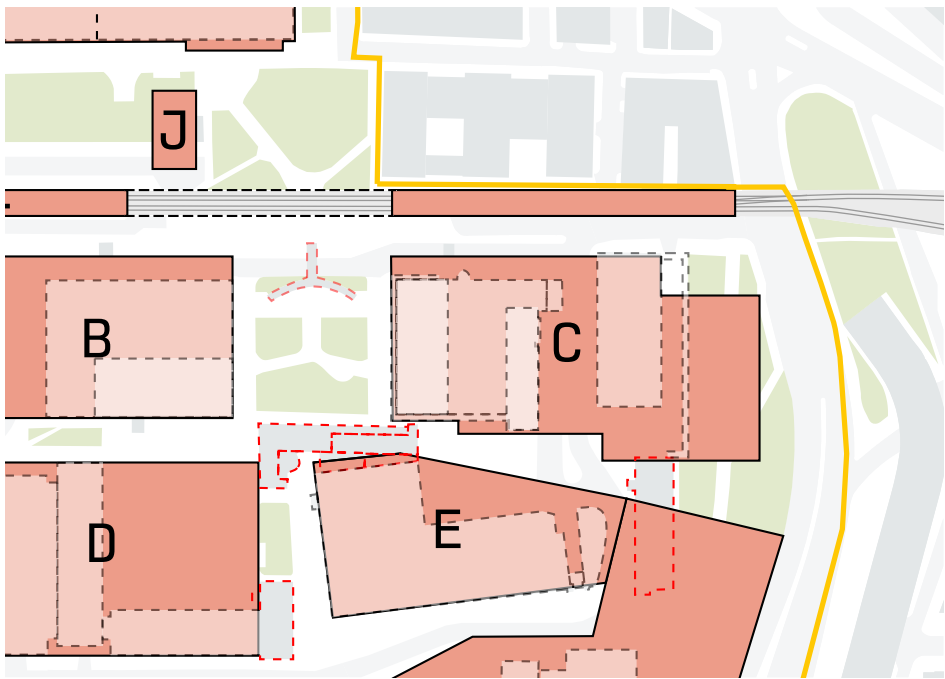
This page summarises optioneering undertaken to explore the potential retention and adaptation of these buildings while delivering the masterplan’s place-making priorities. Optioneering regarding the potential re-use of the Butterfly Stairs is explored in Chapter 5 Landscape and Public Realm.



1. Moffat Building

Building obstructs the creation of a generous arrival space Holloway Place and potential landmark building opportunity.

Studies undertaken explored the removal of the northern portion of the building in order to create a threshold space of an appropriate size, but this was found to exacerbate inefficiencies identified through the reuse appraisal process. It was concluded that the building needed to be removed.



SRF Development Zones Extract

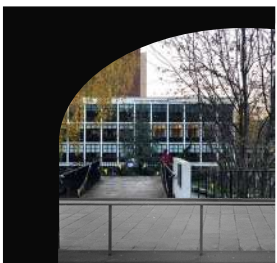
3. Manchester Meeting Place

Building obstructs key east-west and north-south masterplan routes and overly restricts the size and flexibility of Sister Square.

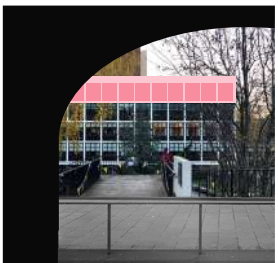
Studies undertaken explored the removal of non-original extensions to the building in an effort to improve public realm permeability, and potential rooftop extensions to improve feasibility of re-use. However key masterplan routes remained compromised and internal spaces were inadequate for viable long term use, resulting in the removal of the building being deemed necessary.



Original fabric



Existing building including later additions

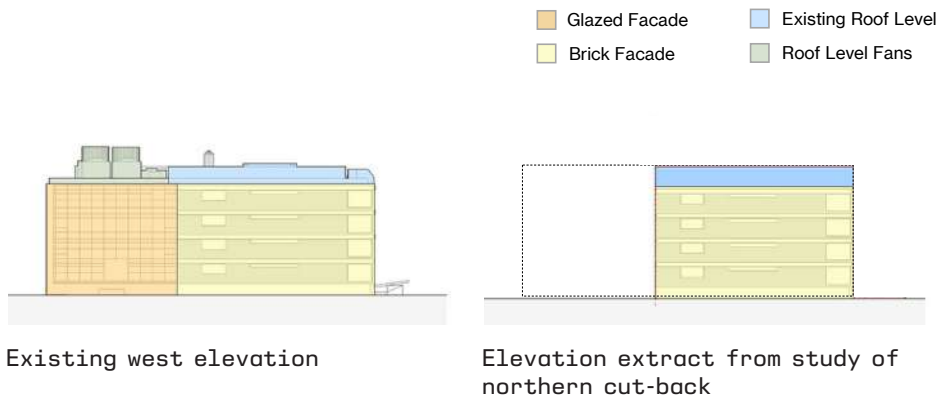


Potential rooftop additions

2. Morton Laboratory

Building obstructs new east-west ‘Mill Lane’ route and vital servicing access point into the site from London Road (please see Chapter 3 for further information)

Studies explored included the removal of the glazed northern portion of the building in order to facilitate the required access, but this was deemed to fundamentally undermine the character of the building as well as compounding challenges to viable long term re-use. It is therefore proposed that the building be removed.

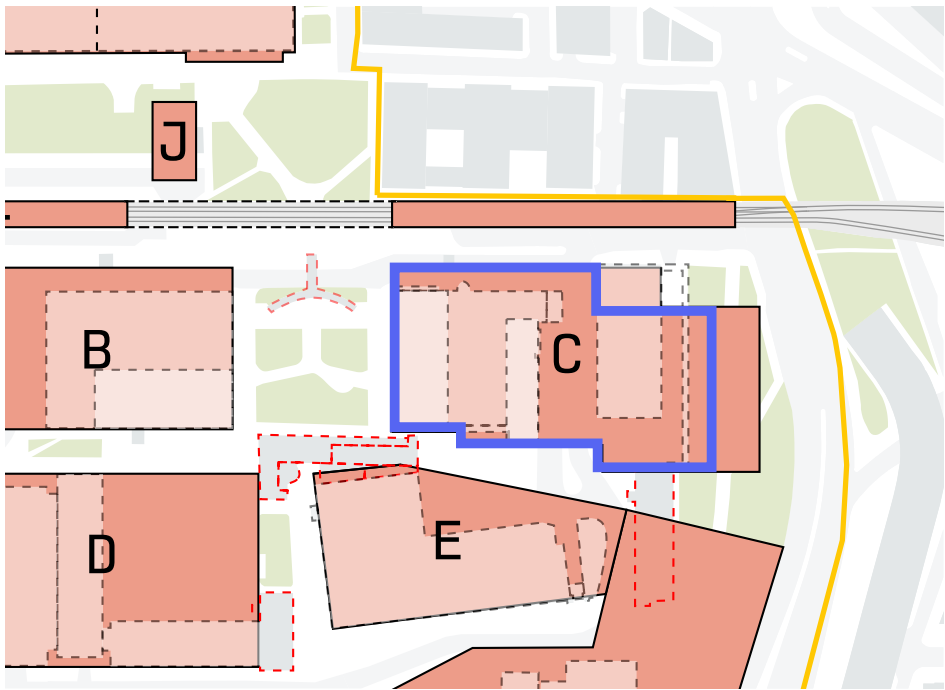


2.3.5 DEVELOPMENT PARAMETERS

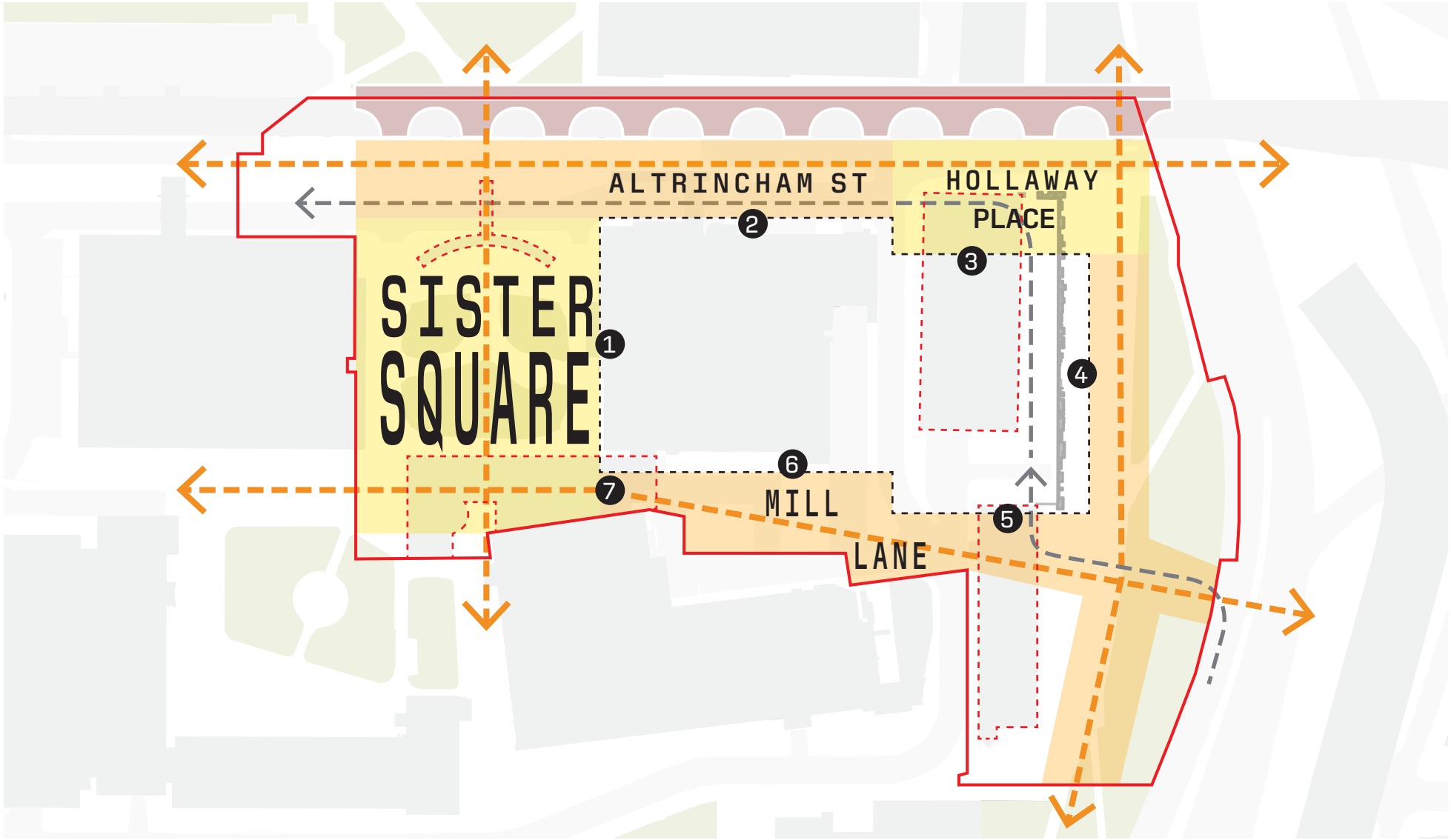
The thorough analysis of the site’s constraints and opportunities and its existing structures in the context of the project brief define a zone of building development - a refinement of the masterplan’s Development Zone C. The rationale behind this refinement is illustrated in the diagram opposite.

The creation of key routes and interconnected spaces accessible to all are integral to the masterplan’s spatial structure. As a consequence, the Moffat Building, Morton Laboratory and Manchester Meeting Place are proposed to be removed, as they are not compatible with this core objective and their partial retention and adaptation for long-term use are not considered viable, as summarised on the preceding pages.

Further detailed optioneering regarding the potential re-use of the Barnes Wallis and Wright Robinson Building, and interventions required to the Hollaway Wall is summarised in Chapter 3.



Development Zone diagram with refined Plot C parameters



Key routes and spaces vital to the masterplan’s place-making principles define the development zone

1. The existing western frontage line of Barnes Wallis defines the civic-scaled square at the centre of the masterplan.
2. The north extent of the development zone is defined by a widened Altrincham Street covering a hidden servicing route below.
3. The need to create a key gateway arrival space to Sister and the Oxford Road Corridor from Piccadilly at the north east of the site requires the development zone to set back to the south here. Optioneering of associated interventions required to the Hollaway Wall are presented in the following chapter.
4. Below ground utilities and associated easements adjacent London Road limit the eastern extent of the zone.
5. Discreet servicing access from London Road, utilising the site’s level changes to connect to a concealed servicing tunnel underneath a widened Altrincham Street. Detailed analysis of service access positioning and optioneering of interventions required to Hollaway Wall are presented in the following chapter.
6. The southern extent of the development zone encloses and provides activation to Mill Lane, considering adjacencies to Development Zones E and F to the south.
7. Removal of Manchester Meeting Place facilitates the new east-west connection to Sister Square from London Road - Mill Lane - and enables the Square to be increased in size to an appropriate civic-scale capable of hosting a variety of events.



3 DESIGN EVOLUTION

3.1 OVERVIEW

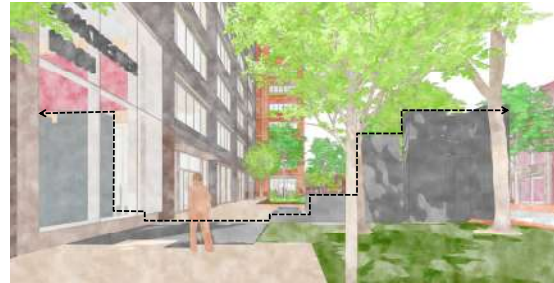
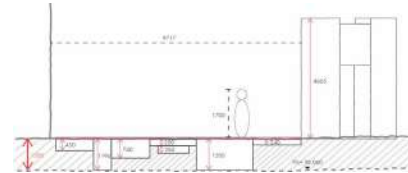
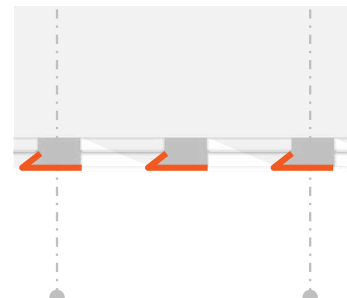
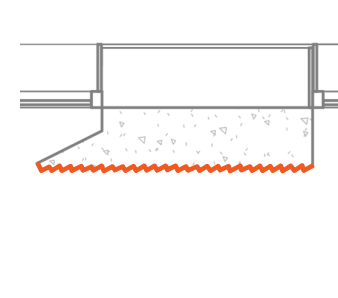
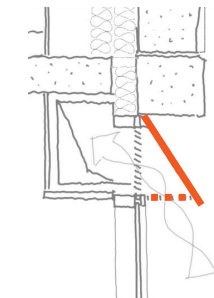
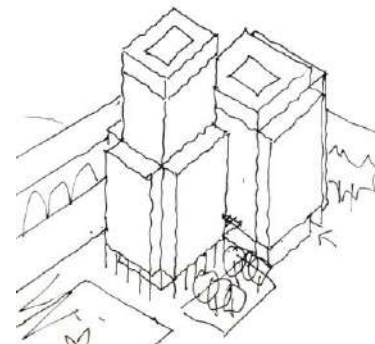
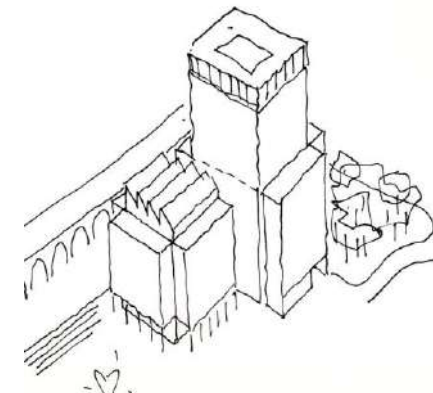
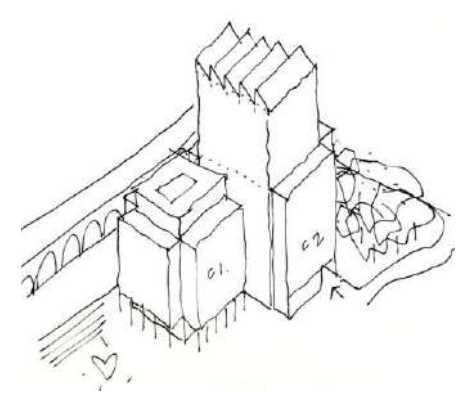
This chapter documents the evolution of the refined design proposal presented in Chapter 4. It is the outcome of a comprehensive, iterative design process informed by design reviews, public consultation, internal stakeholder engagement, statutory body engagement and dialogue with key heritage groups.

Building on the analysis and studies of existing buildings presented in chapter 2, the spectrum of intervention optioneering explores how new building(s) might incorporate existing NDHAs on the site.

A thorough optioneering process focussed on the integration of the Grade II Listed Hollaway Wall explains the rationale behind the detailed proposals that have been developed.

Through the development of the scheme, a series of six core ideas emerged, forming a key metric against which our designs could be tested.

To conclude, key areas of design development are summarised against the project consultation timeline, plotting the various engagements, workshops and discussions that have helped to shape the design.



Design development sketches and models

3.2 EXISTING STRUCTURES OPTIONEERING

3.2.1 INTRODUCTION

Over the last two years an extensive interdisciplinary optioneering exercise has been undertaken to determine the extent of retention and removal of existing structures across Plot C in response to the project brief and objectives and the principles of the masterplan.

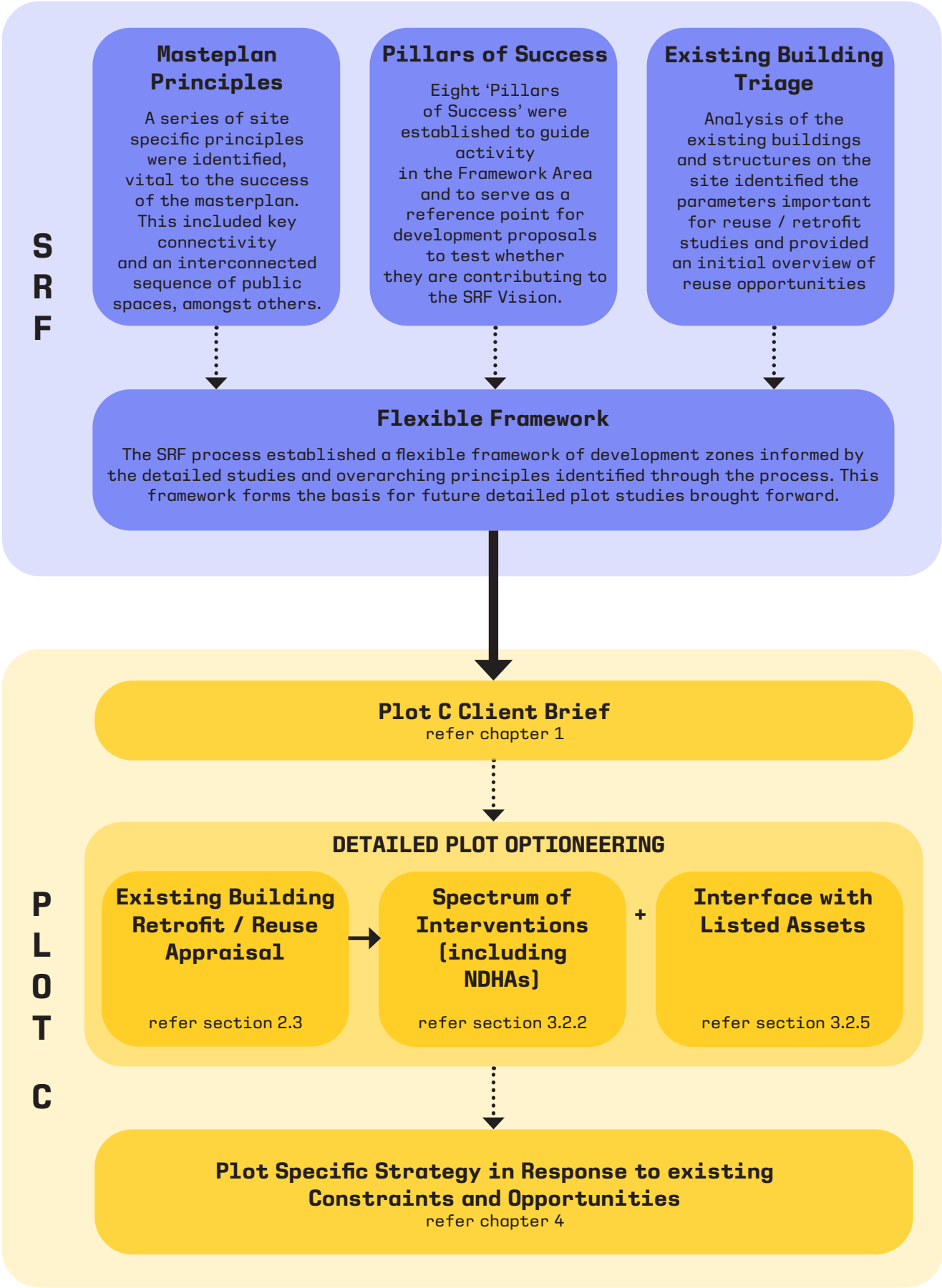
This exercise has built upon studies that were carried out for all buildings within the wider framework area during the development of the SRF, which included;

- Detailed heritage baseline significance appraisals
- Preliminary assessment of suitability for re-use and retrofit, considering structure, fabric, internal accommodation, building services, embodied and operational carbon
- The resolution of a flexible framework of development zones identifying plot boundaries

The optioneering exercise for Plot C began with a more detailed appraisal of the existing buildings on the project site to identify those compatible with the key objectives of the brief and SRF. This is covered in section 2.3 of this document. The outcomes of this study identified the existing structures to be considered in more detail through a spectrum of interventions ranging from part retention, part new build, through to total new build with little retention.

Alongside this process, in-depth analysis and optioneering of key listed assets, particularly the Holloway Wall, was also undertaken to inform their integration into the scheme.

The conclusions of this optioneering process establish the approach to existing structures on the site that are integrated into the final proposal as covered in Chapter 4 of this report.



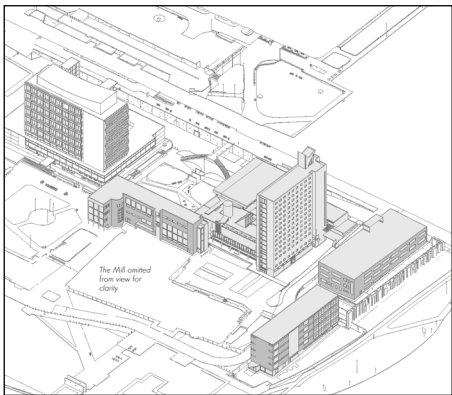
3.2.2 SPECTRUM OF INTERVENTION - OVERVIEW

The appraisal of reuse and retrofit opportunities for each of the existing buildings on site is covered in section 2.3 of this document. This process concluded that a number of the existing buildings are incompatible with the project brief and SRF Place-based Principles.

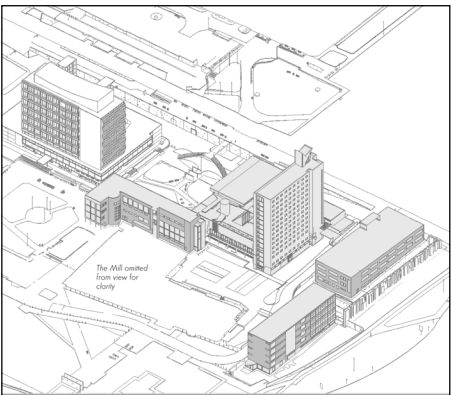
In identifying a spectrum of intervention to existing structures, as illustrated below, we can therefore discount the first three approaches from the further review process as they simply do not facilitate the critical mass of floorspace needed on this flagship plot within the Innovation District.

The two remaining approaches in the spectrum, covered in the following pages, explore:

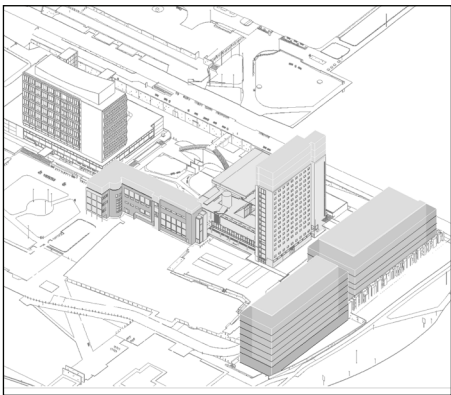
- the integration of select existing assets within a series of partial retention/new build options
- full new build options exploring partial integration of Listed assets where possible as well as total removal.



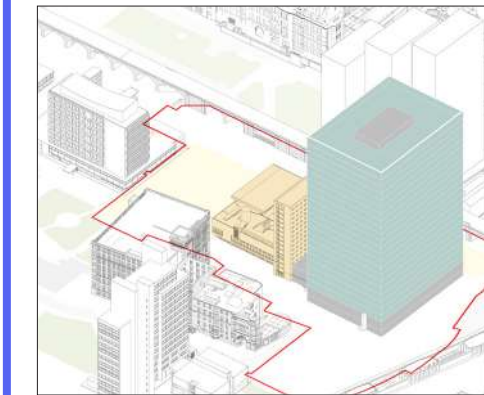
DO NOTHING



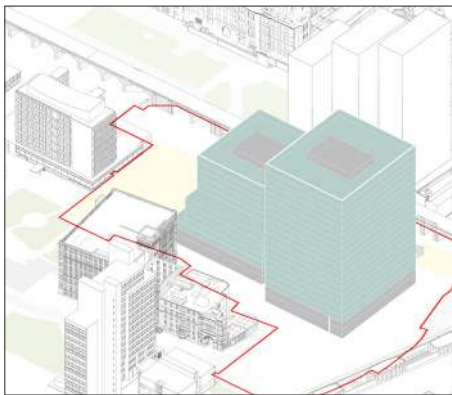
RETROFIT / REUSE



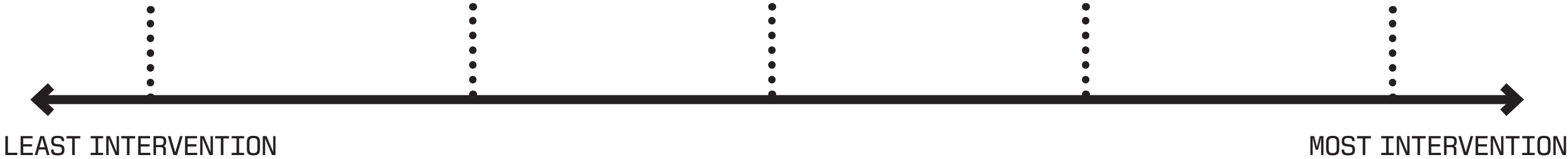
RETROFIT / EXTENSION



PARTIAL NEW BUILD



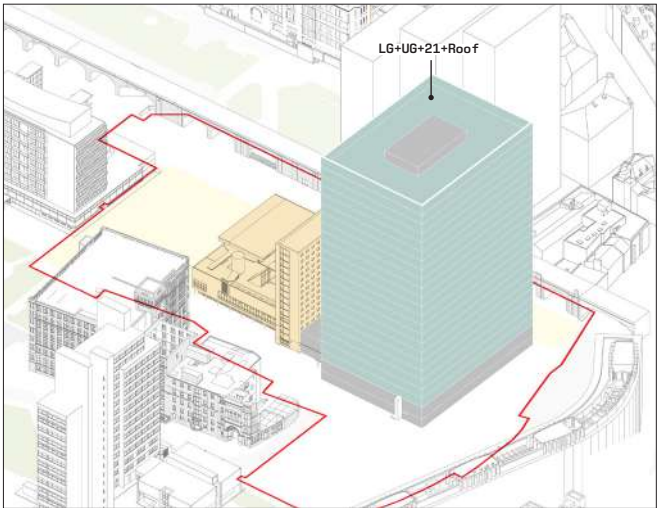
COMPLETE NEW BUILD



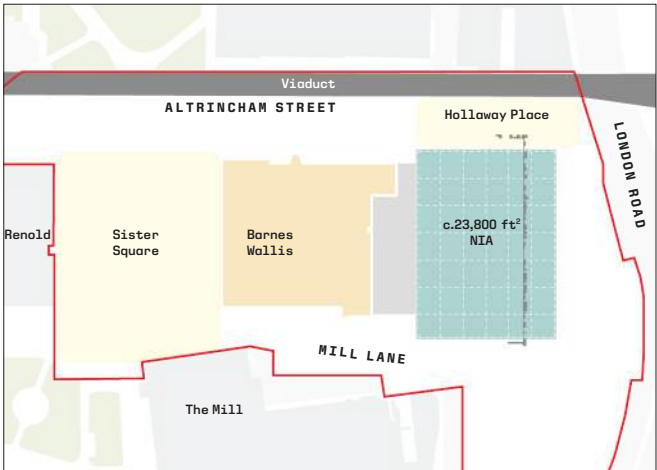
3.2.3 SPECTRUM OF INTERVENTION

SCENARIO A

AXONOMETRIC



TYPICAL LEVEL PLAN



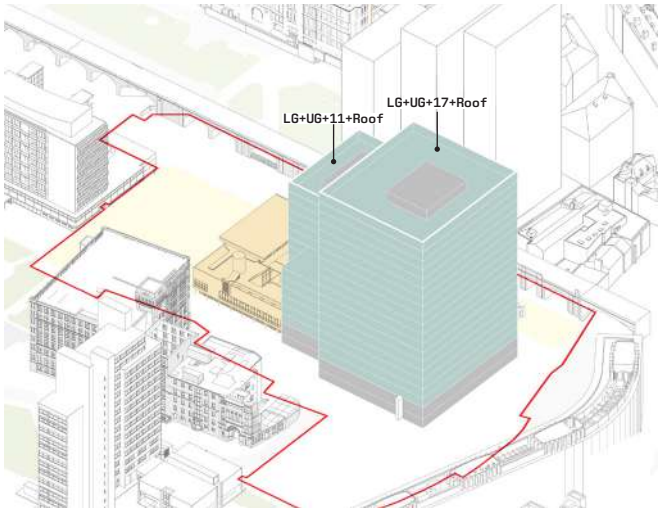
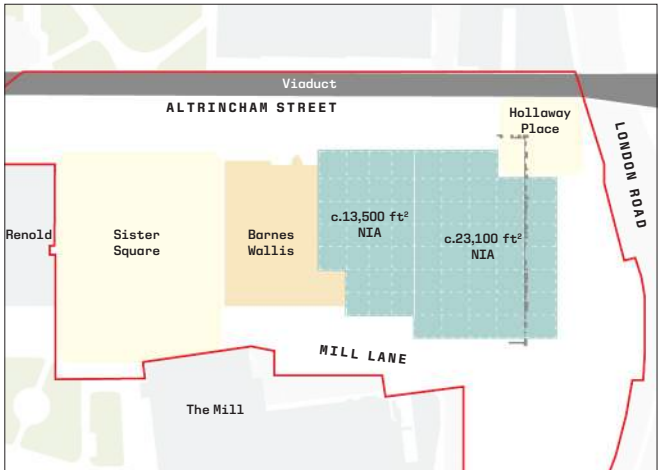
DESCRIPTION

Refurbishment of Barnes Wallis & Wright Robinson Building connected by a two storey podium to a single new build tower that extends beyond Holloway Wall to meet office floorplate area brief requirement.

COMMENTARY

- Brief requirement for two buildings with c.20,000 sqft net typical floorplates that can be phased is not met.
- Single new build element has a constrained footprint, floorplate area requirements pose challenge to providing generous arrival space at Holloway Place.
- Wright Robinson tower's structure places too many constraints on achieving a long term viable retrofit offer - incompatible with brief for world leading Innovation District.
- Retention of Listed assets and an NDHA.

SCENARIO B

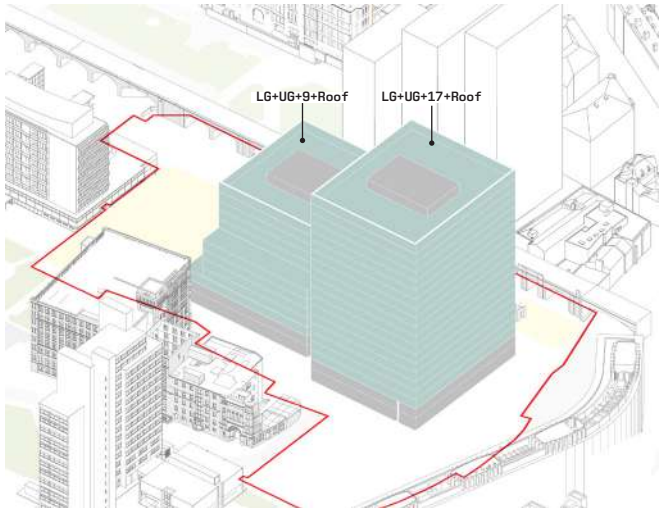
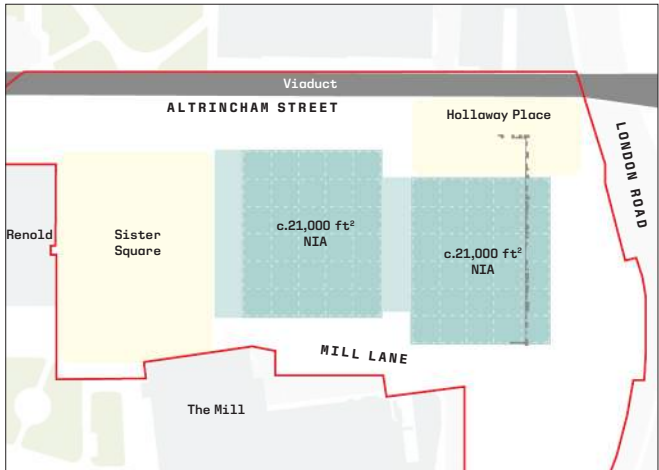


Partial refurbishment of Barnes Wallis. Wright Robinson Tower and eastern portion of Barnes Wallis removed. Removal line respects south elevation composition. New build of two interconnected buildings extends west to meet the altered Barnes Wallis footprint and east beyond Holloway Wall to meet office floorplate area brief requirement for the eastern building.

- New build footprint is too large for a single core building, too small for two cores or two buildings that are both of sufficient size.
- Brief requirement for phased delivery is compromised by interconnected buildings.
- Loss of existing fabric and composition of existing tower / podium elements. Full width of Barnes Wallis south facade retained.
- Complex demolition strategy required at Barnes Wallis / Wright Robinson interface.
- Retention of Listed assets, NDHA compromised.

Selected scenario

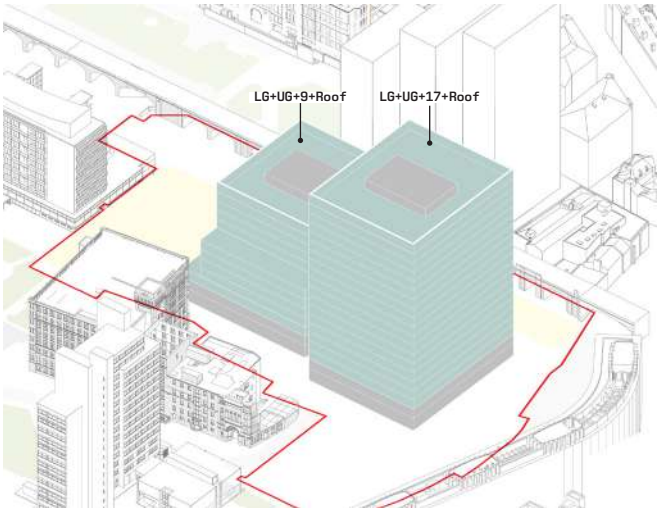
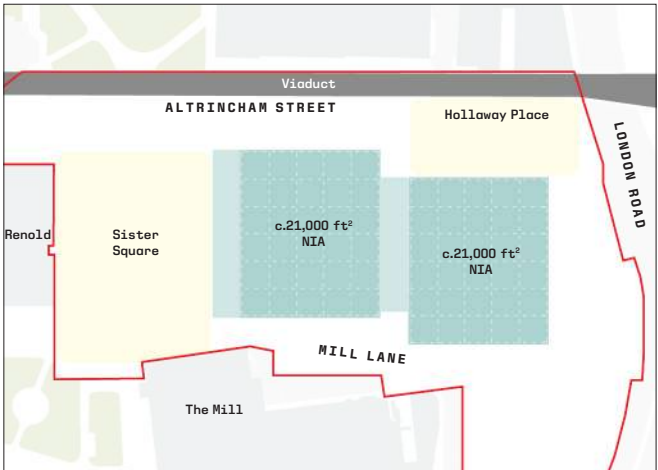
SCENARIO C



Removal of Barnes Wallis and Wright Robinson Tower. New build of two separate buildings linked at lower levels. Footprint extends west to the former Barnes Wallis Bowling Green frontage, and beyond Holloway Wall to the east in order to meet office floorplate area brief requirement. Options for further integration of Holloway Wall possible including oversailing and encapsulation - to be explored in next section.

- Office floorplate area requirements can be achieved across both buildings, whose delivery can be phased.
- New building frontage activates Sister Square, Mill Lane, Altrincham Street and London Road across a number of levels.
- Scale of frontage on Sister Square responds to the reanimated Renold Building opposite.
- Prioritisation of Listed heritage assets over NDHAs. Listed assets reanimated and integrated into proposal.

SCENARIO D



Removal of Barnes Wallis, Wright Robinson Tower and Holloway Wall. New build of two separate buildings linked at lower levels. Footprint extends west to the former Barnes Wallis Bowling Green frontage, and east to meet office floorplate area brief requirement.

- Office floorplate area requirements can be achieved across both buildings, whose delivery can be phased.
- New building frontage activates Sister Square, Mill Lane, Altrincham Street and London Road across a number of levels.
- Scale of frontage on Sister Square responds to the reanimated Renold Building opposite.
- Complex interface with Holloway Wall no longer a constraint to construction, but key heritage asset is lost.

3.2.4 SPECTRUM SUMMARY

The spectrum of intervention covered in this section built upon the existing building analysis in chapter 2 to identify existing structures compatible with the project brief and wider masterplan objectives. The conclusion of this process has demonstrated that all non-designated heritage assets and lower value buildings are to be removed in order to deliver the client brief and critical mass required for the site and wider innovation district.

The two Listed structures present on the site can be fully integrated into the proposal, reanimated in their new role within the masterplan and allow the public to reconnect with them. They are outlined below.

This process has reinforced a number of key constraints and opportunities that have informed the refined design proposal. These themes are illustrated on the diagram opposite.



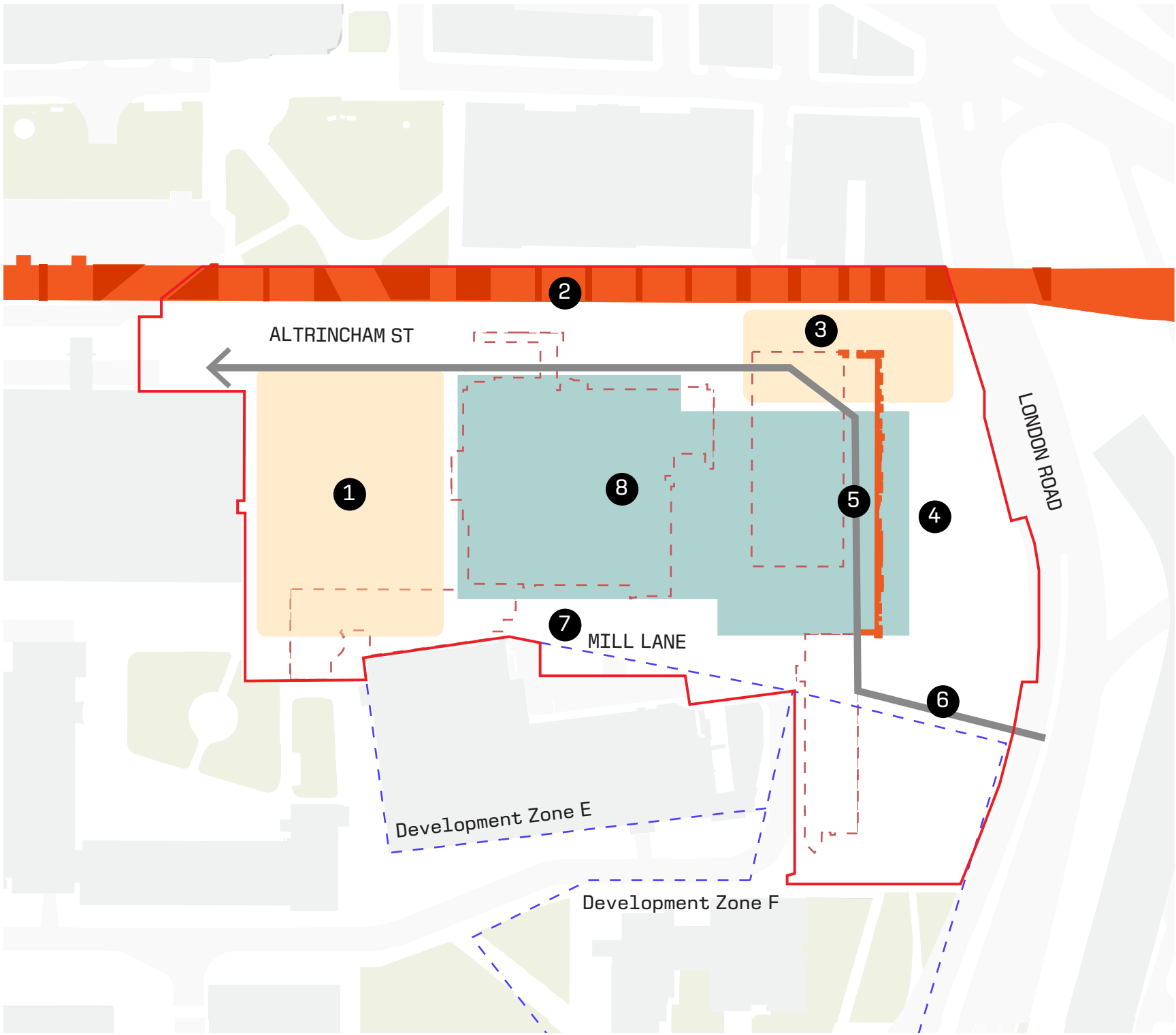
The Viaduct Arches

The Viaduct Arches are perfectly positioned to animate the key east-west axis of Altrincham Street. Our appraisal of the existing structure has identified 8 arches suitable for reanimation alongside the arches currently facilitating connectivity across the site. This is covered in more detail in the Proposal chapter.



The Hollaway Wall

The selected scenario has flexibility to integrate the Hollaway Wall, celebrating its importance rather than seeing it as a burden on the development. The practicalities, opportunities and constraints for its integration are covered in the following pages.



- ① Civic-scale square activated by new building frontage
- ② Listed Asset: Reanimated Viaduct Arches
- ③ Arrival plaza celebrating retained Hollaway Wall
- ④ Opportunity for community use activating London Road
- ⑤ Listed Asset: Hollaway Wall integrated into new build proposal
- ⑥ Discreet access to service tunnel promotes a car free masterplan
- ⑦ Active frontages and entrances along Mill Lane
- ⑧ Indicative new build footprint

3.2.5 THE HOLLOWAY WALL

Before exploring how a new building might respond to the wall, a thorough understanding of the Hollaway Wall's importance is required to inform our approach to it.

Reasons for Listing

Dual Function

- Good and rare example of 1960s public art
- Incorporates a functional purpose as a sound buffer*
- Reflects Hollaway's philosophy of combining public art, form and function

Artist and Architect partnership

- Designed by highly successful artist Anthony Hollaway with notable regional architect Harry M Fairhurst
- Symbolises the inter-woven relationship of artists and architect

Construction and technological quality

- Constructed of high-quality concrete to engineering standards
- Demonstrates the skill and methods developed by Hollaway

Design quality

- It has an imposing and striking sculptural Brutalist design
- Combines both special and artistic and architectural interest

Historic Interest

- the walls functional role as a sound buffer is of historic interest as it illustrates a concept in the 1960s to separate people from noise and visual intrusion from traffic *

* NOTE - research by the team has identified that the wall's function was primarily as a device to screen the Moffat Building - this is expanded on in the heritage report.

Photograph of Hollaway Wall
Source: NAEA Antony Hollaway Dissertation 1993

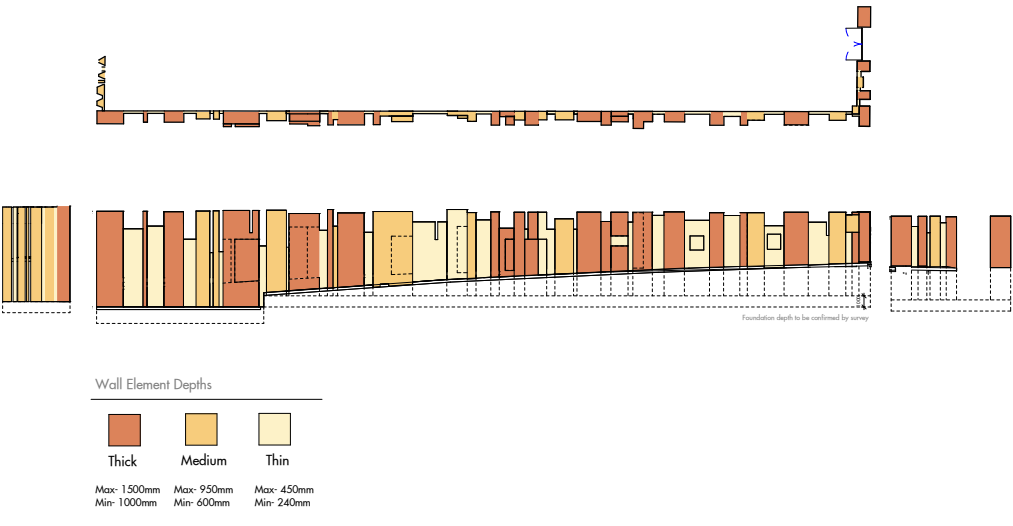


3.2.6 UNDERSTANDING THE WALL

In addition to appreciating the importance of the Holloway Wall from a historic and Listed structure perspective, an understanding of its design, form, function and structure is required to inform any proposals or interventions to the wall.

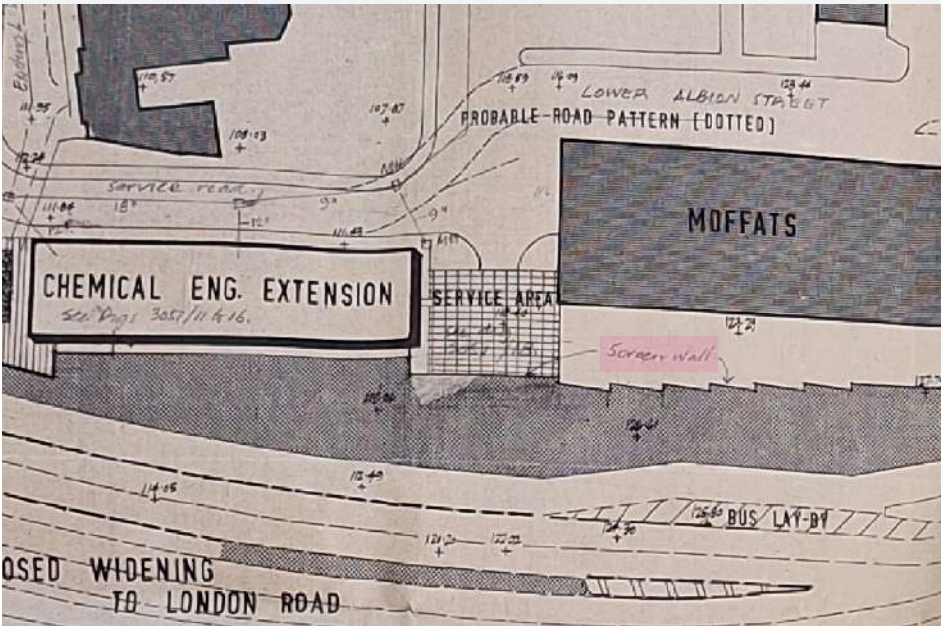
The images opposite highlight some of the studies undertaken to deepen our understanding of the wall.

DECODING THE WALL



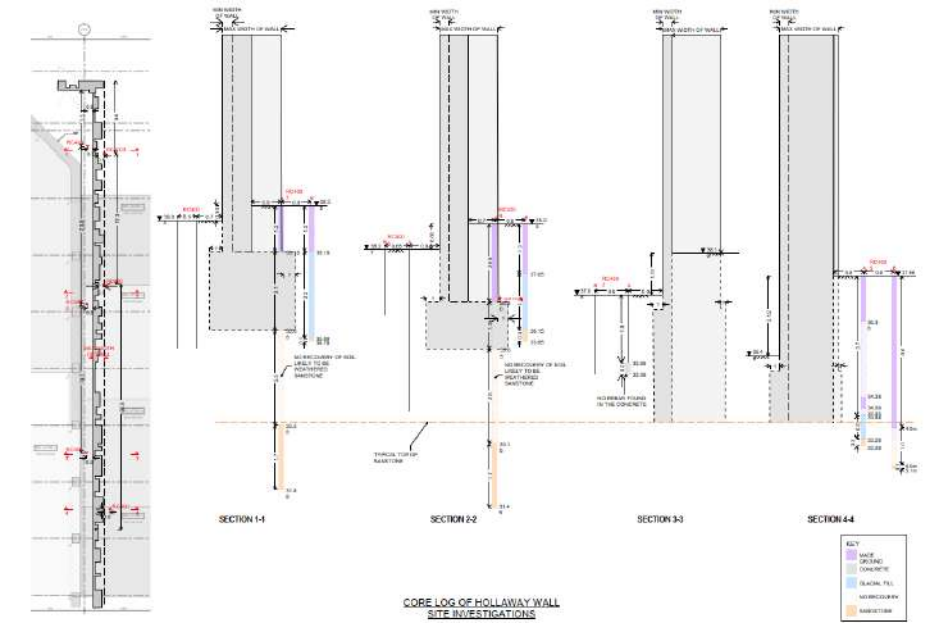
This exercise sought to ‘decode’ the pattern and rhythm of the wall to help us better understand the rationale behind its form. There were no clear conclusions that could be drawn from this that might have informed our interventions to the wall.

FUNCTION OF THE WALL



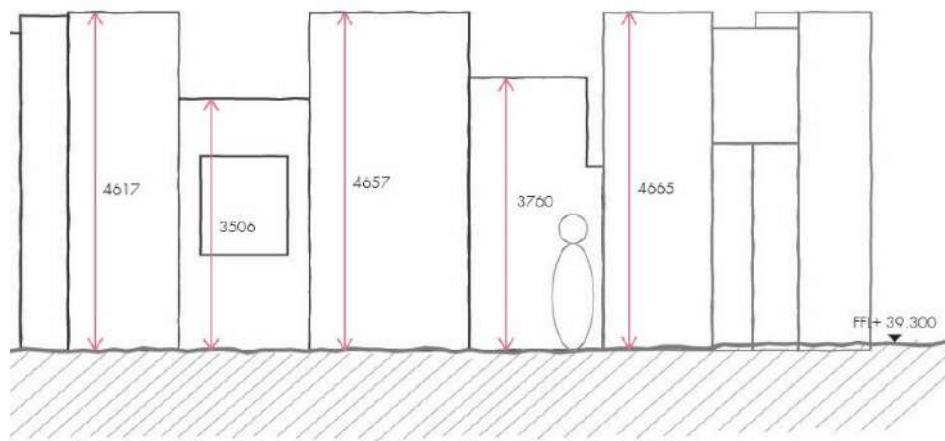
A review of the Manchester City Council and University archives unveiled very few existing drawings of the wall. Those that were found gave clues to the original function of the wall, with it being referred to as ‘screen wall’ and ‘decorative concrete wall’.

STRUCTURAL APPRAISAL



Civic Engineers undertook a series of on site investigations to determine the wall’s construction (precast vs. insitu), extent of foundations and current condition - this is covered in detail in the structural engineering section of this application.

DIMENSIONS & SCALE



A full three dimensional survey of the wall was completed which formed the basis of our studies. It is important to remember the scale of the wall - it is a significant structure rising to 9m above ground at its south end.

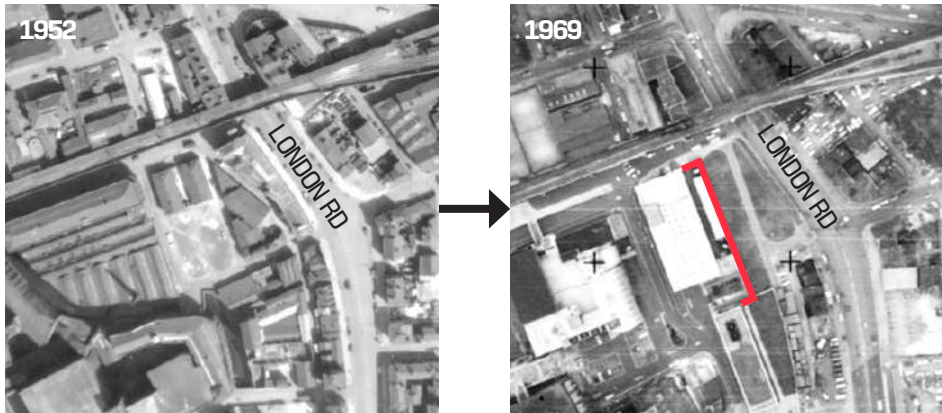
3.2.7 HOLLOWAY WALL CHANGING CONTEXT

In addition to understanding the historic value of the wall, it is important to consider how the wall’s context and role has changed since it was built. Manchester has changed considerably since the 1960s and being at the heart of a vibrant, ever changing city brings with it pressures to change, adapt and respond. It is therefore vital that the wall plays a central role in its new context at Sister, being celebrated rather than forgotten and accessible to all.



Original Role & Setting

London Road used to be a busy high street, with shops and trams and people on foot. It was a street full of life. Post-war reconstruction changed all of this. The disconnection of buildings from the street on both sides, together with road widening and broad grass verges, transformed this once busy city street into an urban motorway - a place for cars rather than people. Whilst the wall was primarily designed to screen the Moffat Building and act as a retaining wall, it also serves as a barrier to movement, only reinforcing this sense of separation.



Current Setting

The rough, boardmarked surface of the wall has recorded the passage of time through weathering. Firstly, natural weathering, whereby the concrete has taken on a darker grey appearance, set against scatterings of moss. It is fair to say the wall has also seen its fair share of cultural weathering, evidenced by the graffiti at the only accessible stretch of the wall at its north end.

The metal fence running along much of its length holds the public away from the wall, removing the opportunity to interact with it fully. The fence further reinforces the feeling that there is a barrier between city and campus on this side of the site. It is easy to miss the wall as you drive past thanks to the visual clutter that has been introduced around it.

SRF ILLUSTRATIVE MASTERPLAN



A Positive New Role

Having assessed how the setting of the wall has changed since its construction, there is a clear opportunity to give the wall a positive new role in the innovation district. The wall’s new role should do the following:

- Allow the public to interact with, celebrate and learn about the history of the wall
- Enable the wall to be repaired, protected and celebrated
- Be sensitively integrated into any new building
- Allow it to be front and centre in a new public space, Hollaway Place, transforming London Road from a barrier to a connector.

The following pages explain the optioneering process undertaken to achieve these aims.

The image above shows the indicative approach illustrated during the SRF, the Holloway Wall cut-back and encapsulated within the lobby of a new office building.

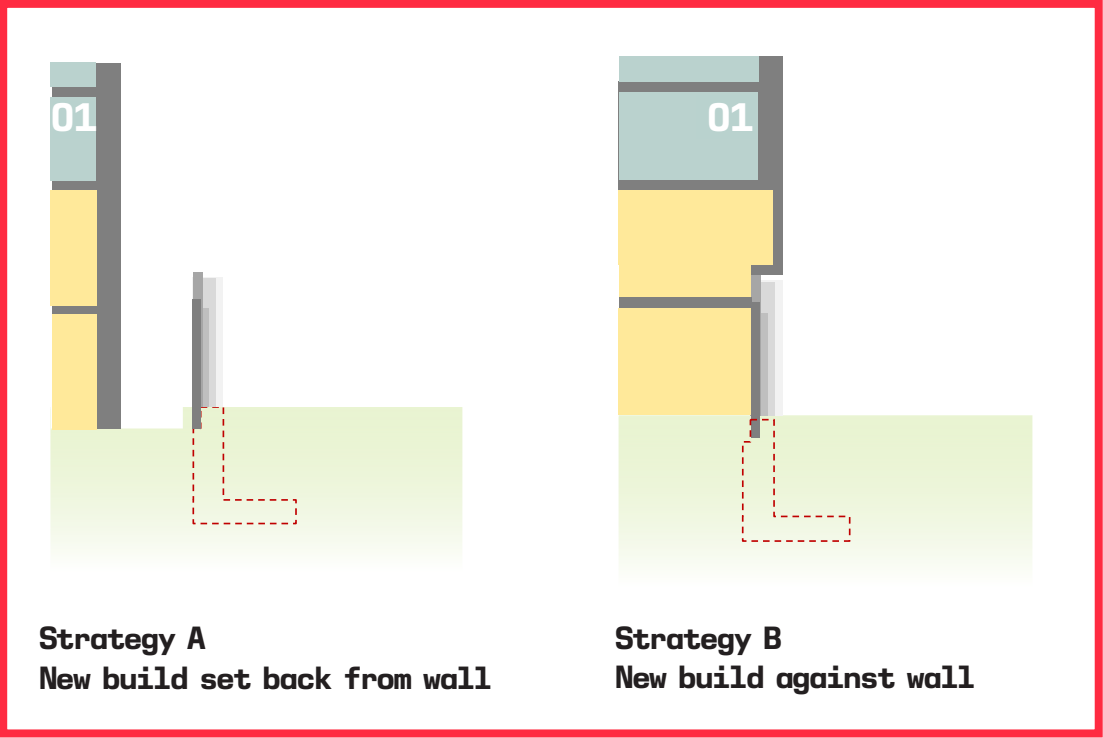
3.2.8 HOLLOWAY WALL STRATEGIES

Having carefully considered the historic importance of the Holloway Wall and the challenges around its current setting, we began to test how a new building might relate to the wall. The overarching principles explored through this process are summarised in the section diagrams below.

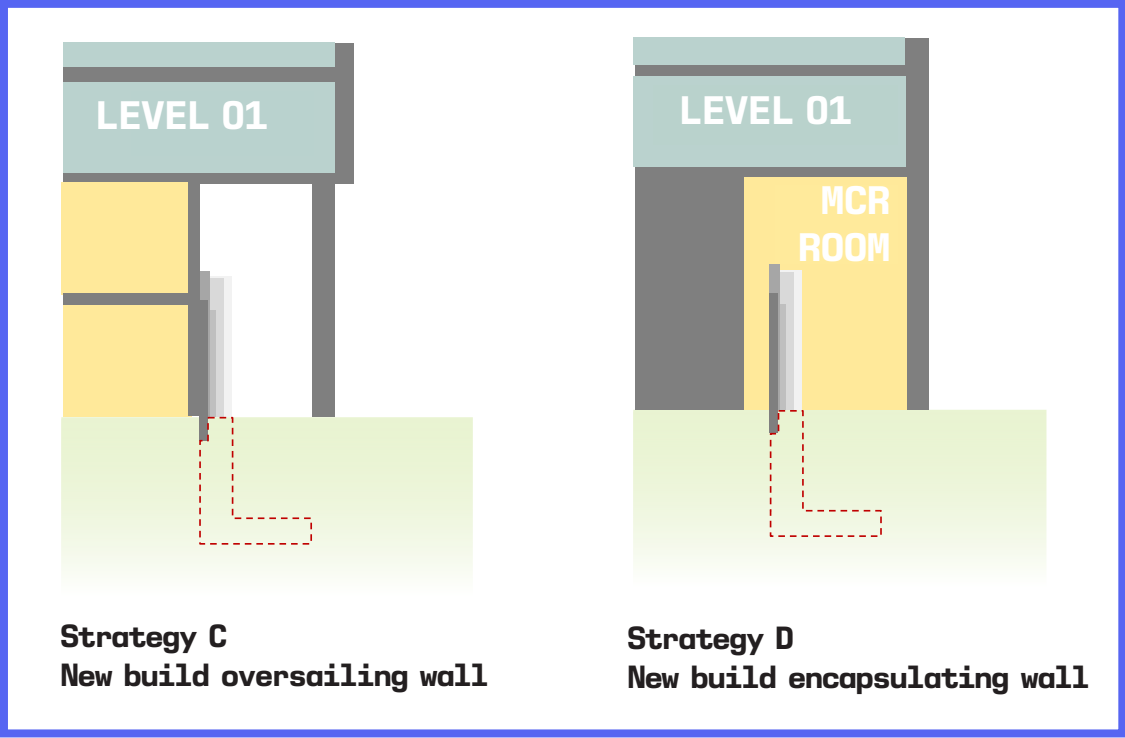
Strategies A - D assumed the wall would be retained in its current position with the new building adjusting in response to it by either setting back, building against, oversailing or encapsulating the historic structure. Strategies A & B limit the eastern extent of the buildings, resulting in office floorplates of insufficient size to meet the c.20,000 sqft net area brief requirement, discounting them from the next stage of the optioneering process.

Strategy E explored moving the wall wholesale eastwards towards London Road to achieve the brief area and massing requirements. Following initial exploration and confirmation that the wall is cast in-situ as opposed to being pre-fabricated, it was deemed that this approach would be extremely challenging to achieve without causing extensive harm and damage to the Listed fabric - for this reason it was discounted from the next stage of the optioneering process.

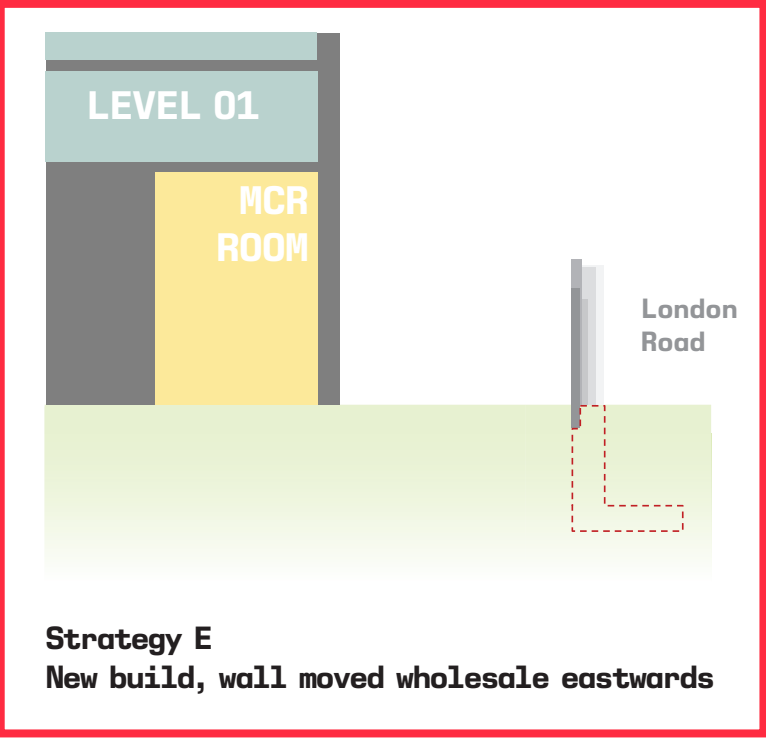
The following pages cover strategies C & D in more detail.



Alternative strategies that do not achieve critical brief area requirements discounted



Strategies taken forward for further review



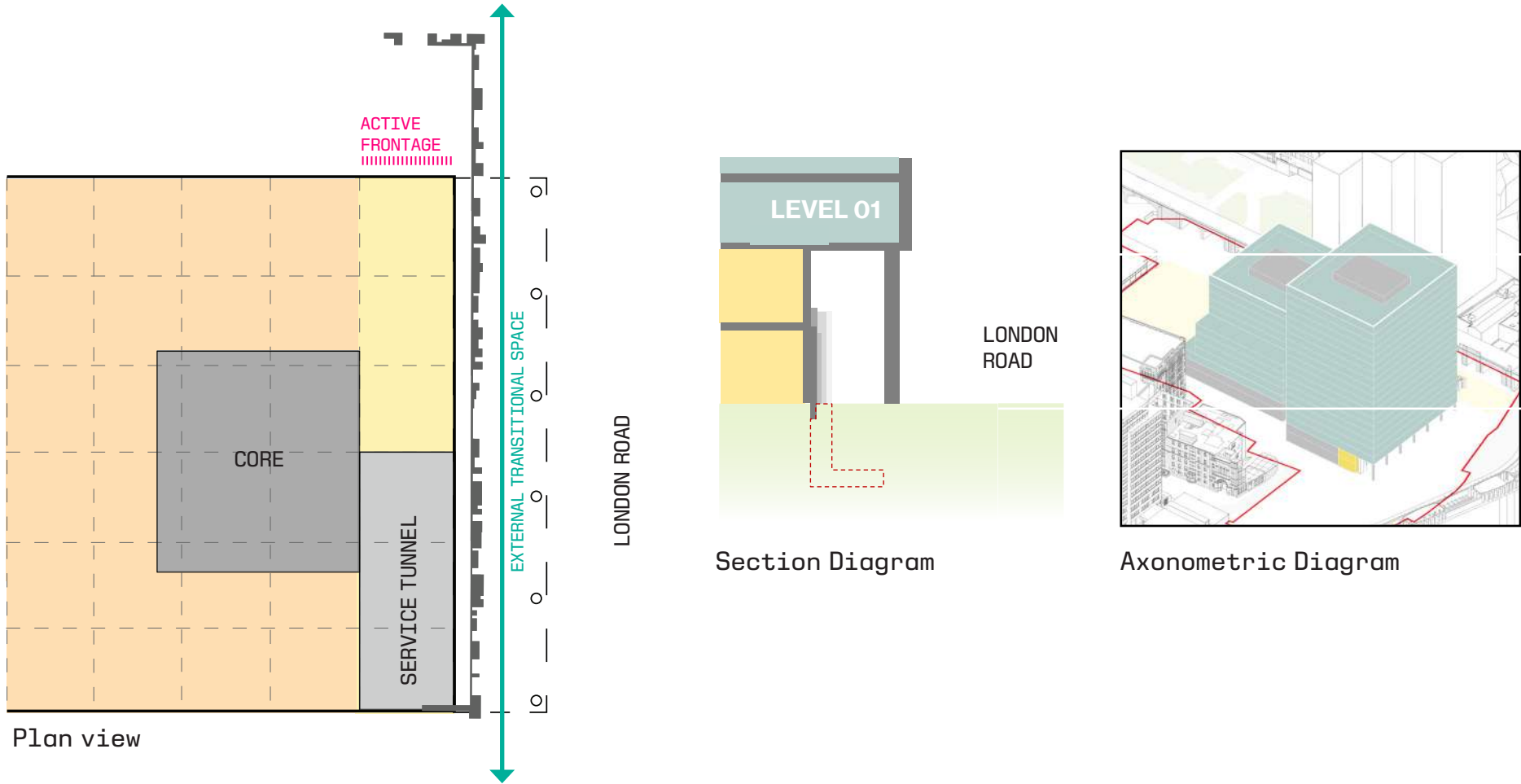
Strategy discounted - challenges include:

- Incompatible with placemaking principles for London Road
- Demolition and reconstruction of wall
- Impact on existing mature trees & utilities

C) New build oversailing

This strategy involves extending the building footprint over the wall and incorporating a colonnade at ground level to create a covered route adjacent to the wall. This means that:

- Optimal office floorplate dimensions can be achieved without the constraint of the wall, allowing the required floorspace to be delivered in a more compact massing.
- Wayfinding, visibility and access to the site and new building will be improved.
- The wall remains an external structure, exposed to the elements and limiting opportunities for year round public interaction.
- The colonnade is a transitional space, less suited to people taking time to appreciate the wall.
- No opportunity for directly accessible public space activating London Road.
- Challenging nature of public space created - limited potential for planting due to the building oversailing above.



Precedent: Bankside Yards, Southwark

A row of Victorian railway arches are reanimated, activating a new piece of public realm created by the triple height loggia at the base of a new building. In this example, the arches form the backdrop to the space as opposed to being central to it.

Photographed by PLP Architecture International Ltd



D) New build encapsulating the wall

This strategy encapsulates the majority of the wall within the building, allowing it to become the focal point of a dedicated community facing space. This means that:

- Optimal floorplate dimensions can be achieved without the constraint of the wall, allowing the required floorspace to be delivered in a more compact massing.
- Generous public spaces clustered around the wall, directly accessible from the public realm, provide continuous active frontage along London Road - a key requirement of the brief and alignment with SRF Principle 6 - Curated Commons.
- Wayfinding, visibility and access to the site and new building will be substantially improved
- Opportunities for public interaction with the wall will be improved - people can experience the wall from all sides and as it is not sited in a transitional space, they can dwell around it.
- The wall, in part, becomes internal where the controlled environment has benefits for the lifespan of the structure - refer to method statement and structural engineering report for further information.

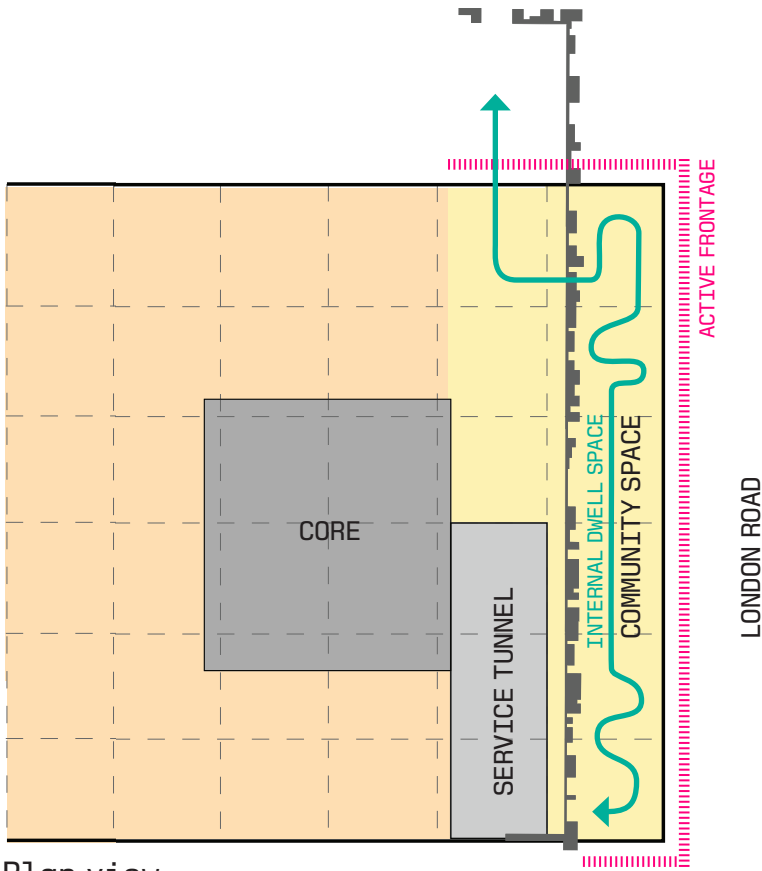


SRF Principle 6 - Curated Commons [P.70 of SRF]

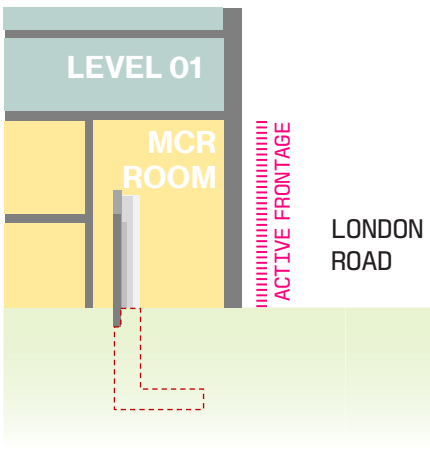
The SRF illustrates a variety of uses to activate key ground floor and public realm spaces, informed by their location and role in the masterplan. The prominent eastern aspect of Plot C was identified as being a location well-suited to exhibition and gathering functions to draw people into the innovation district, as well as community focussed spaces to encourage engagement and support social mobility.

Precedent: The London City Wall, Vine Street

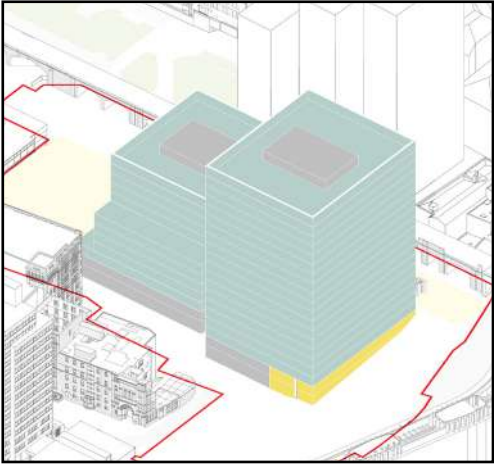
In contrast to strategy C, here a fragment of London City Wall is encapsulated within a building, forming the focal point of a mixed use space with a focus on educating people about the history of the wall. This approach allows the wall to be appreciated in the round and also helps protect it from unwanted weathering / deterioration..



Plan view



Section Diagram



Axonometric Diagram

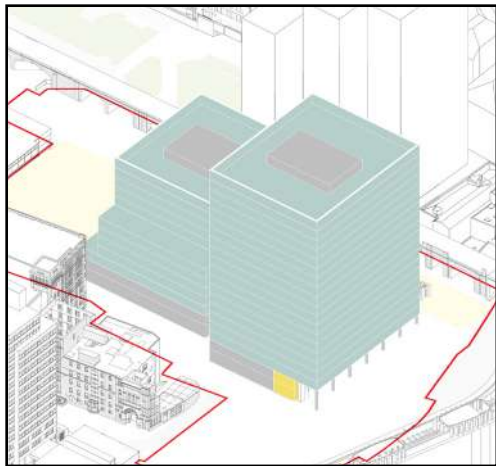
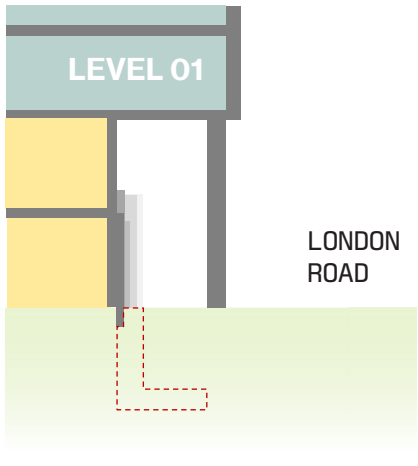
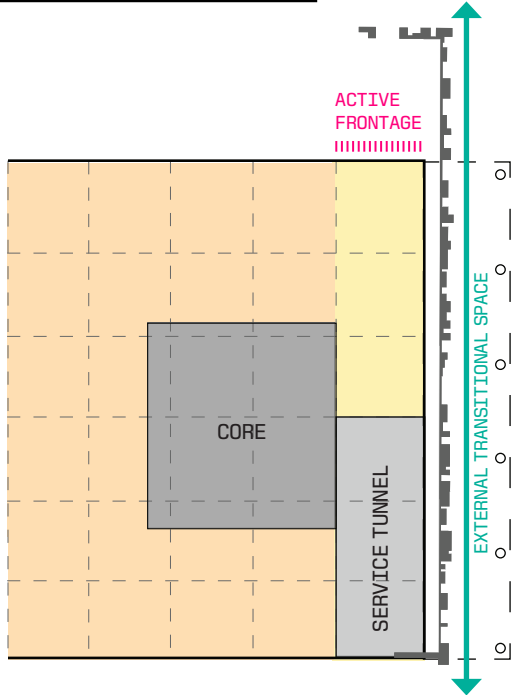


3.2.9 SUMMARY

This initial optioneering exercise has explored the fundamental question of how a new building might relate to the Holloway Wall in principle. Each of the strategies have positive and negative aspects, though we consider option D to strike an optimal balance between:

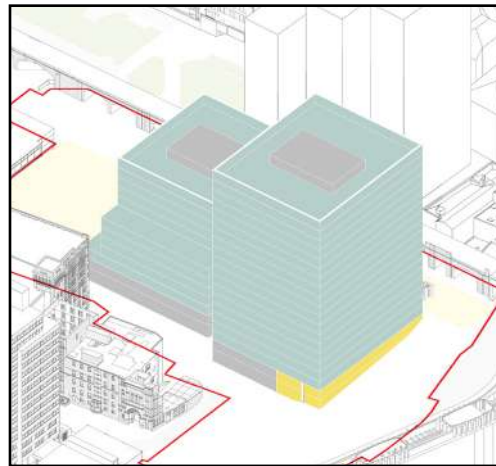
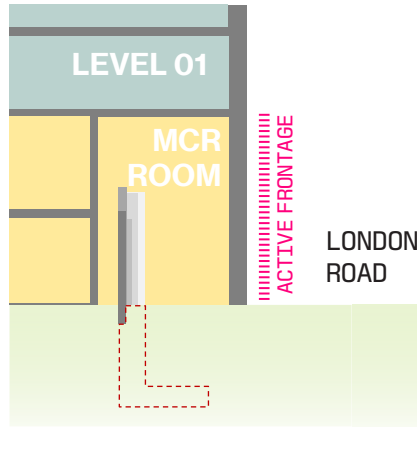
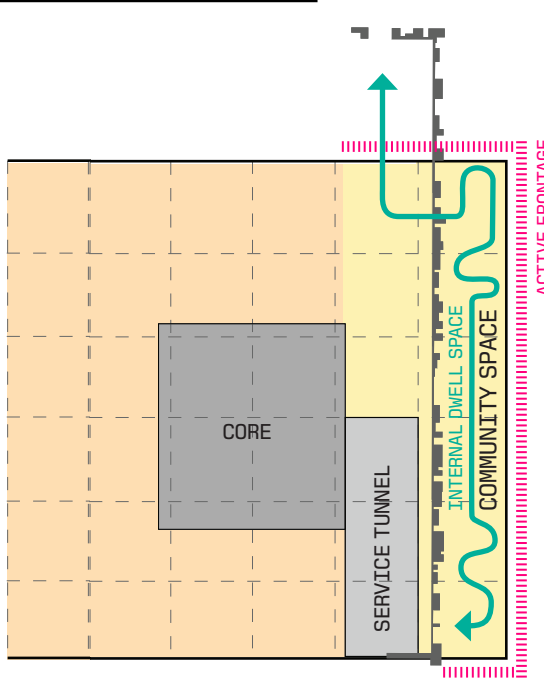
- a positive new role for the wall at the entrance to the Innovation District
- allowing the wall to be celebrated and accessible to the public, year round
- providing a diverse range of directly accessible community uses in this prominent location, aligned with the SRF Principle 6: Curated Commons
- ground level active frontage animating the public realm along London Road
- providing the critical mass of floorspace across a number of flexible and efficient floorplates in accordance with the brief

Option D will therefore form the basis for the more detailed studies that follow with key aspects to be explored including how the delivery of vital routes, sightlines and access to community spaces might necessitate focussed interventions to the wall.



Strategy C
New build oversailing wall

Strategy taken forward for further review



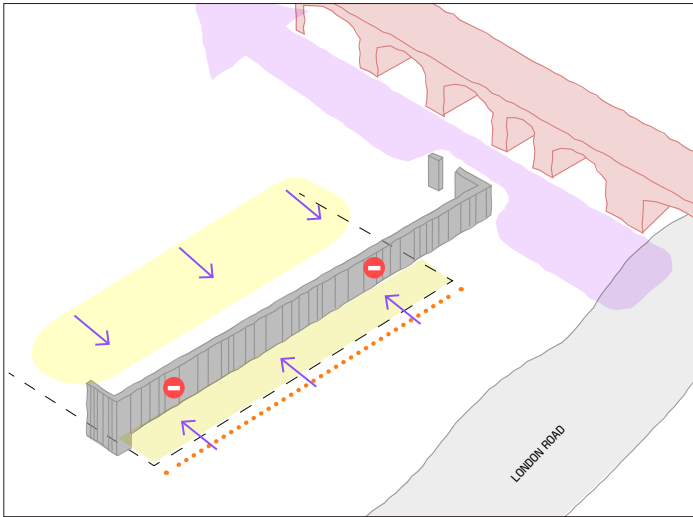
Strategy D
New build encapsulating wall

3.2.10 HOLLOWAY WALL APPROACHES

Having established the preferred strategy for the wall is to encapsulate it mostly inside the new building, a series of studies were undertaken exploring how the wall might be integrated whilst achieving some key themes including:

- Legibility of the wall as a singular element
- Retention of as much existing fabric in-situ as possible
- Celebrating the history of the wall
- Internal circulation and connectivity
- Wayfinding and visibility of building entrances
- Internal and external accessibility

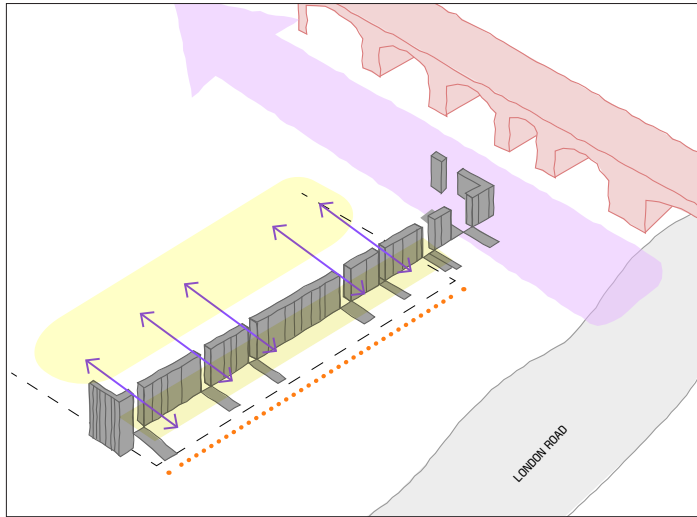
The diagrams opposite illustrate the key principles explored, with the highlighted approach selected for further detailed refinement on the following pages.



Approach 1 - Keep the wall as it is

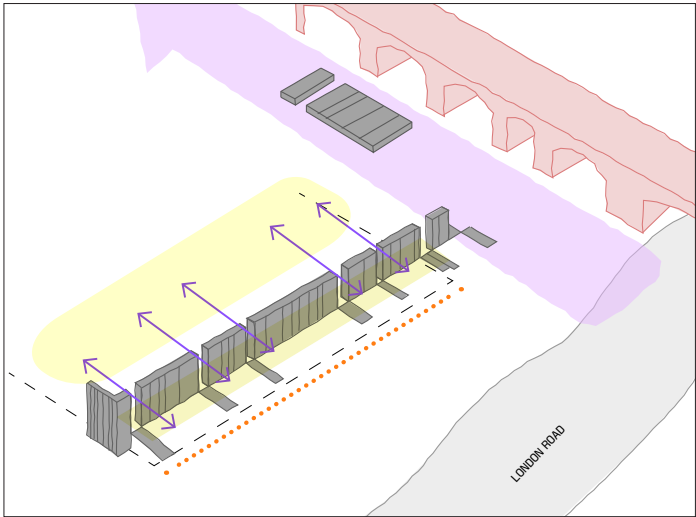
- The wall is preserved in its original state.
- It remains a physical and visual barrier both along Altrincham Street and within the building.
- The active frontage along London Road is completely disconnected from the rest of the building / masterplan.
- The wall cannot be appreciated in the round without leaving the building and walking around it.

Selected approach



Approach 2 - Cut and fold segments, local interventions

- A significant proportion of the wall is retained in its original state.
- Focussed interventions respectful of the rhythm of the wall ,address visibility of building entrances and connectivity issues without impacting the legibility of the wall.
- Community facing active uses along London Road can inhabit both sides of the wall, helping it to be front and centre in the space.
- The wall can be experienced as a threshold where the scale of the wall can be properly appreciated.
- The folded pieces of the wall can be experienced in a new way, as a sculptural topography.



Approach 3 - Cut and fold segments, local interventions + Northern corner located in the public realm

- Less of the wall is retained in its original state and the legibility of it as a single element is compromised.
- Relocating the north end of the wall allows open views and routes through Hollaway Place towards building entrances and active ground floor uses.
- The folded pieces of the wall can be experienced in a new way, as a sculptural topography.



3.2.11 HOLLOWAY WALL PROCESS HOLLOWAY PLACE

The sequence of views below illustrate the incremental process of testing undertaken to determine which segments of the wall would need to be adjusted to provide key visibility and accessibility through Holloway Place to building entrances and active ground floor uses. This process of adjustment needed to be balanced against the desire to maintain legibility of the wall as a singular element.

Decisions regarding which segments of the wall should be retained above ground and which should be set flush with the ground were informed by views closer to the building, focussing on the legibility of the transition from retained vertical elements, to folded horizontal elements and back to vertical inside the building.

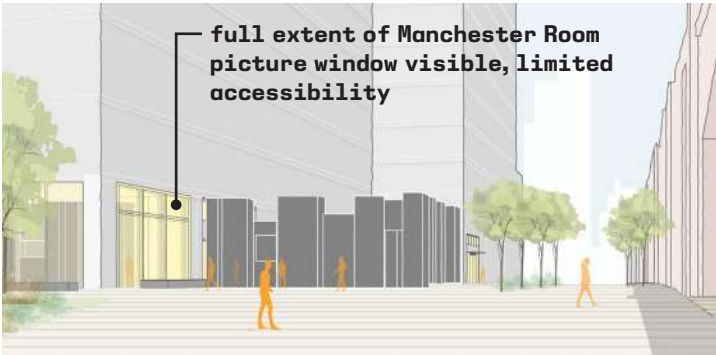
The thickness of the segments selected to be folded were also assessed to identify any public amenity benefit in keeping them above ground [e.g. benches], as well as considering how they might contribute to the legibility. The section studies opposite explain the rationale behind these decisions.

A. ACCESSIBILITY & LEGIBILITY OF BUILDING ENTRANCES

These diagrams identify which segments should be folded



1. Existing north composition



2. Two segments folded



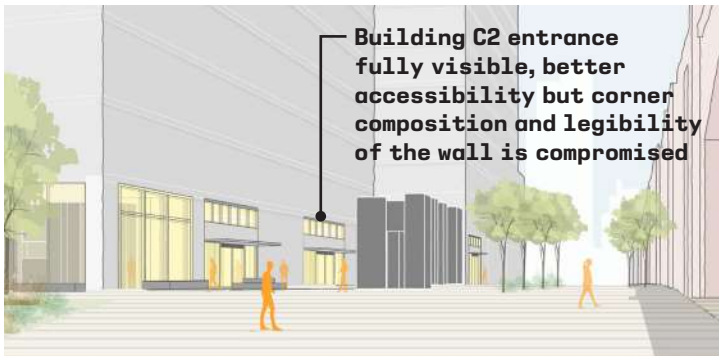
3. Four segments folded



4. Five segments folded



5. Six segments folded

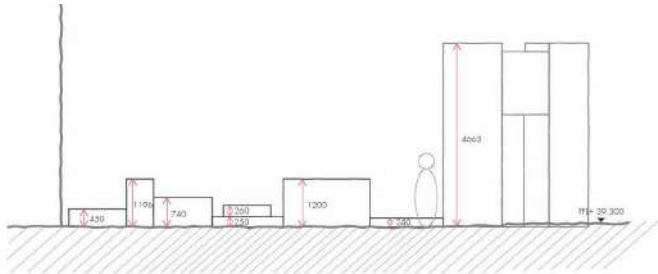


6. Seven segments folded

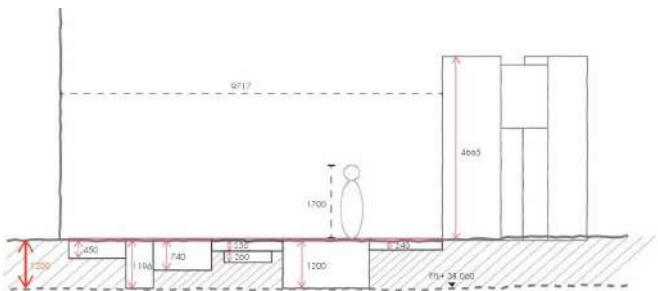
Selected approach

B. SECTION STUDIES

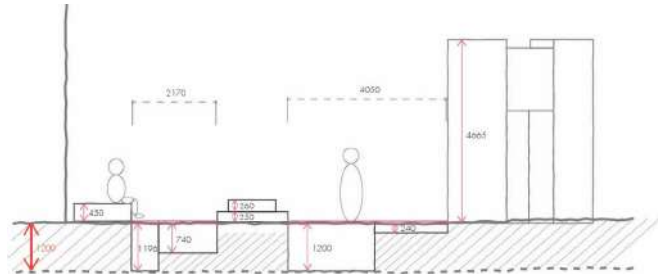
These diagrams explore how the folded segments should be arranged



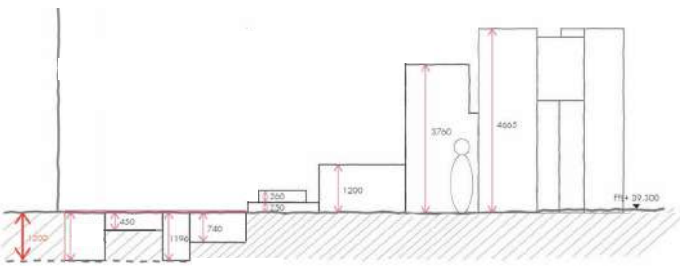
folded segments retained above ground - visibility improved but obstructs accessibility of building entrances.



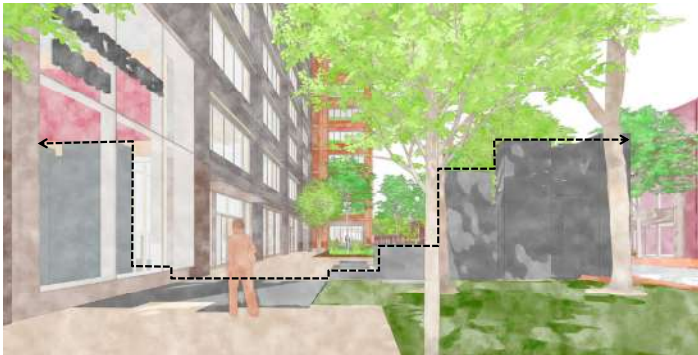
folded segments set into the ground - good visibility & accessibility. Harsh transition from horizontal to vertical, impacting legibility of the wall as a continuous structure.



selected segments retained above ground - good visibility & accessibility. Legibility of wall as a singular element not very clear



selected segments retained above ground - good visibility & accessibility. Smoother transition from vertical to horizontal makes the legibility of wall as a singular element more clear - see sketch view of approach to the building used as part of optioneering process below.



Selected approach

3.2.12 HOLLOWAY WALL PROCESS MILL LANE

The southern return of the wall in its existing position obstructs the proposed access point to the service tunnel ramp, a key enabler to achieving the masterplan objective of a car free public realm.

The position of this access point has been carefully considered and refined, informed by a number of area wide and plot specific constraints that are illustrated in the diagrams opposite.

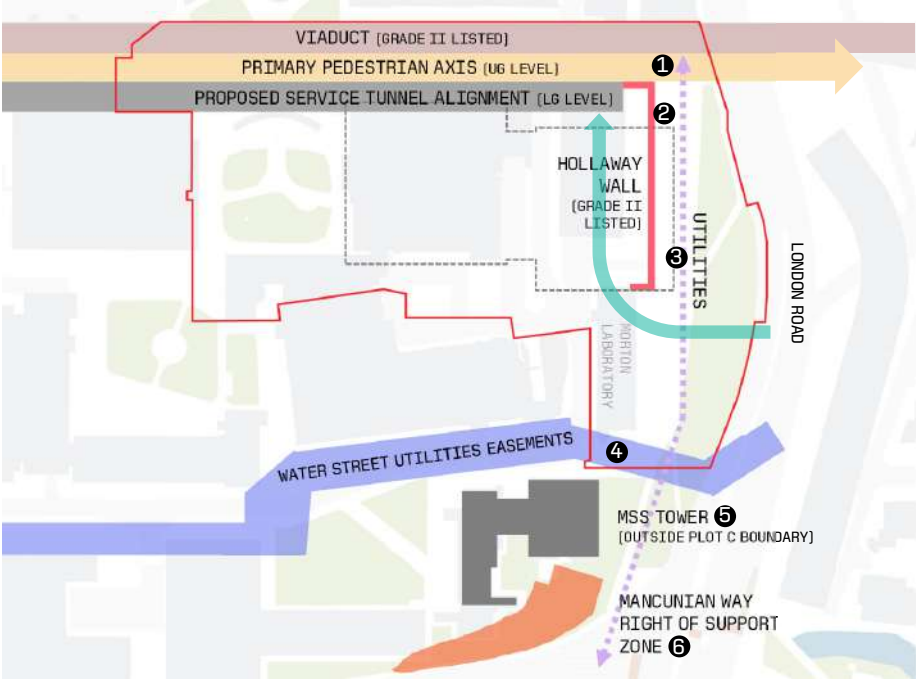
Having established that intervention was required to the southern return of the wall to facilitate this access, iterative design development was undertaken to explore keeping the return as a single composition, positioning it as close to its original footprint as possible and retaining the legibility of the wall as a singular element from outside to inside and vice versa. The images below illustrate the development of the proposed approach.

LEGIBILITY / VISUAL CONTINUITY OF THE WALL



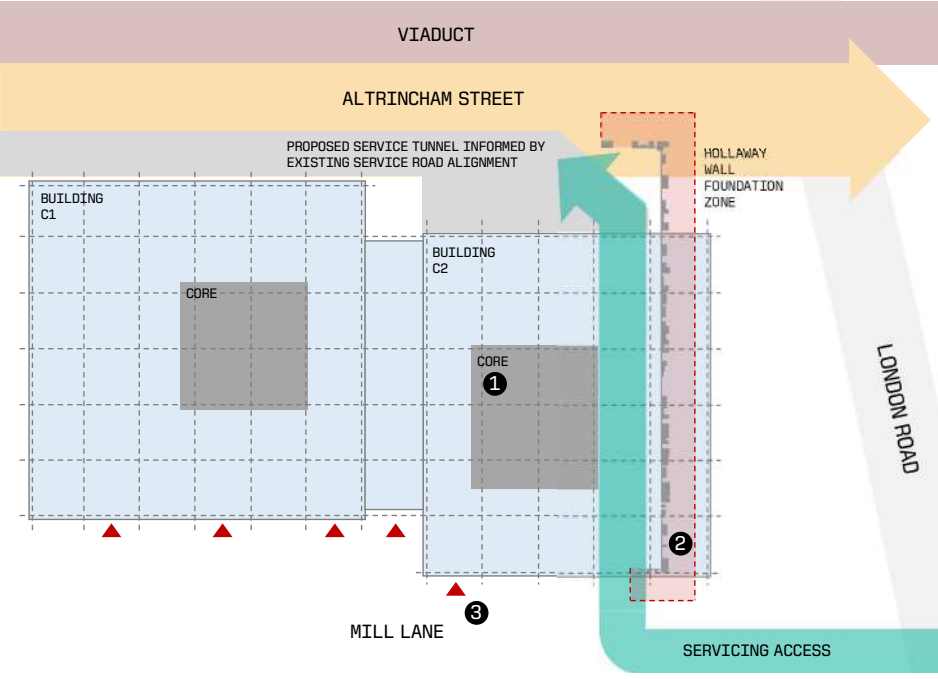
Previous iteration - celebrating the southern return of the wall as a wayfinding & sculptural element in the Mill Lane landscape, but compromising visibility of the rest of wall within the Manchester Room.

AREA-WIDE SERVICE TUNNEL ACCESS & CONSTRAINTS

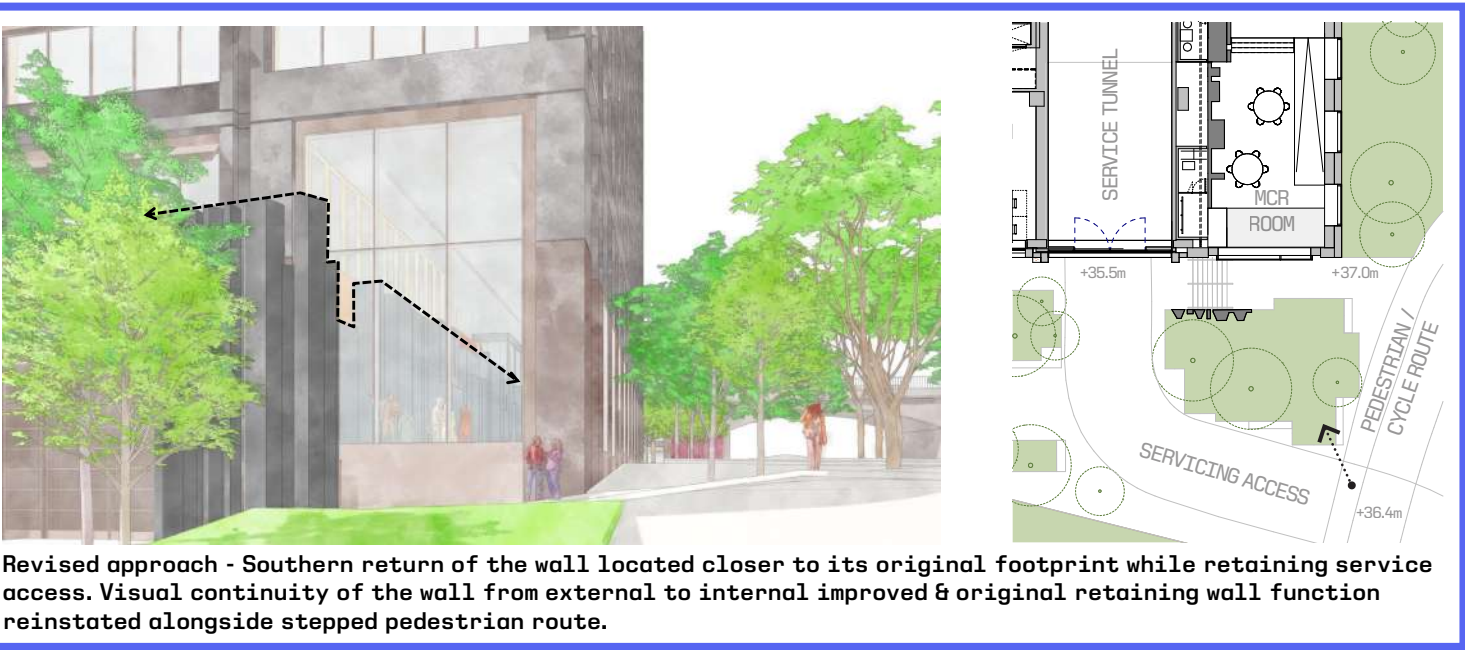


- A number of area-wide constraints dictate that servicing access from London Road must occur in the proposed location.
- 1 Holloway Place and Altrincham Street form the primary pedestrian entry point and east-west route through the site. It is not appropriate or possible to descend to the service tunnel level at this location.
 - 2 A significant portion of the Grade II Listed Hollaway Wall would need to be removed to facilitate access at this location. Proximity to the service tunnel would make levels unmanageable.
 - 3 Utilities along London Road fix levels and location of the start of ramp.
 - 4 Sewer easement along Water Street - risk of obstruction to only servicing route in the event of future utilities access / maintenance.
 - 5 NDHA outside Plot C boundary would need to be substantially altered to facilitate access at this point of the site.
 - 6 Mancunian Way right of support zone - risk of obstruction to only servicing route in the event of support zone being utilised.

PLOT C SERVICE TUNNEL ACCESS & CONSTRAINTS



- A number of building scale constraints dictate that servicing access must be positioned as shown above, requiring local intervention to the southern return of Hollaway Wall
- 1 Core position fixed by flexibility, efficiency and escape distance requirements of office floorplates above.
 - 2 Hollaway wall foundations, existing site levels, below ground utilities, vehicle tracking from London Road and proposed community engagement spaces mean service access east of the wall is not feasible or desirable.
 - 3 Moving the service access west along Mill Lane sterilises opportunities for active frontage, disconnects the buildings at ground floor and increases the impact of vehicles on pedestrian-oriented public realm.



Selected approach

3.2.13 HOLLOWAY WALL PROCESS

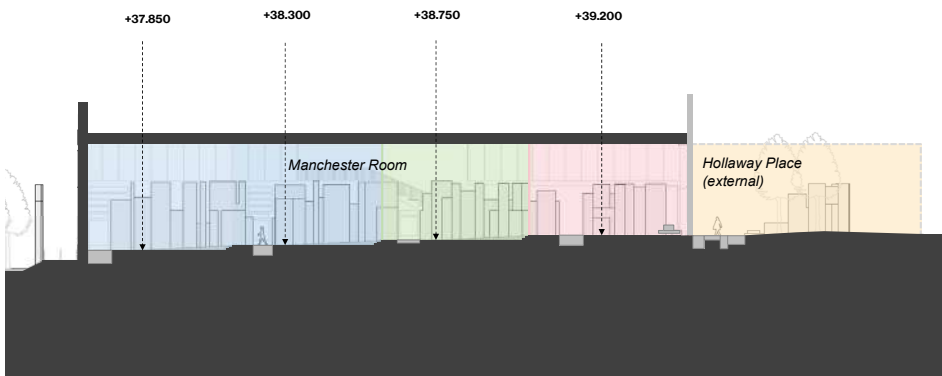
MANCHESTER ROOM

The process of integrating the Holloway Wall into the community focussed Manchester Room has been informed by extensive community and stakeholder feedback alongside a comprehensive client brief.

The following key objectives were identified:

- The need for a diverse, publicly accessible offer ranging from large communal spaces through to smaller, intimate spaces.
- The presence of a series of community focussed spaces along London Road, activating Hollaway Place, Hollaway Forest and Mill Lane in line with SRF Principle 6: Curated Commons
- Spaces should be clustered around the wall to ensure it is a focal point rather than a backdrop and allowing it to be appreciated in the round
- The wall should be well integrated into the spaces to allow people to both learn about and celebrate it.

WORKING WITH EXISTING LEVELS

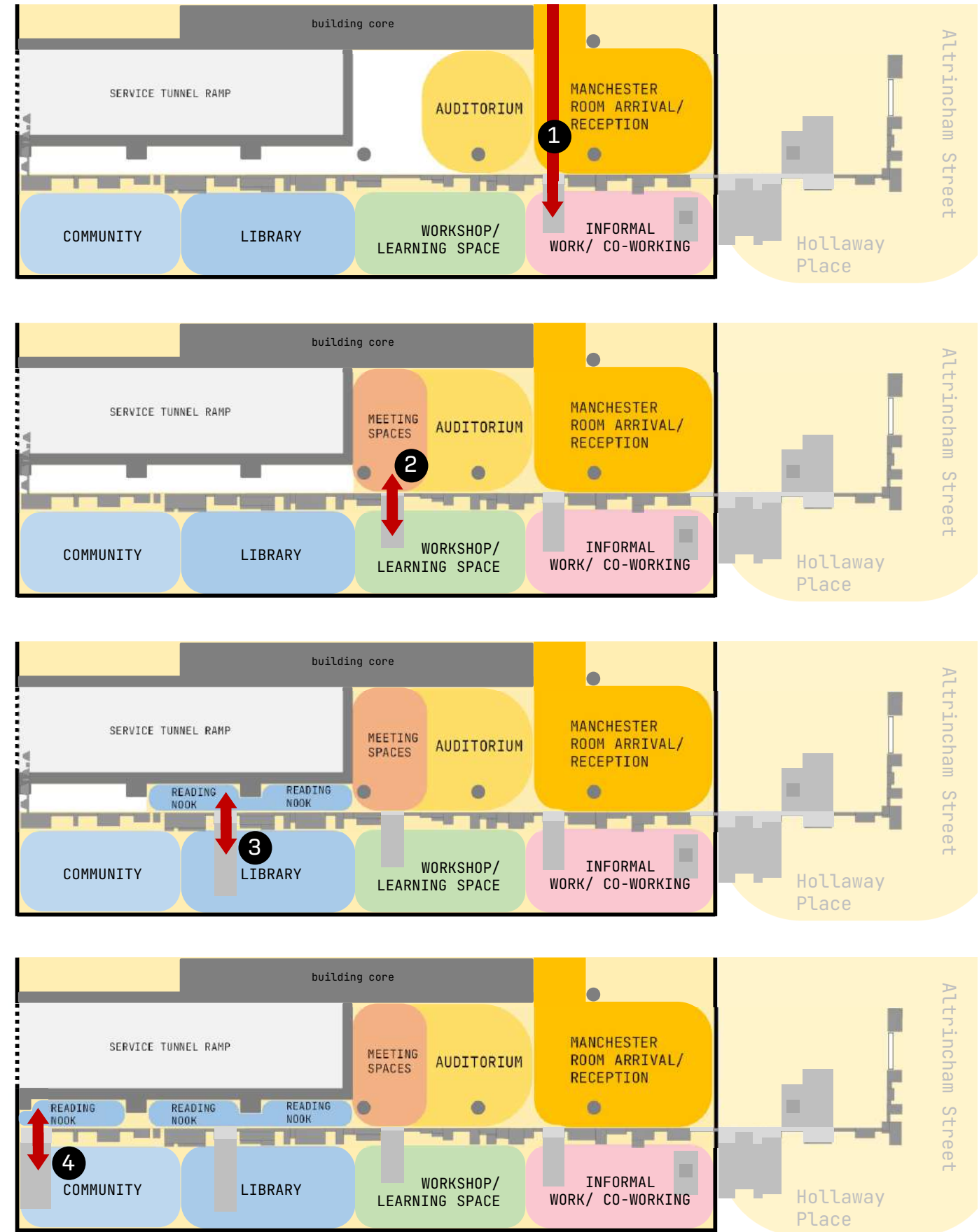


The Manchester Room encompasses a series of four platforms that respond to existing site levels, stepping from Hollaway Place at the north down to Mill Lane at the south.

This gentle topography ensures the extent of the wall above ground is retained broadly as existing and helps to create a distinction between spaces and uses east of the wall.

The connections identified opposite are each aligned to a platform, providing directly accessible support spaces throughout the Manchester Room.

A RANGE OF COMMUNITY SPACES AROUND THE WALL



1 It is essential that access into the community focussed Manchester Room is provided within the building to achieve a series of interconnected, accessible and usable public spaces that respond to the community feedback and client brief.

2 Medium scale community spaces are identified below the raking auditorium structure. Access is constrained by the building core [west], service tunnel [south] and usable width of auditorium [north]. Directly accessible from the Manchester Room, these spaces supplement the large scale, open spaces to the east of the wall.

3 Smaller scale community spaces are located in the interstitial zone between the back of the wall and the service tunnel. Access is only feasible from the east [due to service tunnel & structure]. This connection ensures these spaces are carefully integrated into the wider community offer.

4 The southernmost segment of the wall obstructs the building envelope and will need to be cut and folded for buildability purposes. This also enables access to the southernmost space behind the wall, completing the range of community spaces created anchored by the wall.

3.2.14 HOLLOWAY WALL PROCESS MANCHESTER ROOM CONT'D

Feedback received during the consultation process with Historic England identified two important considerations on how the Wall should be integrated within the Manchester Room.

- The treatment of the ground plane should be consistent inside and outside the new building and should reflect on the existing condition which HE consider ‘appropriate for an outdoor piece of public art’.
- The wall should be celebrated as a focal point in the new building - ‘the wall should form the dominant feature of the proposed new Manchester Room and not be used as a backdrop for other displays’. Visual clutter around the wall [e.g. soffit baffles] should be scaled back to focus attention on the wall.

These themes are explored here.

MATERIALITY & GROUND PLANE INTERFACE



The existing landscape finishes, grass and tarmac, flow into the profile of the wall. There are no expressed shadow gaps or pebble margins. The new finishes around the wall should respect this approach.



Where segments of the wall are cut and folded, the profile of the cut line should be expressed alongside the folded pieces and the new ground plane finishes.

ENSURING THE WALL IS THE FOCAL POINT IN THE SPACE

previous iteration



Visual clutter in the space took the focus away from the wall, including the baffled soffits, signage and ramps / handrails.

previous iteration



The requirement for office space at level 01 over the Manchester Room foyer also created a visual distraction from the wall.

proposal

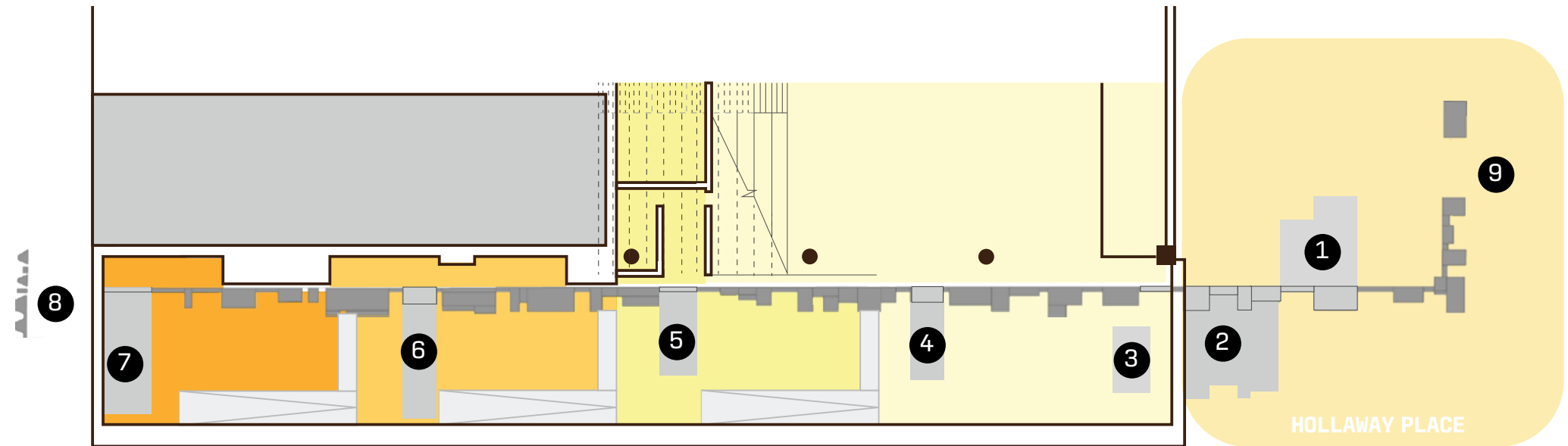


Introducing a neutral screen element set-back from the back of the wall allows its backdrop to be calmed, focusing attention on the wall and allowing it to be the dominant feature in the space. Openings in the screen provide access to and visibility of the rear of the wall.

3.2.15 HOLLOWAY WALL REFINED APPROACH

This page documents the rationale behind each of the focussed interventions to the wall, informed by the objectives, understanding and detailed assessment covered in the preceding pages. This concludes our optioneering process, which sets out the fundamental principles for how the wall should be integrated into the proposal. This is built upon in further detail in Chapter 4 of this report.

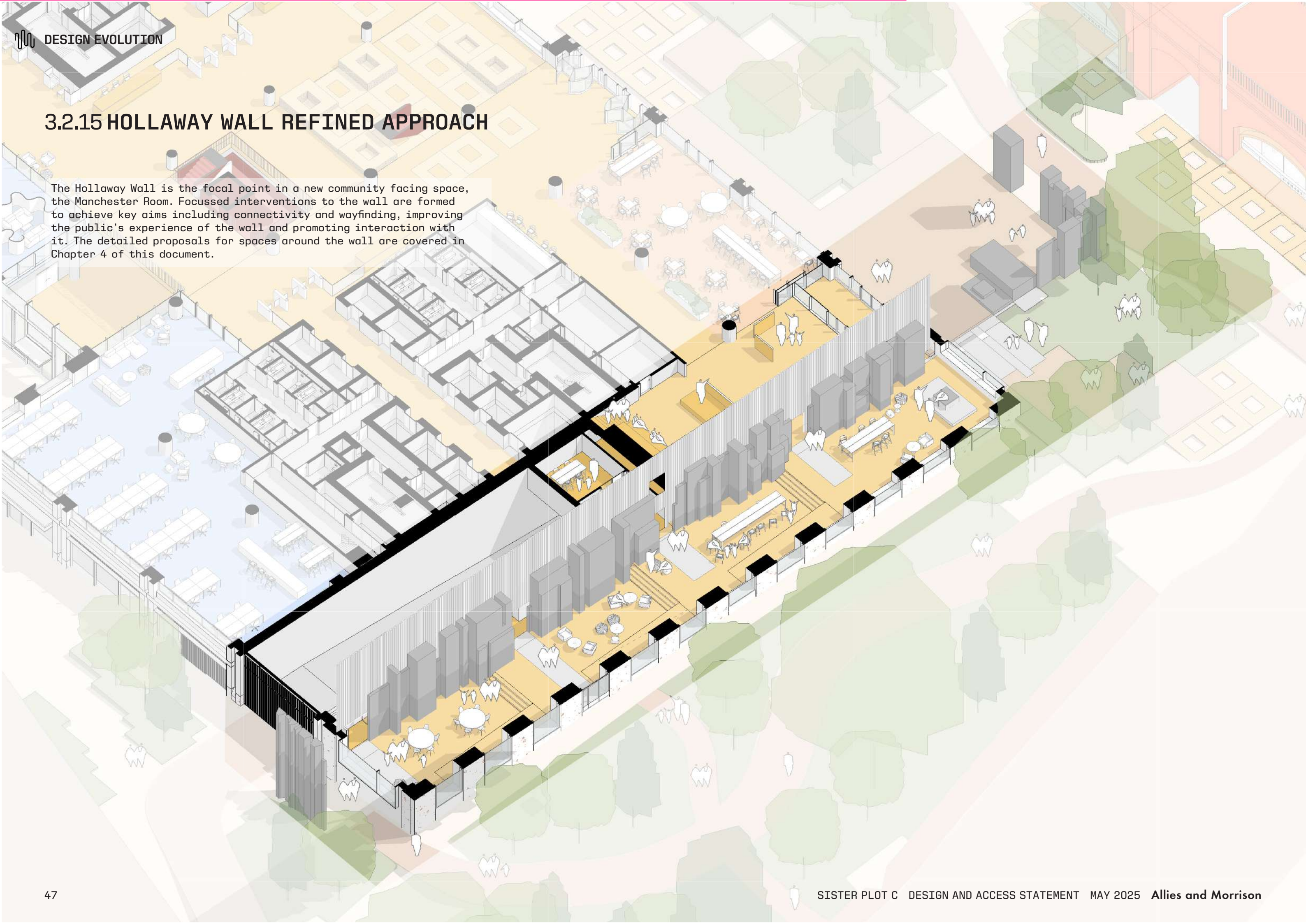
A supporting detailed method statement has been prepared by the structural engineering team to ensure this approach is feasible and to minimise any adverse impacts to the existing fabric.



Approach 2 - Cut and fold segments, local interventions

KEY

- 1 In Hollaway Place, two segments fold west and sit above ground level, improving pedestrian visibility into the site [e.g. to building entrances], easing the transition from vertical to horizontal pieces of the wall and enabling three existing trees to be retained east of the wall.
- 2 The segments adjacent to the building are folded east and set flush with the ground to improve visibility and provide level access towards building entrances.
- 3 The wall segment interfacing with the building footprint is cut, folded and placed above ground level within the Manchester Room. The wall's foundations local to the facade need to be removed to allow the introduction of new structure supporting the facade.
- 4-7 Carefully selected segments of the wall are folded flush with the floor to allow people to pass through the wall to access a range of curated community focused spaces around the wall. A services crossover point is formed through the wall below ground at segment 6.
- 8 The southern return of the wall is moved south and westwards into Mill Lane to facilitate entry to the service tunnel and support of the new facade. Its location has been carefully considered to retain the legibility of the wall as a whole when approaching from the south. The wall's retaining wall function is reintroduced, managing the level change between London Road and Mill Lane whilst also making the wall more accessible to the public.
- 9 The existing gate is retained in situ and propped open.



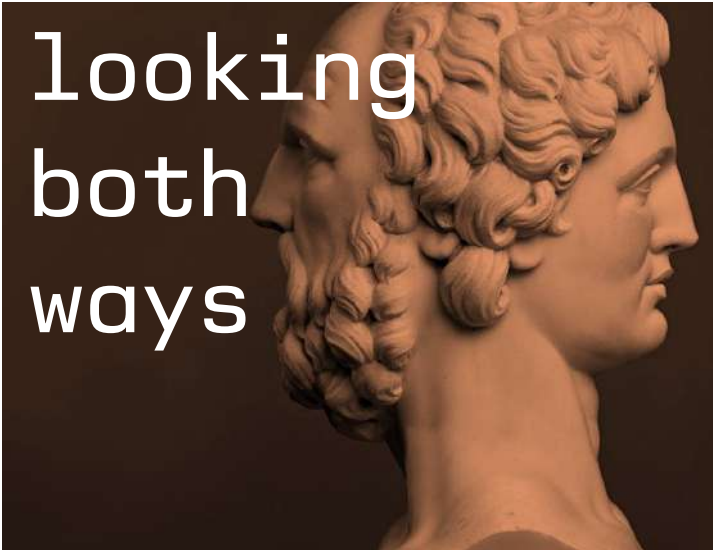
3.2.15 HOLLAWAY WALL REFINED APPROACH

The Hollaway Wall is the focal point in a new community facing space, the Manchester Room. Focussed interventions to the wall are formed to achieve key aims including connectivity and wayfinding, improving the public's experience of the wall and promoting interaction with it. The detailed proposals for spaces around the wall are covered in Chapter 4 of this document.

3.3 DESIGN EVOLUTION

3.3.1 6 CORE IDEAS

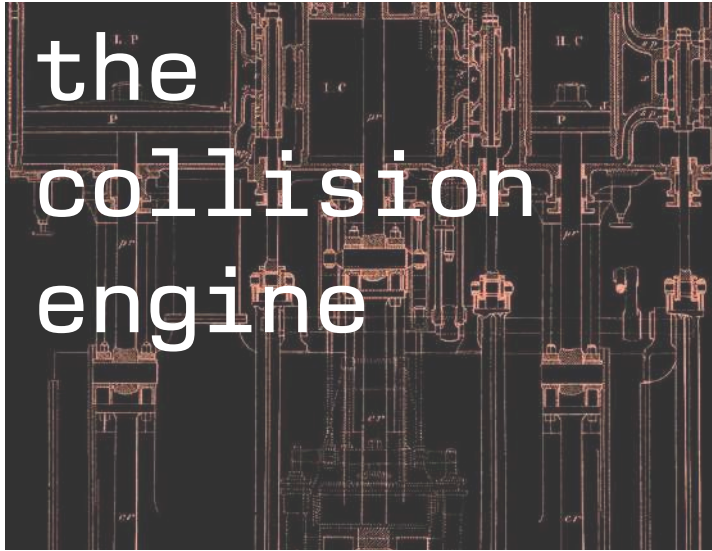
Six core ideas have been integral to the wider design development of Plot C. They distil and respond to the key ambitions of the SRF, the project brief, and the constraints and opportunities identified through site analysis and optioneering processes, proving a touchstone for the evolution of the design of the buildings.



Buildings that look both ways, west to Sister Square and the Renold Innovation Hub and east to Hollaway Wall, Piccadilly Station and the growing City.



Separate buildings with distinct roles, connected at their base.



A central communal space linking the buildings, connecting entrances and site levels, concentrating social space with patterns of movement to encourage interaction and collaboration.



A curated commons for all to engage with, including multi-functional community spaces.



Identities that both fit in with their context, and stand out as a strong landmark announcing the arrival of Sister on the city skyline.



A critical mass of flexible, efficient and adaptable floorplates supporting a diverse range of occupiers and ways of working to drive a world-class innovation ecosystem at Sister.

3.3.2 CONSULTATION TIMELINE

- Manchester City Council Pre-application meeting

Community Panel

Public Consultation event

Young Manchester workshop
- Historic England Pre-application meeting

Twentieth Century Society meeting

Manchester Modernist Society meeting

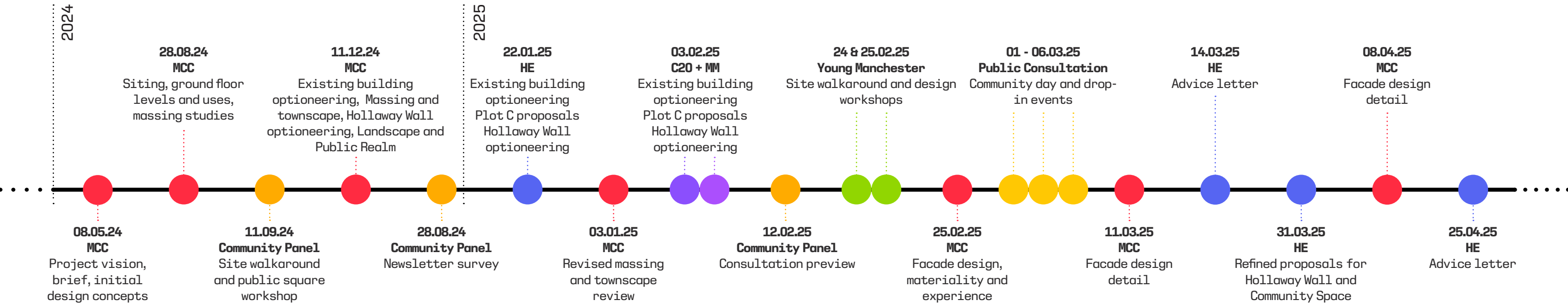
The evolution of the design has been informed by extensive consultation involving various stakeholders, statutory bodies and heritage groups. This spread shows the main meetings and events included in this process, whilst the rest of the chapter describes the main design developments resulting from them, described by theme.



Public consultation events were held at the Renold Building and the St Thomas Centre in Ardwick, with information boards illustrating the emerging scheme on display and online.

Comments received relating to the proposed buildings and public realm were generally supportive, particularly regarding improved accessibility.

Several responses on the Hollaway Wall were received and have helped to inform the refinement of its proposed integration in the scheme, as is illustrated further later in this chapter.

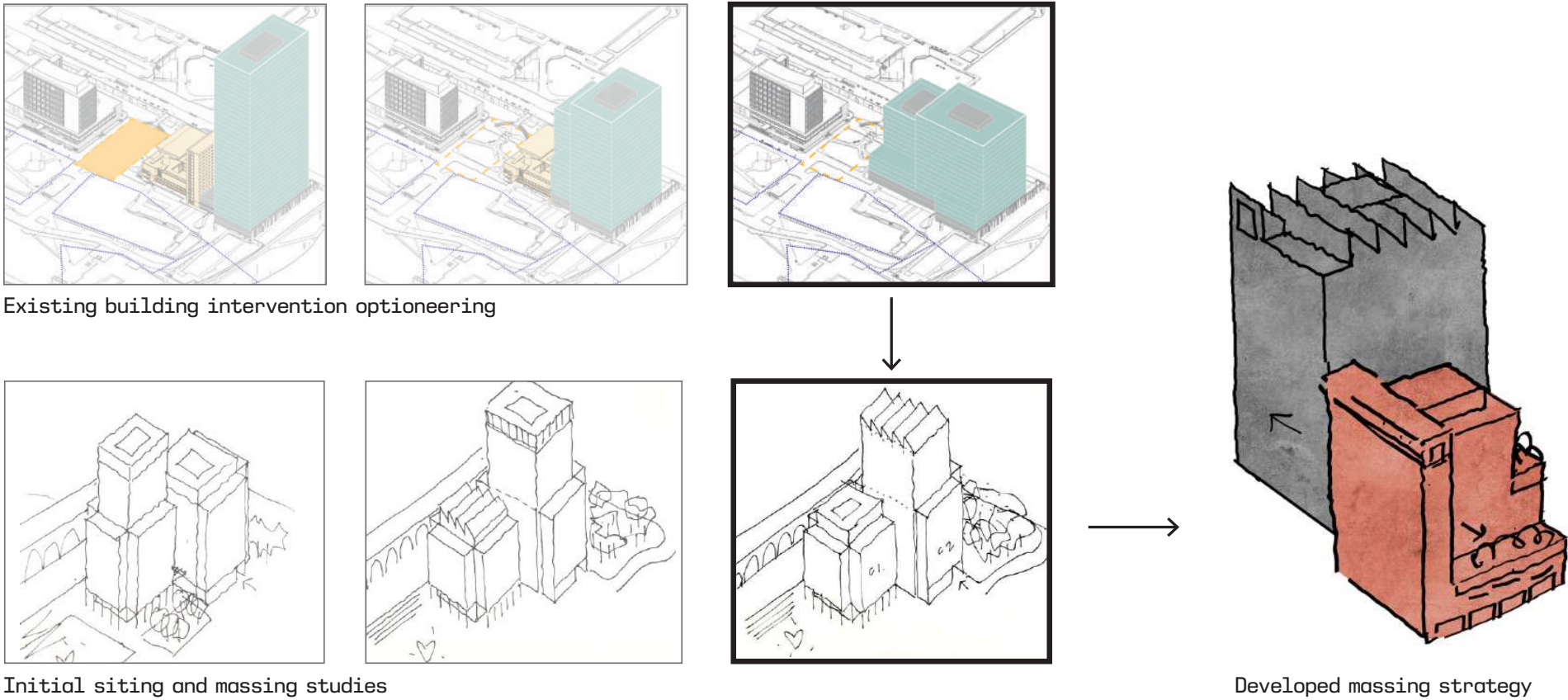
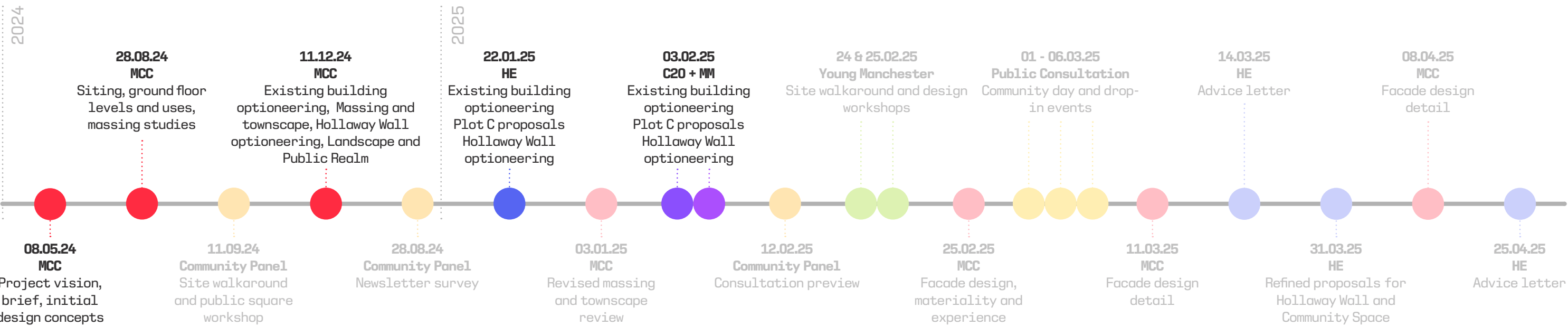


3.3.3 SITING AND MASSING STRATEGY

The client and design team presented the existing building intervention optioneering process and the rationale for selecting a new build strategy consisting of two linked buildings to Manchester City Council officers, and at meetings with Historic England, the Twentieth Century Society and the Manchester Modernists Society. Concerns were raised by some heritage stakeholders, but the strategy remained unchanged following detailed analysis undertaken that is summarised earlier in this chapter.

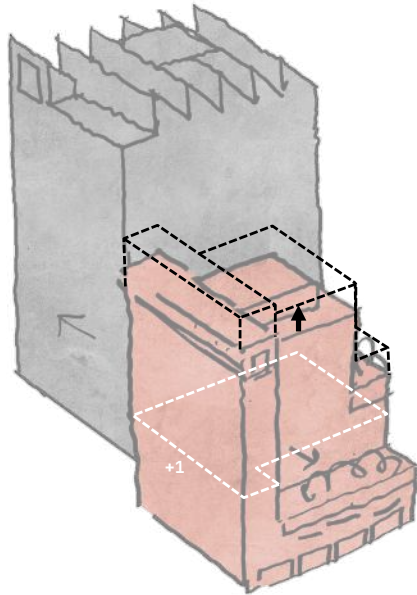
MCC officers noted that a rigorous, thorough process had been undertaken in reaching this selection, and responded positively to the massing strategy that had been developed, following a series of studies into how the building volumes might be distributed across the site and informed by key concepts of 'fitting-in, standing-out' and 'looking both ways'.

Comments were given requesting further development of the materiality strategy, which were presented and discussed at subsequent pre-application meetings.

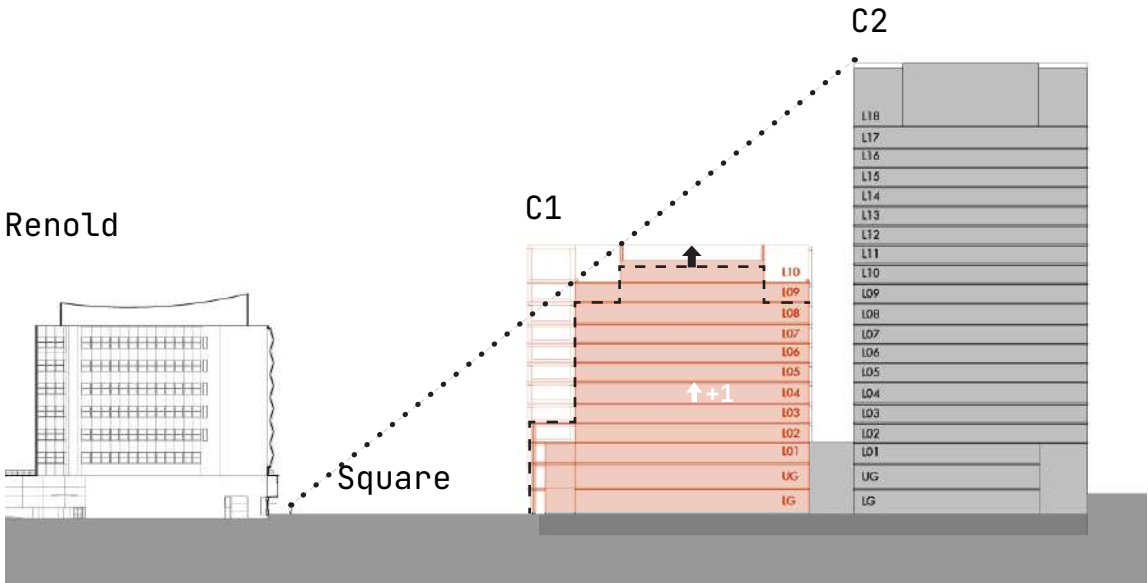


3.3.4 SCALE AND MASSING REFINEMENT

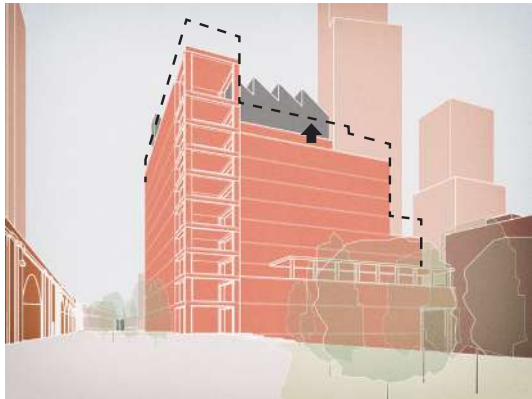
Revisions to the proposed massing were discussed and agreed with the MCC officers following the re-balancing of storey heights between the buildings in response to updated overall floor area and efficiency targets. It was agreed that key contextual relationships to the neighbouring Mill and Renold buildings are retained, as is the hierarchy of heights and visible layering of the two buildings from key townscape views.



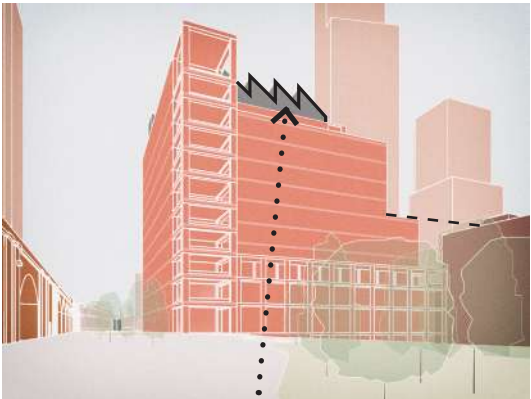
Massing strategy sketch diagram



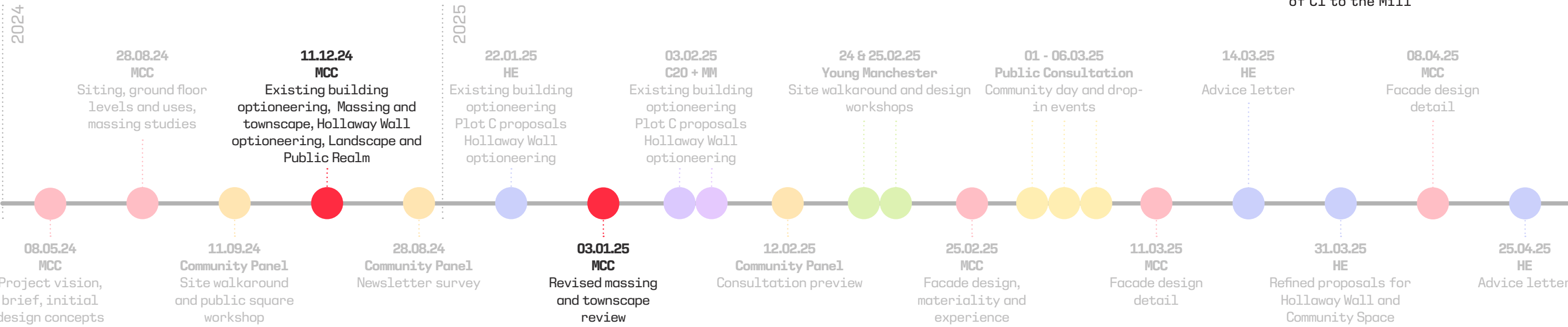
Site section diagram informing hierarchy of building heights



Sketch townscape view comparison of massing revisions



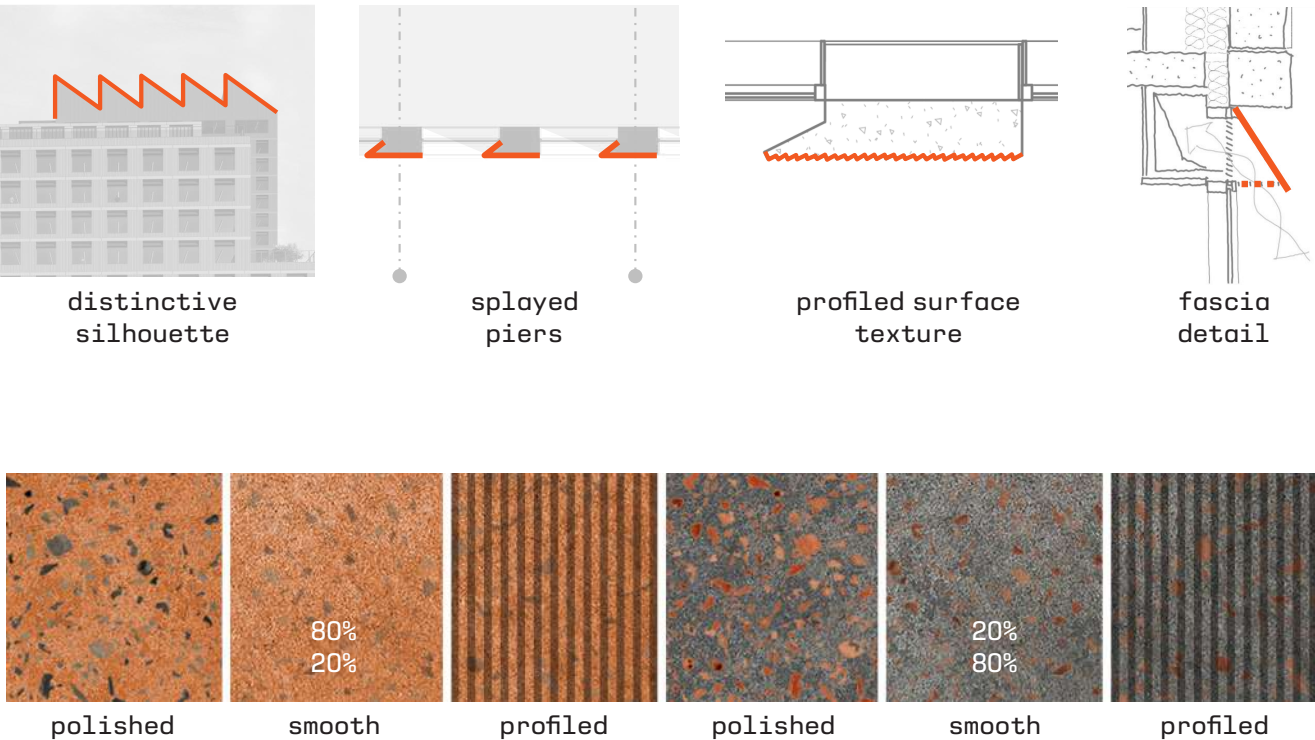
Sketch townscape view demonstrating visibility of C2 building beyond C1 from Altrincham Street, and the relationship of the southern terrace of C1 to the Mill



3.3.5 APPEARANCE AND MATERIALITY

A detailed material palette of tones, finishes and textures was developed and well-received by MCC officers in response to their comments and suggestions following initial review of the proposed reconstituted stone facade strategy.

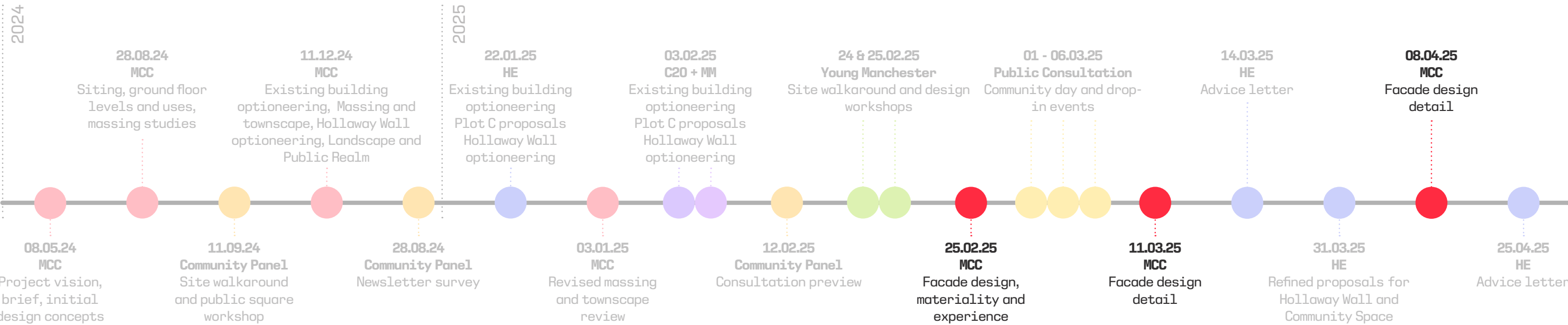
Facade details including the integration of ventilation requirements for proposed local MVHR systems, passive shading elements and articulation of openings have been developed through regular consultation with MCC officers, and will continue to be refined.



Above: Physical model exploring ventilation integration approaches

Top: Sketch diagrams exploring an angled motif expressed at a variety of scales

Above: Material palette diagram exploring contrast and mixing of reconstituted stone ingredients and finishes between the buildings



3.3.6 HOLLOWAY WALL & THE MANCHESTER ROOM

Proposals for the integration of the Holloway Wall and the community spaces that are created around it have been developed through engagement with various heritage stakeholders, Manchester City Council and the local community.

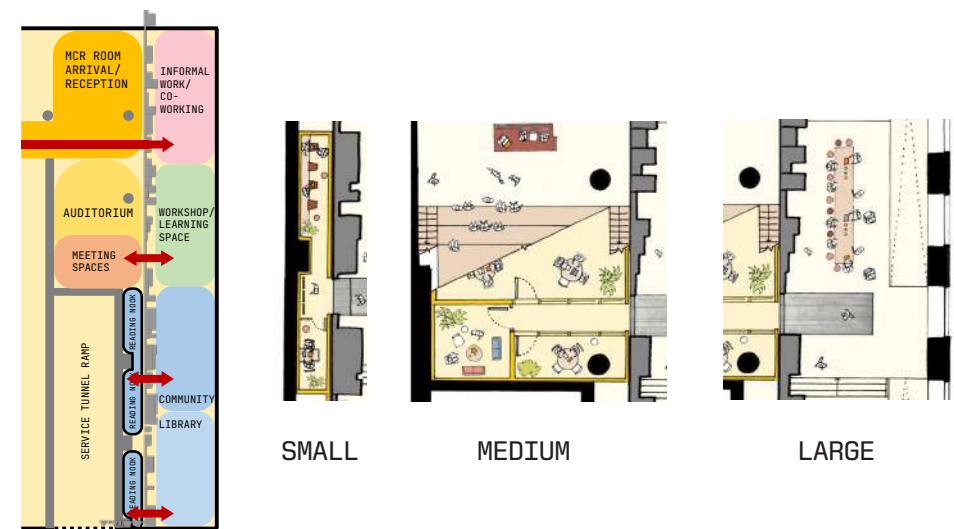
Following feedback received from Historic England and the public, proposals have been refined through further detailed investigation to reduce the extent of intervention to the Wall, improve its legibility and prominence, while maintaining key views and routes externally and strengthening the range of community spaces that are anchored around it internally.

Workshops were set up with young people from Manchester engaging with Young Ambassadors and M13 Youth Project in Ardwick, focussing on how Sister and Plot C could improve young people’s access and engagement with the proposed development. These workshops have helped to shape the proposals, particularly the series of small, medium and large spaces proposed around the Wall in the Manchester Room.

The design development of these spaces has considered the types of activities suggested by local young people through discussion, from independent study spaces, to ‘hub’ spaces to develop new skills and network with professionals.

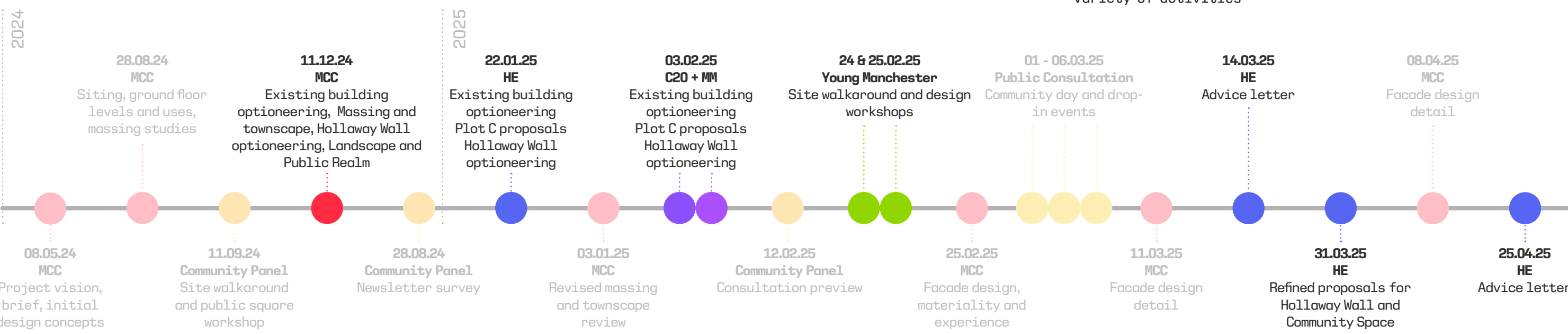


Examples of sketch views produced in order to reduce the extent of intervention to the Wall and maintain its visual continuity, while providing important legible views and routes to building entrances from Holloway Place.



Top: Manchester Room design development and photograph from youth engagement workshop

Above: Sketches of a range of community spaces to host a variety of activities





4 THE PROPOSAL

4.1 OVERVIEW

4.1.1 TWO SISTERS

Introduction

The proposal consists of two distinct office buildings. Like two sisters: individual in character yet connected by shared qualities, and a publicly accessible link spanning from lower ground floor to level 1.

Their placement creates a dialogue across the site, framing spaces and encouraging movement between and around them.

The Big Sister, C2 stands tall on London Road – a landmark building announcing arrival to Sister.

The Little Sister, C1 is more modest in scale with an articulated massing responding to the surrounding context.

At ground level, both buildings engage with the public realm through outward-facing, flexible uses such as cafés, restaurants and other active uses that animate the street and create a vibrant environment.

Together, they form a cohesive whole – distinct but connected, and united in creating a place that is engaging and inviting.

This chapter comprises of the following key sections:

- Use and amount
- Layout
- Scale
- Appearance



Axonometric view of the proposal

4.2 USE AND AMOUNT

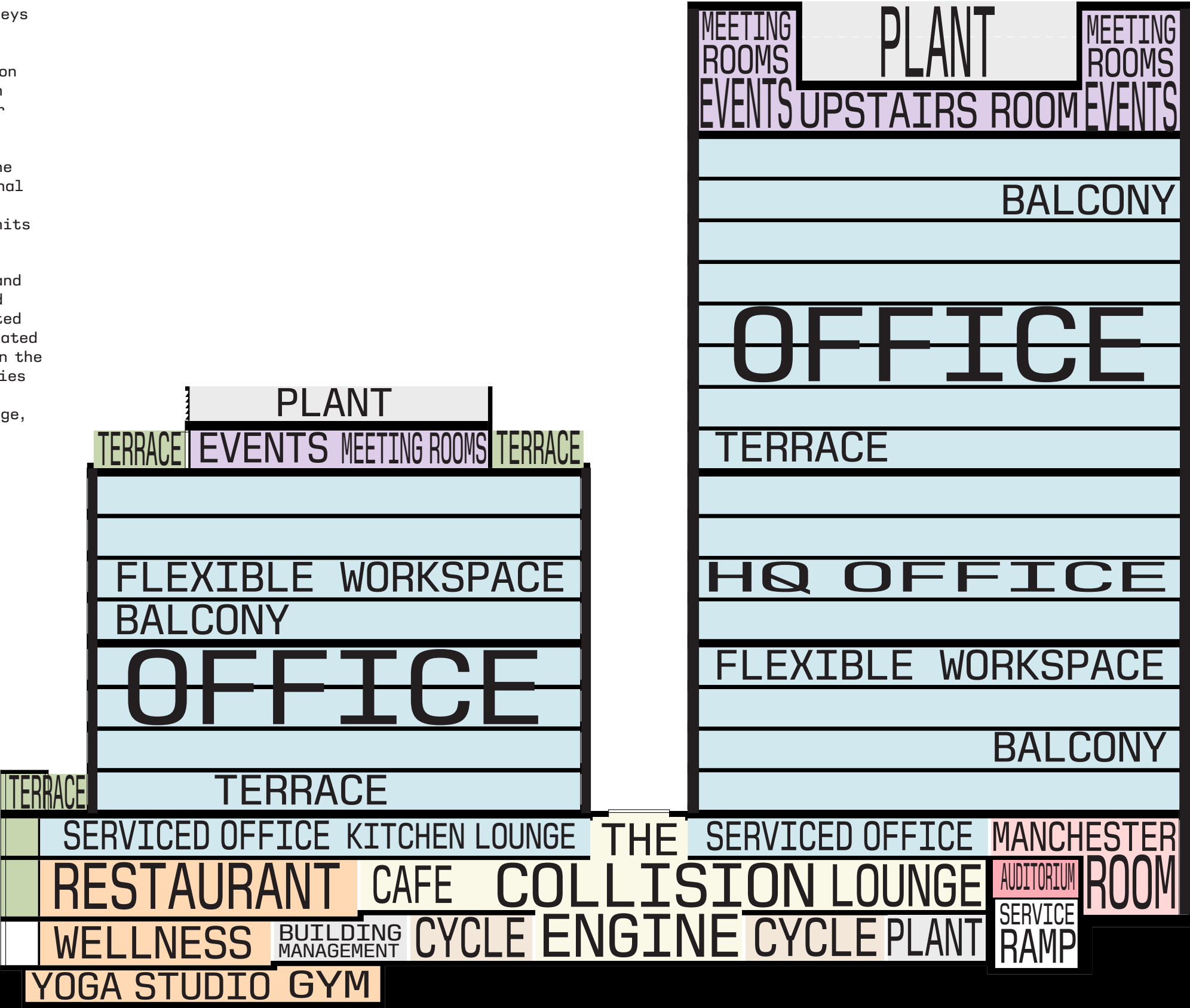
Illustrative section of the proposal

4.2.1 USES

Separated but connected

The proposal comprises two buildings of twelve and twenty storeys from the Square [lower ground], each including an upper ground floor, lower ground floor and basement level. The buildings are connected by a central triple-height lobby space – the Collision Engine – which provides shared access and permeability between the two buildings. This space is accessible from both the upper and lower ground floor levels. At lower ground floor, two double-height entrance lobbies support multi-tenancy flexibility: one located to the west fronting Sister Square, and the other to the south addressing Mill Lane. At upper ground level, two additional entrances are proposed to the north, activating the Altrincham Street frontage alongside new retail and flexible commercial units that contribute to the vibrancy of the public realm.

Office accommodation then extends up to levels 09 and 17 in C1 and C2 respectively, with flexible communal amenity spaces provided for the occupiers on the top floors above. Plant areas are located within screened enclosures at roof level and are also accommodated at lower ground and basement levels, ensuring minimal impact on the public realm. Cycle parking and associated end-of-trip facilities are situated at lower ground level, with dedicated cyclist entrances on Mill Lane providing direct access to secure storage, changing areas, showers, and drying rooms.



4.2.2 AMOUNT

Uses

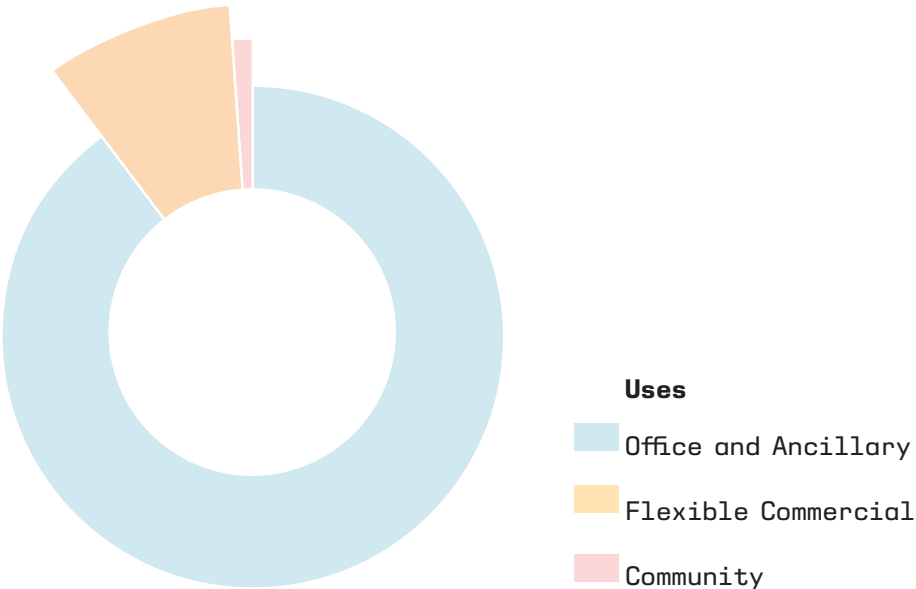
- C1 & C2 Office [includes ancillary space]
- C1 & C2 Flexible Commercial [Upper Ground, Lower Ground, Level 18 Upstairs Room]
- C2 Community Space [Manchester Room]
- Arches [includes mezzanine]

Other Uses

- Service tunnel 2,254sqm [GEA] / 1,965sqm [GIA]
- External building amenities 2,524sqm

Site-wide Areas

- Buildings footprint 6,014sqm
- Public Realm area 13,558sqm



Uses

Tab 1 Amount by use

By Use	GEA		GIA	
	sqm	sqft	sqm	sqft
Office and Ancillary	72,928	784,997	68,095	732,975
Flexible Commercial	7,265	78,202	6,989	75,234
Community	860	9,257	771	8,299
Grand total	81,053	872,455	75,855	816,510

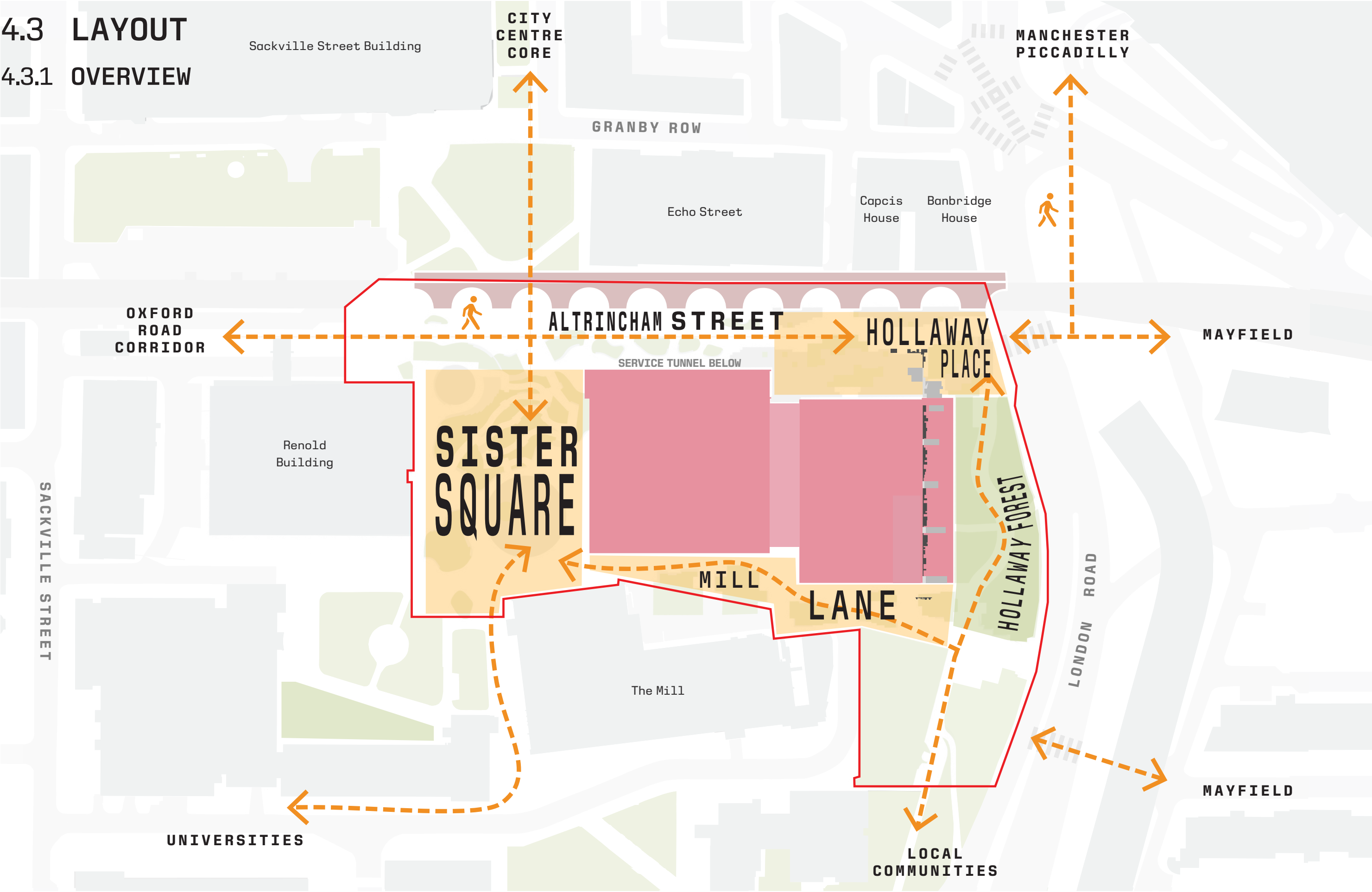
Tab 2 Amount by phase

By Phase				
Sister C1 (Phase A)	GEA		GIA	
Floor / Area	sqm	sqft	sqm	sqft
C1 Office and Ancillary	27,058	291,252	25,125	270,446
C1 Flexible Commercial (Upper Ground, Lower Ground and Basement)	3,822	41,140	3,802	40,925
Total	30,880	332,392	28,927	311,371
Sister C2 (Phase B)	GEA		GIA	
Floor / Area	sqm	sqft	sqm	sqft
C2 Office and Ancillary	45,870	493,745	42,970	462,529
C2 Flexible Commercial (Upper Ground, Lower Ground, L18)	2,519	27,115	2,364	25,446
C2 Community [Manchester Room]	860	9,257	771	8,299
Total	49,249	530,116	46,105	496,275
Arches (Phase C)	GEA		GIA	
Floor / Area	sqm	sqft	sqm	sqft
Arches [incl/ mezzanine]	924	9,947	823	8,864
Grand total	81,053	872,455	75,855	816,510

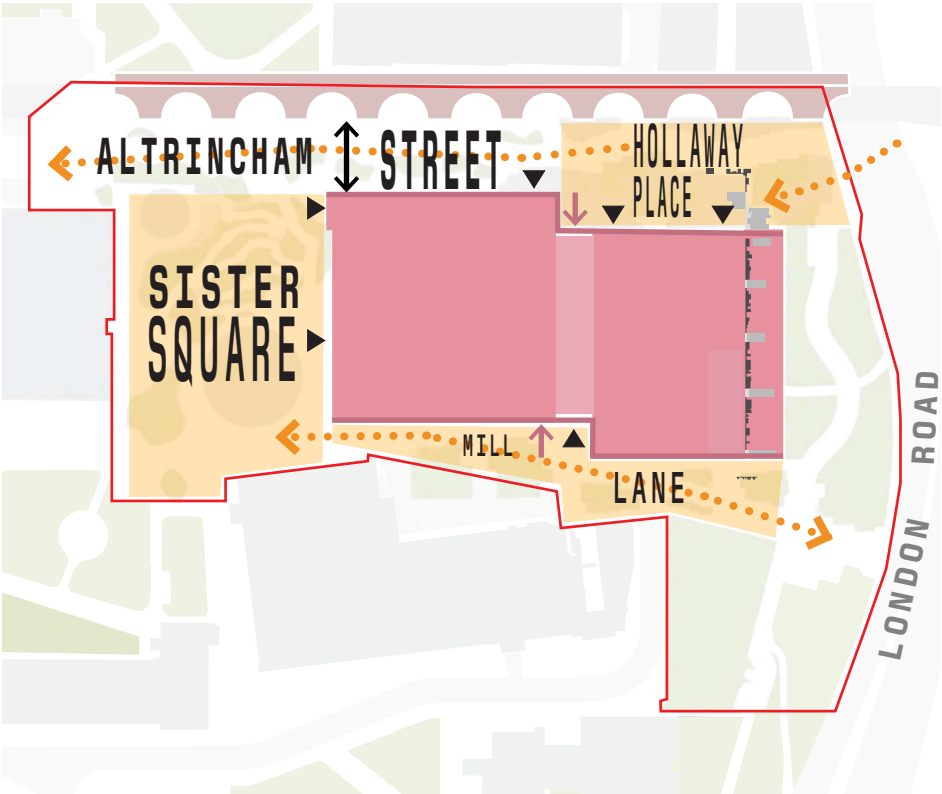
Schedule of amount by Phase and Use

4.3 LAYOUT

4.3.1 OVERVIEW



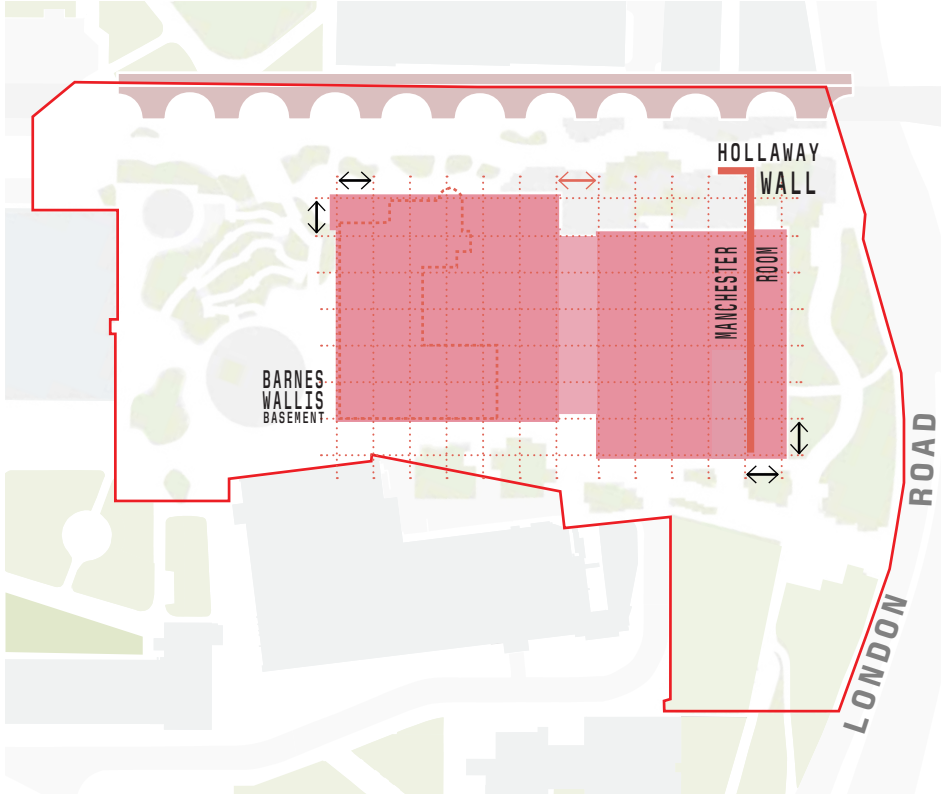
4.3.2 LAYOUT KEY STRATEGY



Siting, routes and entrances

The siting of the buildings responds to and defines the proposed network of routes and spaces. The two footprints are offset in plan, creating a generous arrival space at the north east of the site, and giving each building greater presence from both east and west. Building entrances are strategically located along key masterplan routes and desire lines through the neighbourhood.

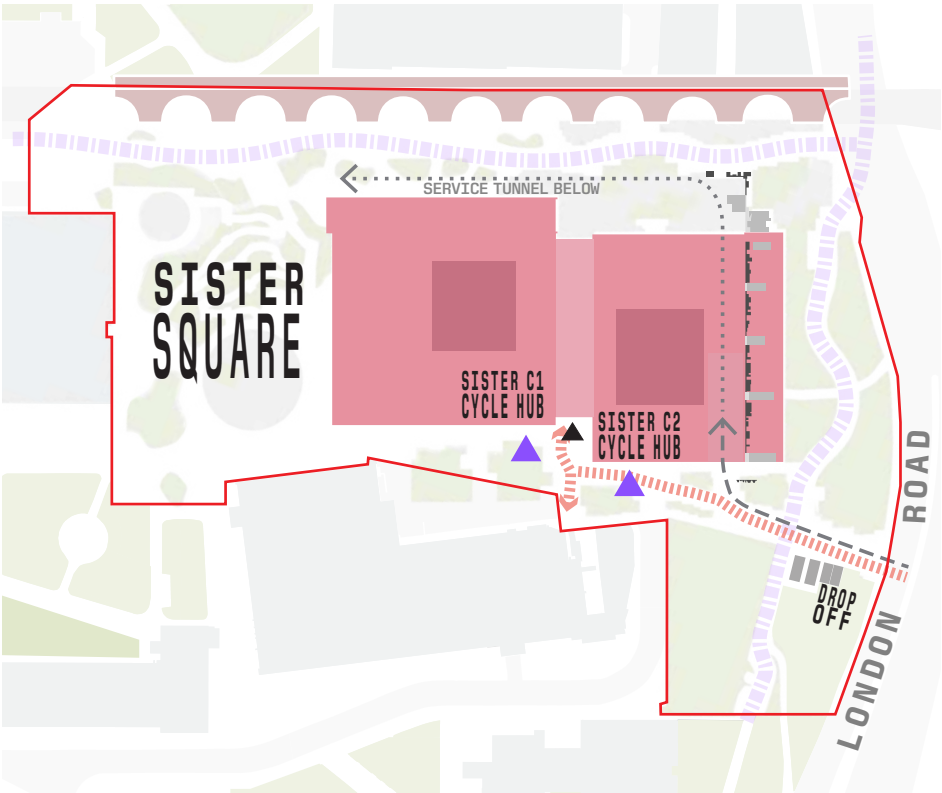
- Building set back
- Pedestrian routes
- ↔ Widened street
- Public spaces



Heritage and existing structures

Building footprints and efficient structural grids are carefully coordinated with the retained Hollaway Wall and enable effective re-use of the existing Barnes Wallis basement.

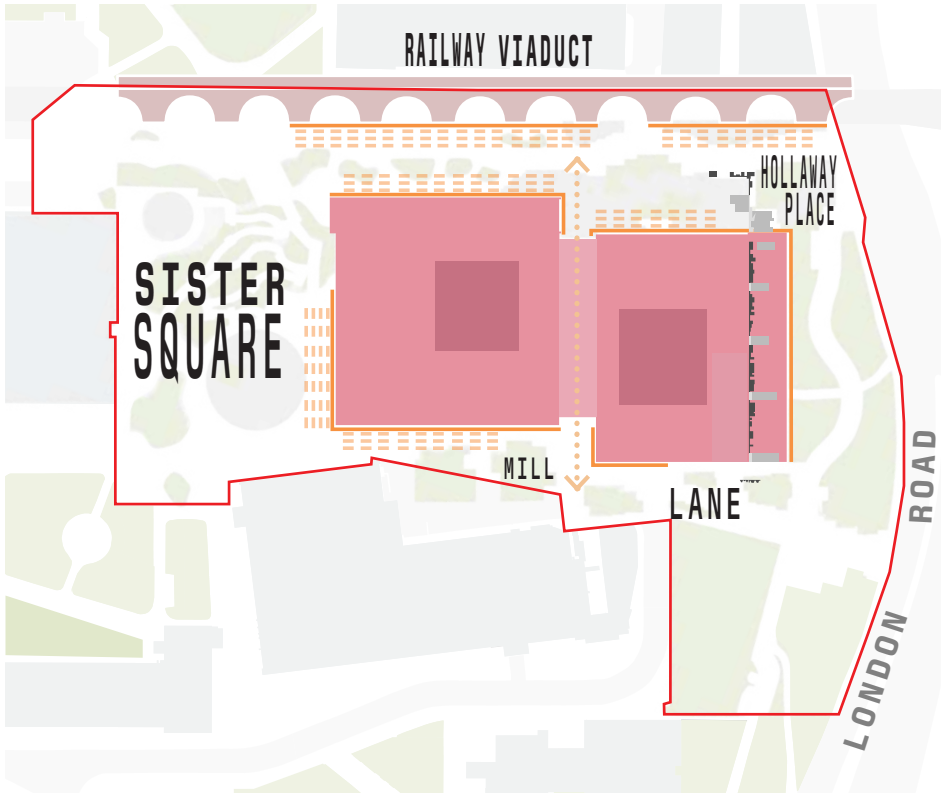
- Hollaway Wall
- - - BW existing basement
- ↔ Typical 9m grid
- ↔ Wider 10.5m grid



Servicing, vehicular and cycle movement

A simple and direct vehicle route is proposed from London Road to the south-east of the Sister C2 building. This provides access to drop-off spaces as well as below grade servicing infrastructure. Fire tender access is provided along the full length of Altrincham Street to the north and at each end of the building to the south. The cycle hubs are accessed centrally on the south elevation.

- Vehicle route
- Fire tender route
- Two ways cycle route



Active uses and frontages

Active frontages have been maximised around the perimeter with community uses showcased along the prominent eastern aspect. Flexible food and beverage and hospitality uses are proposed to be centred along Sister Square to the west, wrapping around to the north and south. Further flexible commercial units run along Altrincham Street and within the viaduct arches, as well as to the south along Mill Lane. The main entrance lobbies and Collision Engine provide footfall and activity through the centre of the north and south frontages.

- Active frontages
- Spill out

LOWER LEVELS

ALTRINCHAM STREET ARRIVAL.
THE LOWER LEVEL FRONTAGES DRAW
PEOPLE THROUGH THE SITE AND
INTO THE BUILDING ENTRANCES.
GENEROUS GLAZED FACADES PROVIDE
TRANSPARENCY AND ALLOW GROUND
FLOOR USES AND ACTIVITIES TO
SPILL-OUT INTO THE PUBLIC REALM.



C2

C1

4.3.3 LOWER GROUND FLOOR

Working with site levels

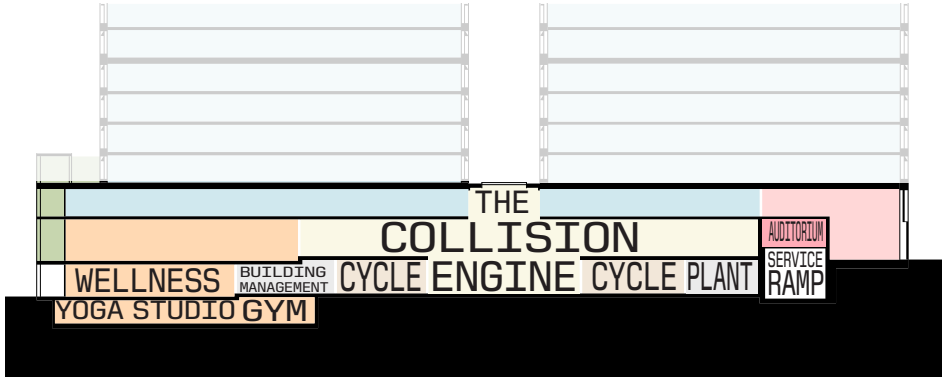
The existing change in level from north to south provides the opportunity for an upper ground level set at Altrincham Street and lower ground level set at Mill Lane below. This allows for a clear separation between front-of-house spaces and back-of-house areas, such as servicing bays, plant rooms and associated facilities, which are positioned to the north of the plot at lower ground floor level.

Aside from the service vehicle access route, estate vehicle store and fire escape routes, the western and southern parts of the plan accommodate front of house arrival spaces and flexible uses which provide activity and life along Mill Lane and Sister Square.

The main entrance from the west is positioned centrally on Sister Square. This provides connectivity to the flexible leisure use in the basement and flows eastward up to the Collision Engine above.

Dedicated cyclist entrances and cycle stores are proposed either side of a central southern entrance to the shared Collision Engine. The internal layout provides a seamless journey from cycle arrival, through the cycle store, dedicated male, female and non-assigned changing areas and showers through to drying rooms and lockers for each building.

A generous stair and lift connects the lower end of trip arrival level to the main office entrance lobbies, Collision Engine and flexible workspace floors above.

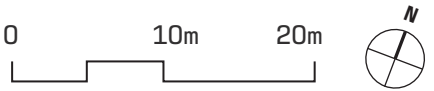


Lower Ground Floor illustrative section.

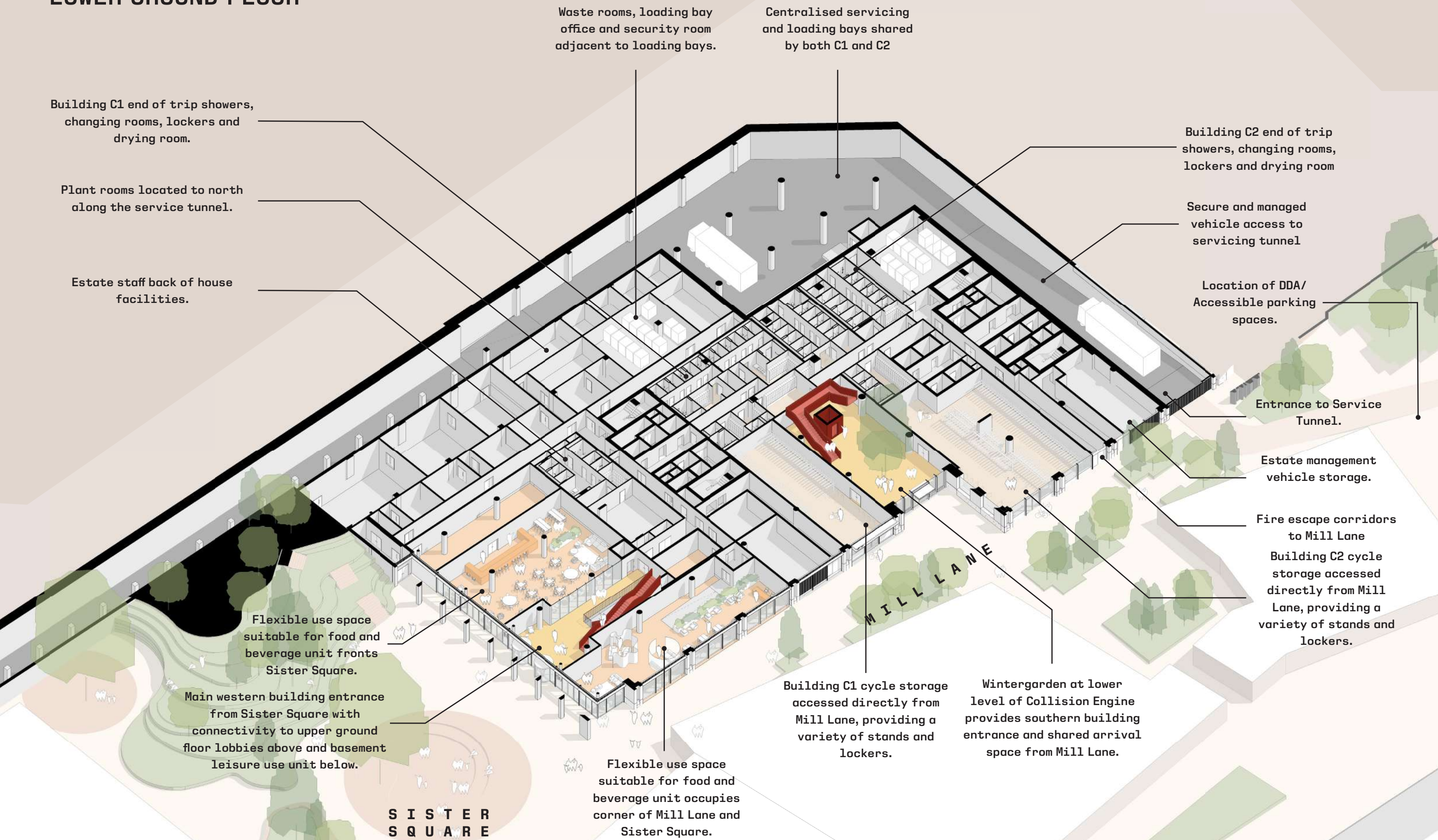


Lower ground floor plan

- | | | |
|--------------------------------|---------------------------|--------------------------|
| ▶ Flexible commercial entrance | ① Double height lobby | ⑤ End of Trip facilities |
| ▶ Cycle entrance | ② Flexible commercial use | ⑥ Ramp to Service Tunnel |
| ▶ Collision Engine entrance | ③ Long stay cycle parking | ⑦ Loading Bays |
| ▶ Service tunnel entrance | ④ Collision Engine | ④ Plant |



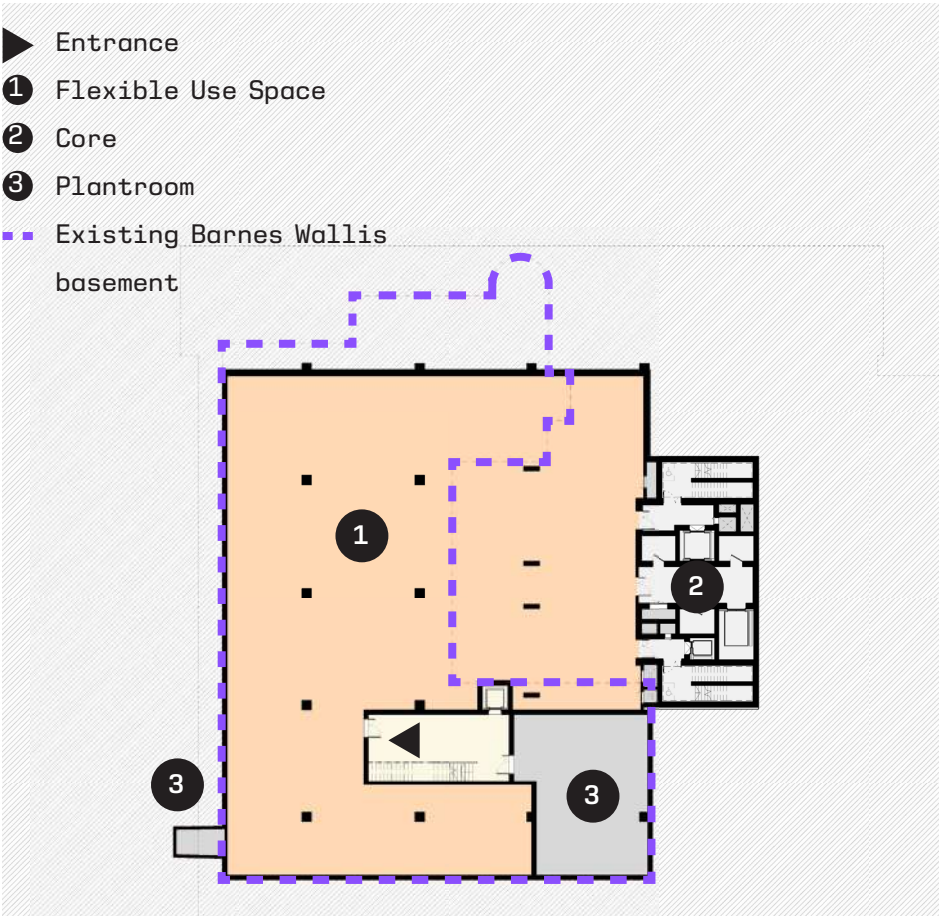
LOWER GROUND FLOOR



Basement Level

The proposal retains the existing Barnes Wallis building basement sub-structure, basement slab and perimeter walls wherever possible. The existing footprint has been adjusted and extended to accommodate plant areas and back of house connections to the main building core for a new flexible leisure use.

The basement tenancy can be accessed from the Sister Square main entrance via lift and stair, but also has opportunities for direct connectivity from the other flexible uses on upper ground floor above if desired.



Basement plan.



Cycle entrance from Mill Lane.

End of trip facilities

Dedicated end of trip facilities are provided for each building. The provisions are generous and exceed BREEAM and planning policy requirements. 30 short stay visitor cycle spaces are provided in the public realm mainly located around the main entrances to the buildings.

Separate Sister C1 and Sister C2 long-stay cycle entrances are accessed via automated double doors from Mill Lane and provide a range of cycle stand types and arrangements in generous and secure store rooms.

Separate male, female and non-assigned shower and changing areas are provided with associated toilets, lockers and drying rooms for each building. Facilities are laid out in a logical sequence to ensure a seamless end of trip journey for all building users.



Illustrative end of trip facilities plan

End of Trip Facilities

- Entrance
- 1 Cycle Store
- 2 Collision Engine
- 3 Lift & stairs to main building reception
- 4 Shared Entry / Lockers
- 5 Gendered Changing Room
- 6 Universal Facilities
- 7 Drying Room
- # Sister C1
- # Sister C2

	C1	C2	total
Cycles			
2 Tier	128	230	358
Sheffield	16	16	32
Acc.	8	18	26
	152	264	416
Showers			
Male	6	11	17
M. Acc.	1	1	2
Female	6	11	17
F. Acc.	1	1	2
Universal	1	1	2
U. Acc.	2	1	3
	16	27	43
Lockers			
Lockers	201	167	368

4.3.4 UPPER GROUND FLOOR

Connected to the public realm

The upper ground floor accommodates extensive front of house areas for the office buildings, community uses and flexible spaces for retail, cafés and restaurants all connected to and anchored by the central ‘Collision Engine’.

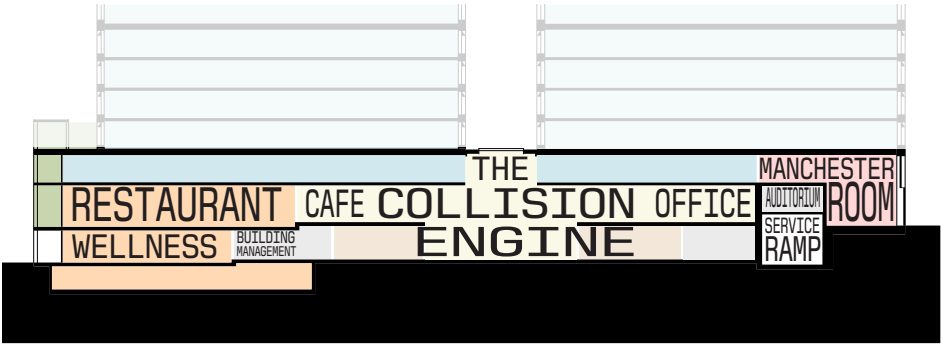
Main office entrances are located centrally to the north with direct connection from the main public east-west route along Altrincham Street. Buildings have individual entrances which lead onto entrance lobbies and reception areas facing a generous part double, part triple height central volume with shared break-out areas, planting and dynamic vertical circulation to the levels above and below.

Flexible use spaces flank each entrance lobby with opportunities for access from the street as well as internal interconnectivity. The larger of the two wraps westward with a separate main entrance at the prominent north-west corner and spills out into a linear sheltered loggia along the west elevation overlooking Sister Square.

A separate public entrance at the north of Sister C2 building provides access to the Manchester Room: a special double / triple height volume that extends the full extent of the prominent eastern elevation, activating Hollaway Forest and London Road. A combination of different community use spaces arranged around the retained and altered Hollaway Wall activate the Manchester Room.

The southern area of the upper ground floor is occupied by flexible workspace and front of house building management offices, both with connections to the lobbies and views over Mill Lane to the south.

Both building cores are positioned centrally with secure lift lobbies, fire escape stairs and washroom facilities for all building uses. The service ramp is tucked in behind the Hollaway Wall with the volume above utilised for a ventilation plant room.



Upper Ground Floor Illustrative section.



Upper ground floor plan

The Arches

Demountable insertions within the existing arches will activate Altrincham Street enabling flexible commercial uses while still allowing maintenance access for Network Rail when required. Free-standing mezzanines maximise usable space and minimise interference with the existing structure.

▶ Main Office entrance

▶ Community entrance

▶ Flexible commercial entrance

① Flexible commercial use

② Building management

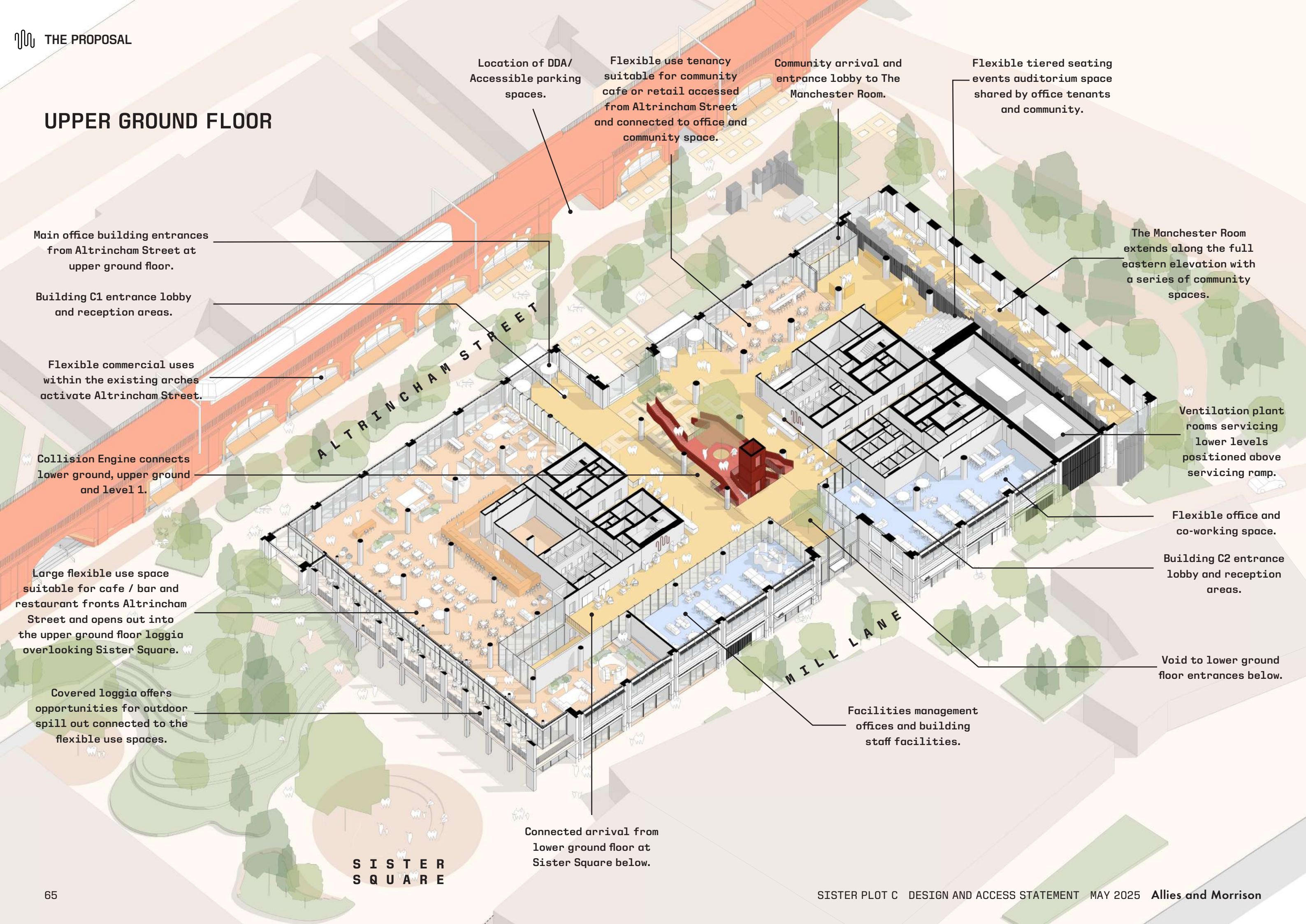
0 10m 20m

③ Flexible office use

④ Plant

North arrow

UPPER GROUND FLOOR



Main office building entrances from Altrincham Street at upper ground floor.

Building C1 entrance lobby and reception areas.

Flexible commercial uses within the existing arches activate Altrincham Street.

Collision Engine connects lower ground, upper ground and level 1.

Large flexible use space suitable for cafe / bar and restaurant fronts Altrincham Street and opens out into the upper ground floor loggia overlooking Sister Square.

Covered loggia offers opportunities for outdoor spill out connected to the flexible use spaces.

Location of DDA/ Accessible parking spaces.

Flexible use tenancy suitable for community cafe or retail accessed from Altrincham Street and connected to office and community space.

Community arrival and entrance lobby to The Manchester Room.

Flexible tiered seating events auditorium space shared by office tenants and community.

The Manchester Room extends along the full eastern elevation with a series of community spaces.

Ventilation plant rooms servicing lower levels positioned above servicing ramp.

Flexible office and co-working space.

Building C2 entrance lobby and reception areas.

Void to lower ground floor entrances below.

Facilities management offices and building staff facilities.

Connected arrival from lower ground floor at Sister Square below.

4.3.5 THE COLLISION ENGINE

The SRF uses the phrase “A Human Collider” to describe the idea of a place where patterns of movement - when and where people walk - are concentrated and collocated with the places people stop and dwell - the vital social spaces. This simple idea creates a fertile ground for the planned and accidental conversations, overhearings, events, talks and long coffees that stimulate the many ideas, connections and collaborations that fuel innovation. We have thought about Sister Plot C in exactly the same way with the purpose-designed ‘Collision Engine’.

Sister C1 and C2 buildings will together support a population of over 3500 people. Our idea for linking the buildings means that this giant reservoir of “human potential energy”, will pass through the Collision Engine at least twice a day. The space will also be a place to stop and meet. It will have inhabited edges - booths, benches, perches, balconies. It will be a stage for the theatre of daily collisions and collaborations between everyone in the buildings and beyond.

Interconnected scissor stair arrangement provides access to upper and lower levels from north and south.

Central collaboration platform connects all staircases with space for sharing ideas and informal meetings set around a central tree.

Linear stair set in double height void connects Collision Engine to Sister C1 main entrance from Sister Square.

Main northern entrance to Sister C1 on prominent corner on Altrincham Street.

Main northern entrance to Sister C2 on Altrincham Street.

Generous glazed facade with views into Collision Engine.

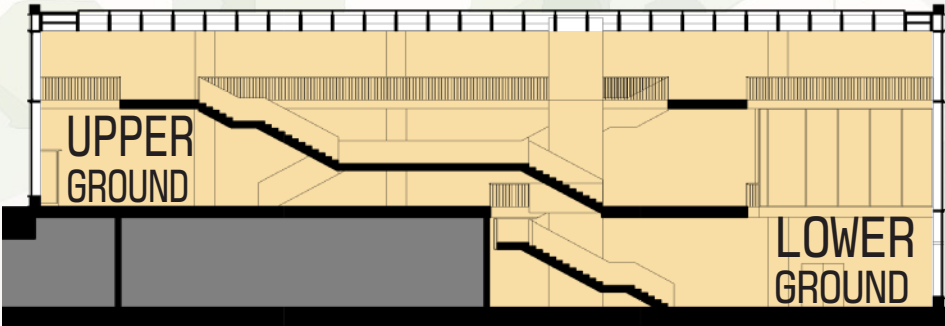
East-west route provides internal connection to flexible and community spaces to east.

Collision Engine is flanked east and west by receptions and secure lines to lift lobbies.

Collision Engine extends down to lower ground floor with double height void. Greening brings the landscape in.

Southern entrance at lower ground floor shared by both buildings.

East-west connection to Sister Square is lined with flexible breakout space and building management offices.



Section through Collision Engine stairs.



THE COLLISION ENGINE

A DYNAMIC SHARED CENTRAL SPACE THAT DRAWS PEOPLE IN AND THROUGH THE BUILDINGS PROVIDING OPPORTUNITIES FOR WORKING, MEETING, SOCIALISING AND COLLABORATING.

C2

4.3.6 THE MANCHESTER ROOM

A collection of new spaces for the community

Outward looking and engaging community uses are laid out along the eastern side of the site to ensure visibility and accessibility from London Road and Piccadilly Station. A series of spaces specifically designed for different types of community activities are laid out along and anchored by The Hollaway Wall.

Medium size community meeting rooms located below auditorium.

Hollaway Wall

Private study nooks located behind Hollaway Wall.

Flexible use tenancy suitable for a multi-function cafe shared by all building users located central led with connections to office lobbies and community hub.

Manchester Room arrival lobby & exhibition space provides events break out space provides access to all internal routes and spaces.

Dedicated public main entrance to community facilities located on Altrincham Street with visibility from north-east approach.

Flexible tiered seating auditorium used for larger public events and occupier presentations, product launches etc

Entrance threshold connects the community spaces with the arrival lobby and exhibition area.

The Manchester Room runs the full length of the building and comprises a series of four terraces connected by wide stairs and ramps positioned along the east facade. The flexible and connected layout allows various community activities and events to take place as and when required.

Hollaway Forest.

LONDON ROAD

How the spaces would be used?

While the exact arrangement of uses and activities is not known at this stage, this page demonstrates the potential for a wide range of spaces and activities that appeal to a diverse community can be accommodated.

These initial thoughts have been informed by recent consultation and community youth panels and will continue to evolve with further consultation events and respond to community needs over time.



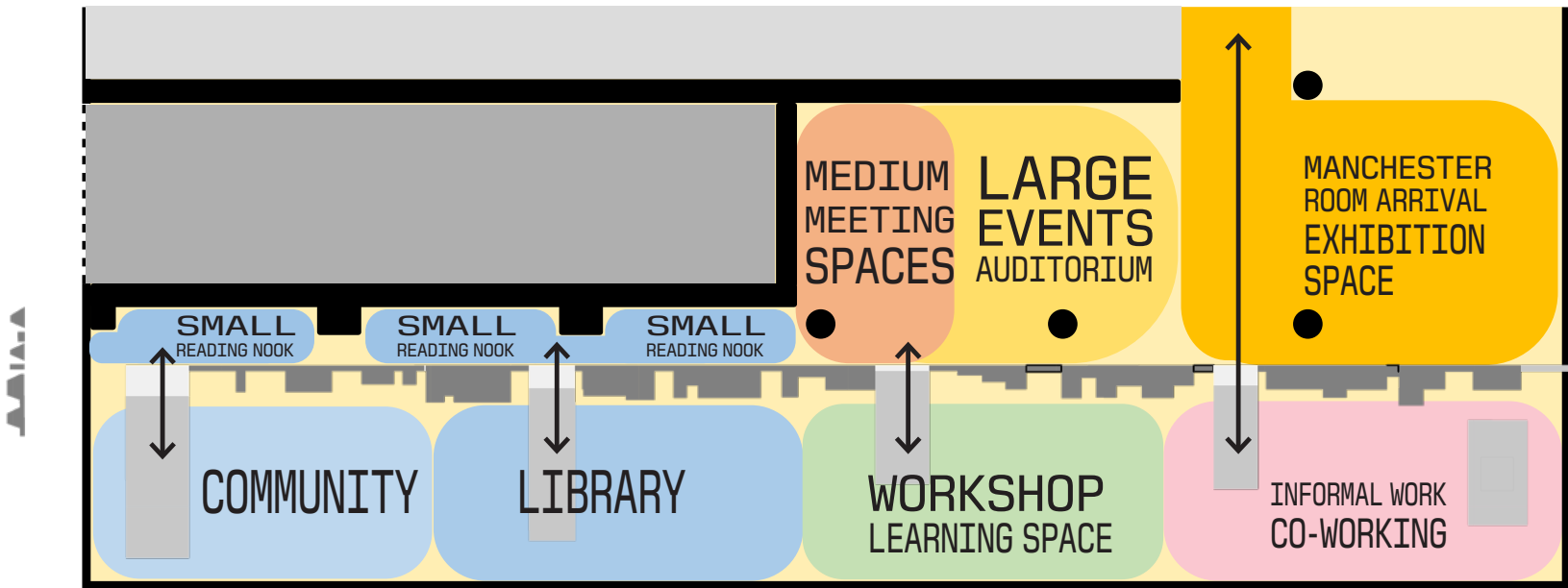
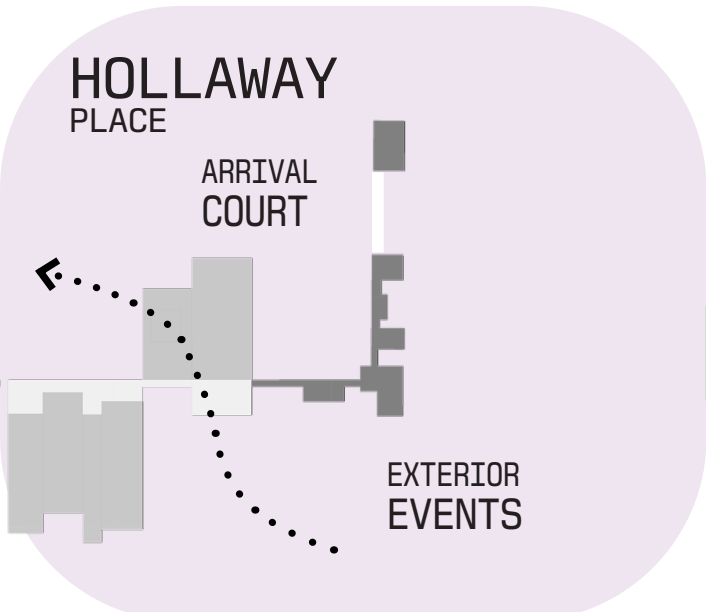
Open space with large table for group events and workshops.



Large flexible raked seating auditorium for community talks, presentations and product launches.



Sheltered exterior space framed by Hollaway Wall for informal play.



Open air event space under the trees for small to medium talks and performances.



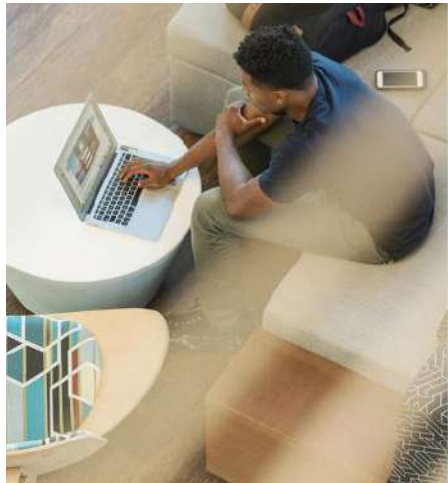
Community library with learning resources for different ages.



Smaller private nooks for reading and studying.



Meeting room for small groups and mentoring.



Touch down space for informal working.



Flexible central space for arrival, reception and exhibitions.

How will people experience the spaces?

Levels

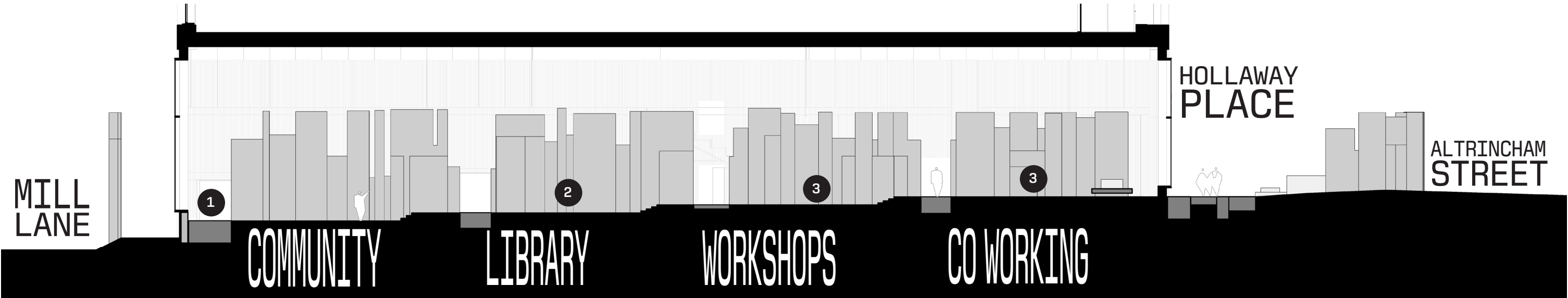
The existing and proposed site levels fall from north to south so the space has been adjusted to follow the landscape to ensure visual connectivity to the public realm and maintain the existing relationship between the ground and the Hollaway Wall.

Scale

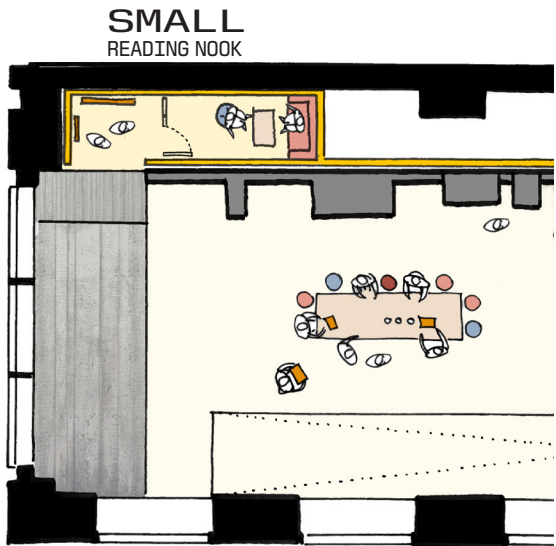
The Manchester Room volume is double height at the north and triple height at the south providing generous space around the listed Hollaway Wall.

Activities

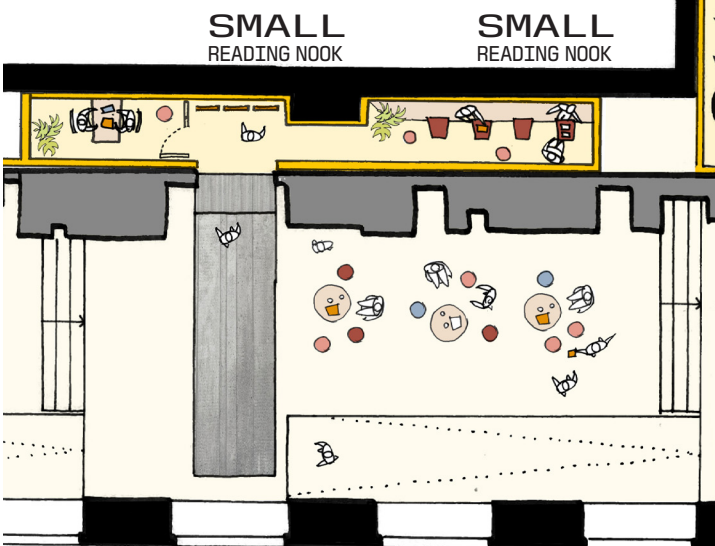
The illustrative plan shows how community activities of various scales can be accommodated along and around the wall, all experiencing the Hollaway Wall in their own ways.



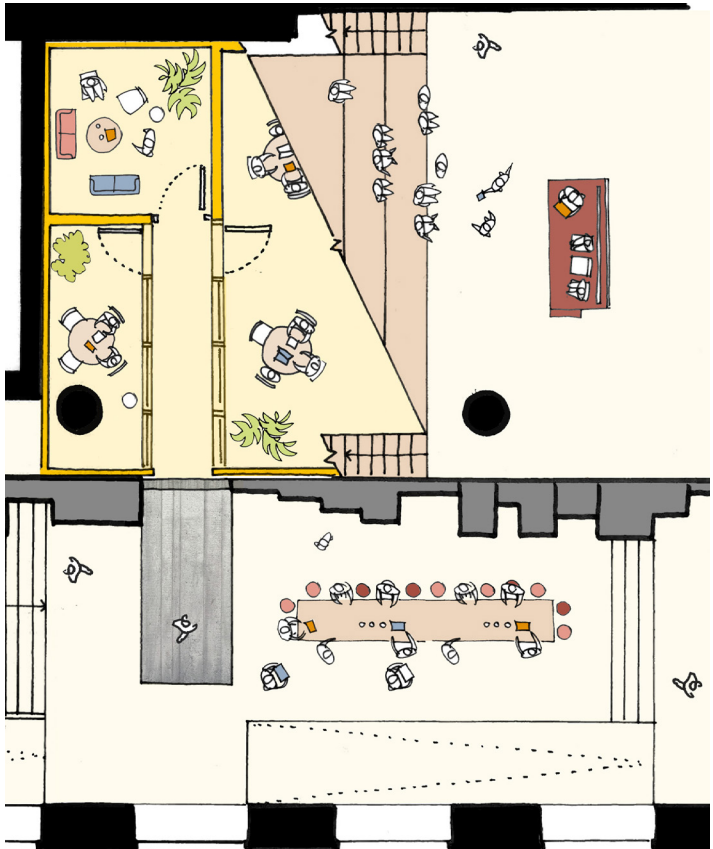
Manchester Room section.



1 Small private reading nook.



2 Medium meeting spaces.



3 Large event spaces.

THE MANCHESTER ROOM

A COLLECTION OF
COMMUNITY SPACES
DESIGNED AROUND
THE HOLLOWAY WALL

The Manchester Room

4.3.7 FLEXIBLE SERVICED OFFICES

Introduction

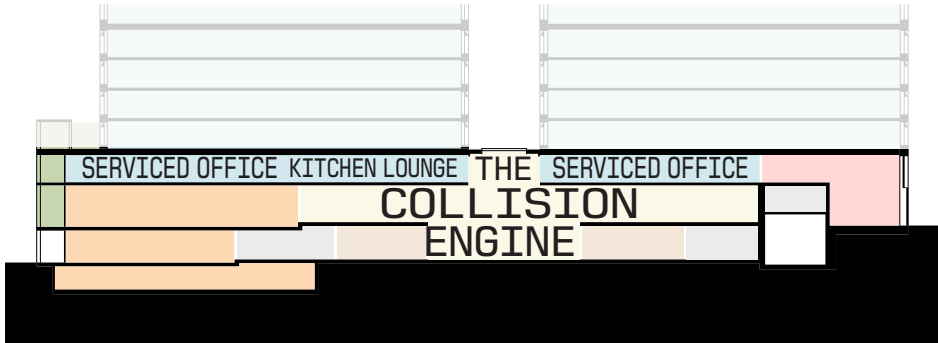
Both buildings have been specifically designed to accommodate serviced office suites across level 1, all accessed from and connected via the central Collision Engine. Each building has an arrival and break-out space that leads onto office areas to the north and south. The floor plates have offset central cores that create flexible office space with private suites of varying sizes laid out around the perimeter.

Floor layout brief

A detailed space brief has been developed to ensure offices are provided that appeal to different types of occupiers in terms of size, flexibility, amenities and look and feel.

Key brief elements are as follows:

- Hospitality style shared kitchen and break-out areas located adjacent to lifts and stair to welcome people on arrival.
- Blend of office sizes to allow businesses to flex and grow remaining in this location.
- All offices have windows to maximise natural light, energy efficiency and visual connections to outside.
- Amenities including lounge seating areas, booth seating, meeting rooms and private phone booths.
- Flexibility for greater occupational densities within the offices to suit business needs.

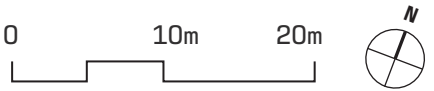


Flexible serviced office illustrative section.



Illustrative level 01 plan

- ▶ Arrival from Collision Engine
- ③ Collision Engine stairs
- ① Private terrace
- ④ Void over winter garden
- ② Flexible serviced office
- ⑤ Connection to auditorium
- ⑥ Manchester Room below



Designed for flexibility

The layout has been carefully designed to accommodate a diverse range of private office suites, varying in size and arranged around the building perimeter to maximise access to natural light. The internal configuration supports flexibility for different tenant needs while maintaining a consistent quality of provision.

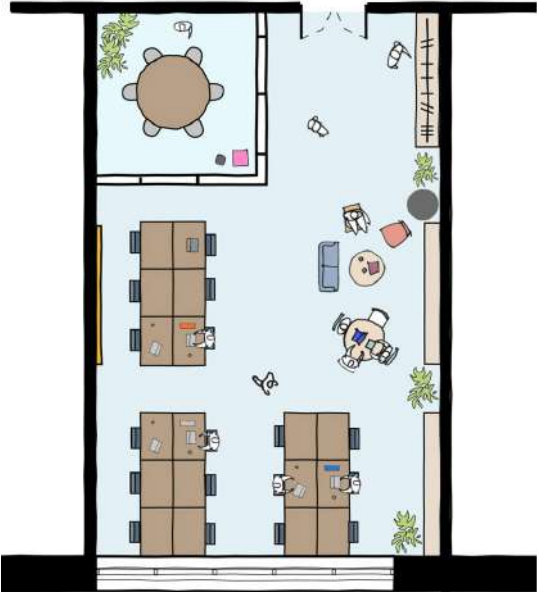
Each suite typically includes:

- Open-plan workspace with access to natural daylight
- Desk layouts arranged in pairs and clusters
- In suites designed for 20 people or more, a dedicated meeting room is included within the unit
- Individual locker provision for each user
- Internal features such as a feature wall [through colour or wall covering], shelving, and coat stands

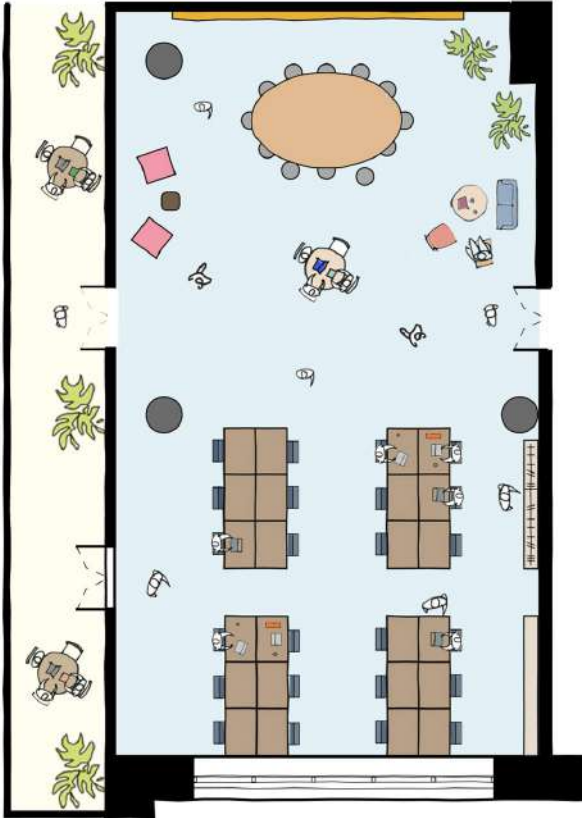
All office suites are designed to allow varying levels of internal fit-out and dressing, enabling tenants to tailor the space to suit different operational and budgetary requirements.



Illustrative plan of small office suite.



Illustrative plan of medium office suite.



Illustrative plan of large office suite.



Informal co-working.



Shared facilities.



Lounges filled with greenery.



Informal meeting spaces.



Private meeting booths.



Flexible meeting rooms.

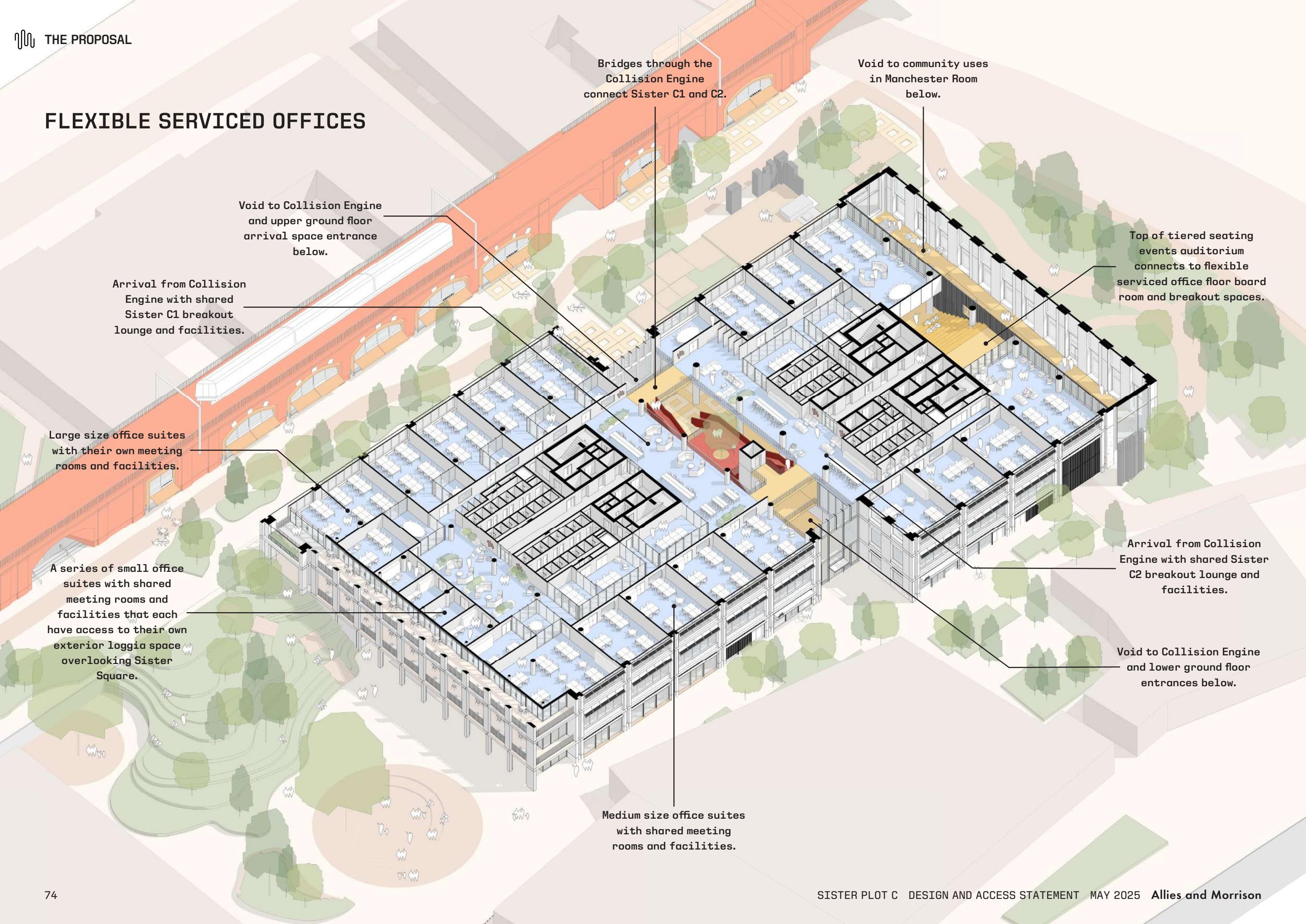


Flexible workspace.



High quality meeting rooms.

FLEXIBLE SERVICED OFFICES



4.3.8 TYPICAL FLOORS

Workplace that works

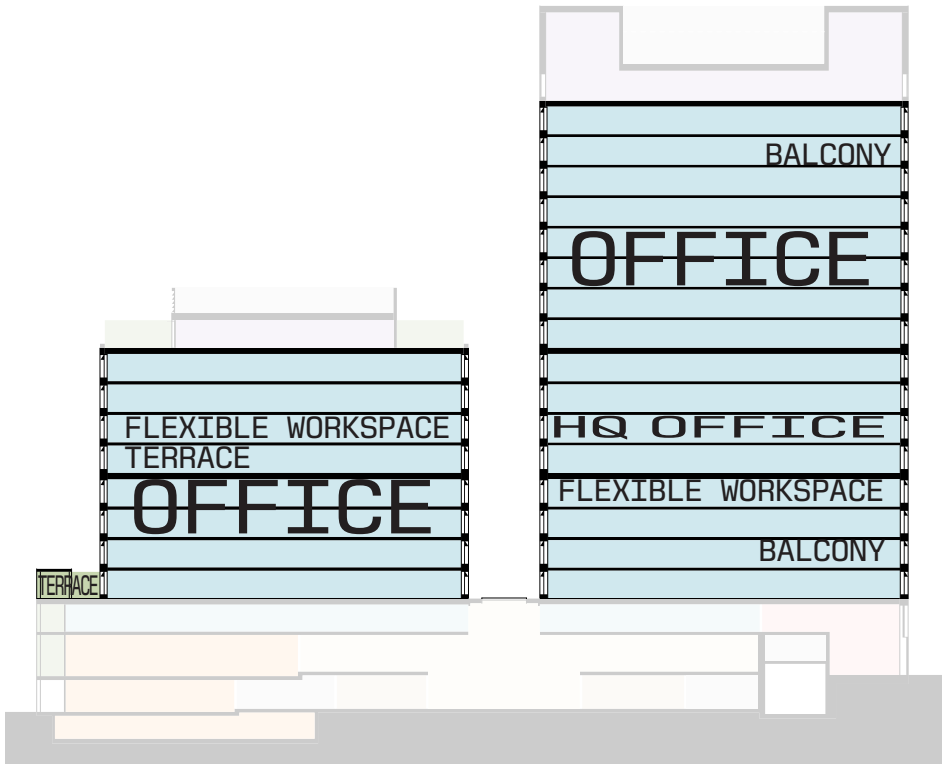
A workplace that works prioritises flexibility, efficiency, and long-term adaptability to support a diverse range of occupiers and evolving ways of working.

Flexibility

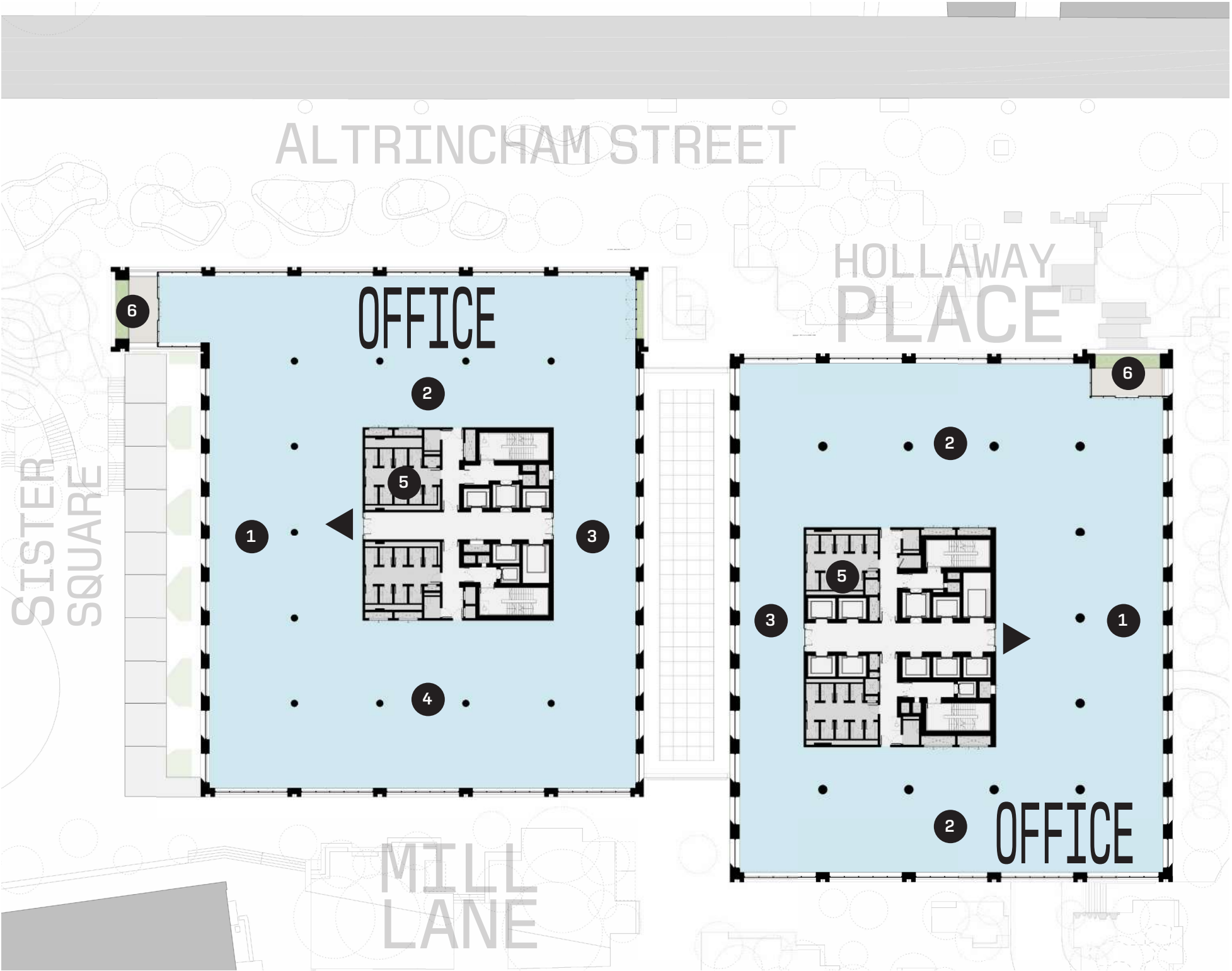
Flexibility is critical for any workplace building. Large speculative buildings represent a considerable investment in money and carbon and a flexible, long-life, loose-fit building builds confidence that expectations can be met over the long-term. Equally, as the first new buildings in the innovation district, Sister C1 and C2 will help establish a critical mass and mix of organisations and so need the flexibility to offer a wide range of office floors and spaces from day one.

Efficient, simple, diverse floor plates

The first development phase has a lot to contend with, from the construction of the ramp and below-ground infrastructure, to the extensive new public realm so simple and efficient office floor plates are especially important to deliver. While Sister C2 has simple rectangular stacked floor plates, the responsive massing strategy creates a series of different sized and proportioned floor plates for Sister C1.

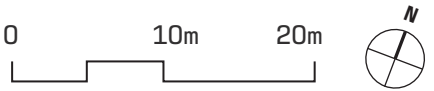


Upper floors illustrative section.



Typical lower level plan (02-05)

- ▶ Main entrance onto floor
- ① Deeper exterior facing floorplate
- ② Medium depth floorplate to north and south
- ③ Shallower inward facing floorplate
- ④ Floorplate depth varies as a result of massing shoulder to the south
- ⑤ Building core
- ⑥ External amenity

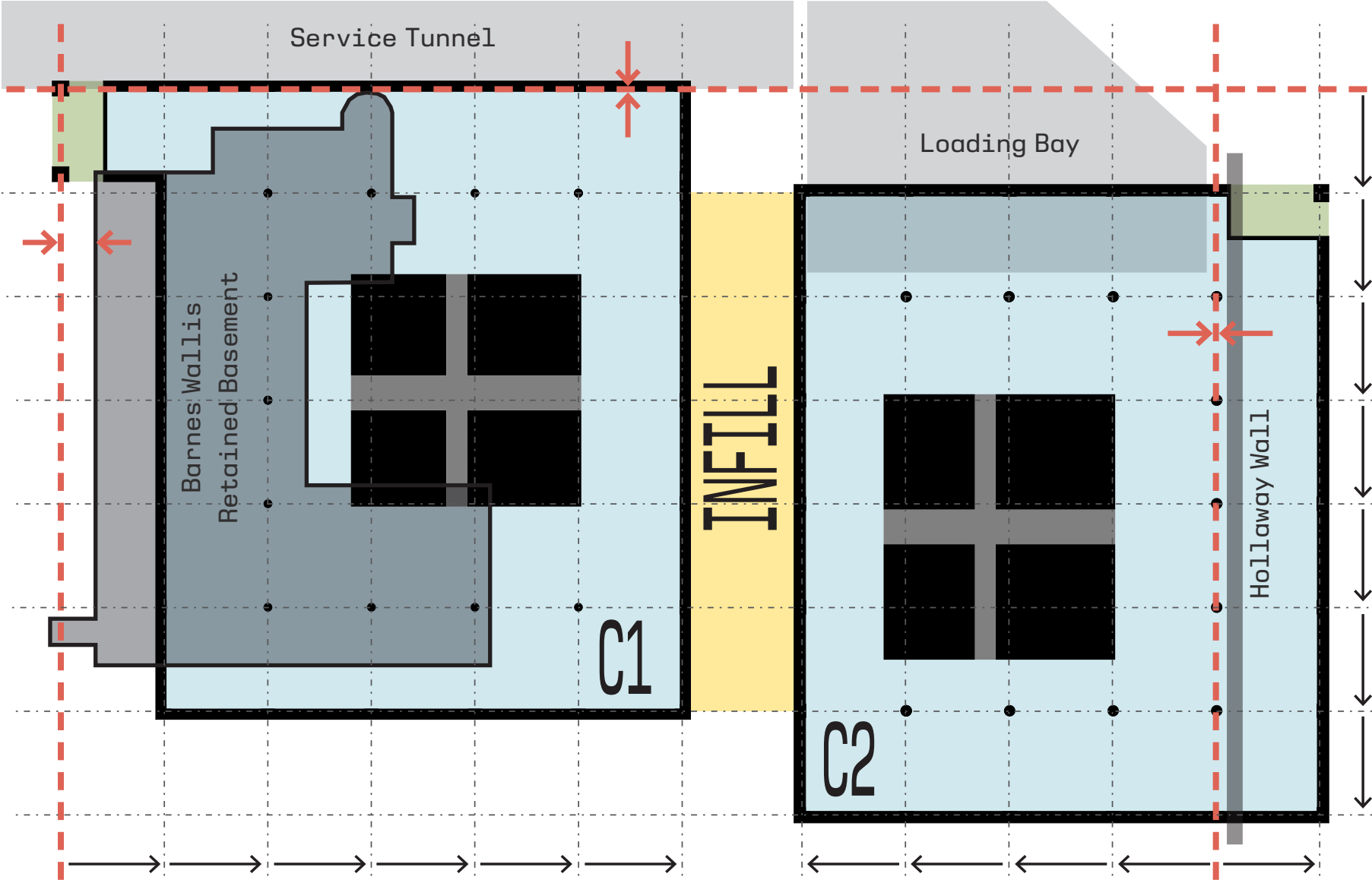


Efficient Structural Grid

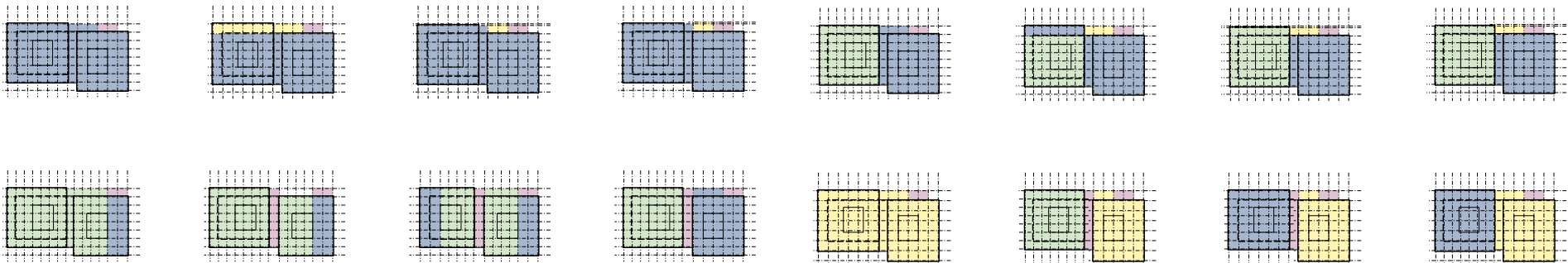
Both buildings adopt a consistent 9m x 9m structural grid, optimised for flexibility, simplicity, and long-term adaptability. Strategic adjustments to the grid respond directly to site-specific constraints, ensuring efficient construction and minimised structural complexity.

Key moves:

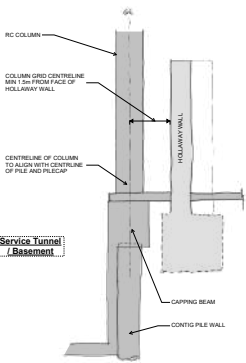
- Eastern edge set by the Holloway Wall to minimise impact on existing foundations
- Western edge aligned with Barnes Wallis building to maximise reuse of the existing basement structure and reduce the need for new piling
- Northern edge set by the service tunnel, allowing the new building to abut the tunnel and optimise shared structure
- 9m grid spacing maintained at key locations such as the loading bay and along the Holloway Wall, leading to the adoption of a uniform 9m x 9m grid throughout
- Building grids set out from fixed points, ensuring structural efficiency, consistent spacing, and simplified construction
- Increased grid span accommodates the loading bays without affecting Building C2, where columns only support Altrincham Street above
- The wider span between the two buildings allows for a lightweight structural solution in the infill link area at lower levels



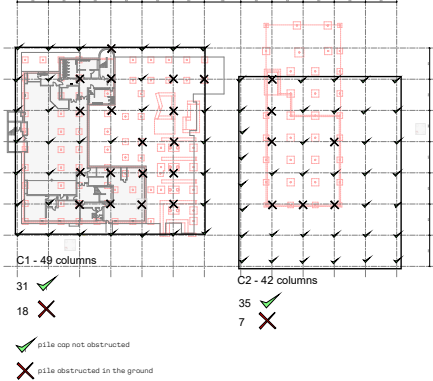
Grid responds to constraints



Grids optioneering and final outcome



Holloway Wall foundations



Barnes Wallis obstructions

The [off]centre core

The dimensions of the building footprints naturally lend themselves to a 'central core' office floorplate typology. Rather than finding the perfect centre of the plans, 'offset cores' are proposed. The idea behind this is twofold. Firstly, it maximises the depth [and flexibility] of the zone of the floorplate where you arrive and the views and light are best. Secondly, it reduces the amount of inward-facing floor area, in close proximity to the building opposite. The result is floor plates with a hierarchy of depth of space that respond to the site, the context and are capable of being fitted out in a variety of ways.

Tenancies

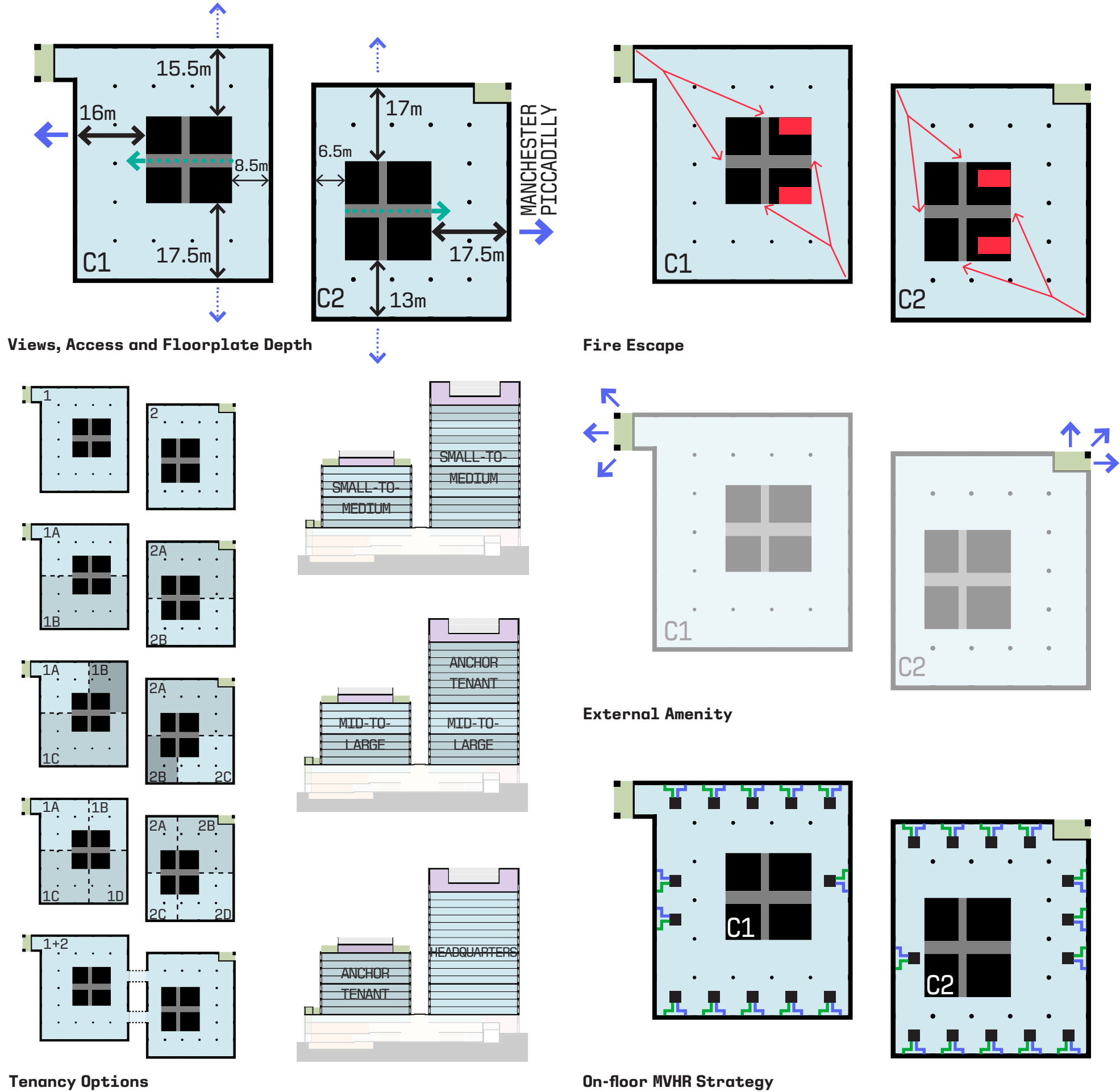
Both buildings have been designed to allow letting of a range of unit sizes, depending on demand. Each of the floorplates has been designed to be occupied by two tenancies. The careful built-in arrangement of cruciform core cross corridors does allow for up to four tenancies with adjustments to the MEP design if desired. The floor levels of the buildings are aligned to preserve future flexibility for occupiers to spread over a pair of floors across both Sister C1 and C2 buildings with the introduction of connecting bridges similar to those proposed as part of the level one flexible serviced office floors. Tenancies over multiple floors are also possible. Structural soft-spots will be provided to more easily allow for vertical connections within the tenant space.

On-floor balconies

Looking carefully at the range of tenancy splits, small exterior amenity terraces integrated into every floor level are proposed. Each is covered by the one above and therefore usable year-round. Each is located at a corner to take advantage of the views and because this is often where break-out spaces or special rooms occur. We have used these breaks in the rhythm of the elevations to produce special 'corner towers' - relating to the character of the context.

MVHR

The layout of the MVHR local ventilation system is efficiently integrated within the 9m x 9m structural grid, supporting an effective MEP strategy. The regular grid enables straightforward duct routing, easy connection to facade bays for fresh air intake and exhaust, and allows for tenancy flexibility.



Core Layouts

Cores have a cruciform arrangement which facilitates flexible access and provides multiple points of egress from each tenancy.

Lift Strategy

Lifts are arranged along an East-West lobby, which allows users to enter the lifts from the Collision Engine at Upper Ground level and exit onto the floor plates oriented toward the primary views.

Sister C2 has a hybrid lift strategy, with the main group of lifts serving all levels and the secondary group of lifts serving lower levels only, which provides flexibility of the location of an anchor tenant in the stack as well as an opportunity to gain floor area at upper levels where lifts drop off.

Each building has a combined Passenger / Goods lift to accommodate servicing and movement of larger items.

Firefighting

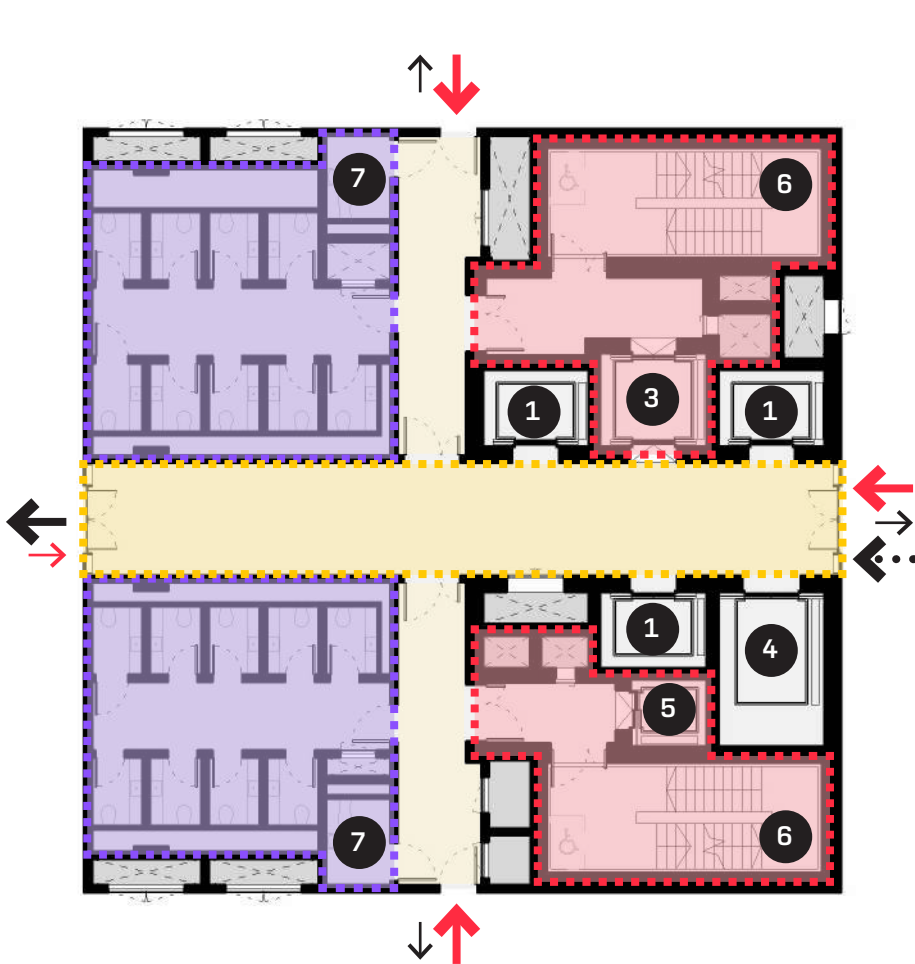
Each building has two firefighting shafts, each containing a fire escape stair and a firefighting lift connected by a protected lobby.

Toilets

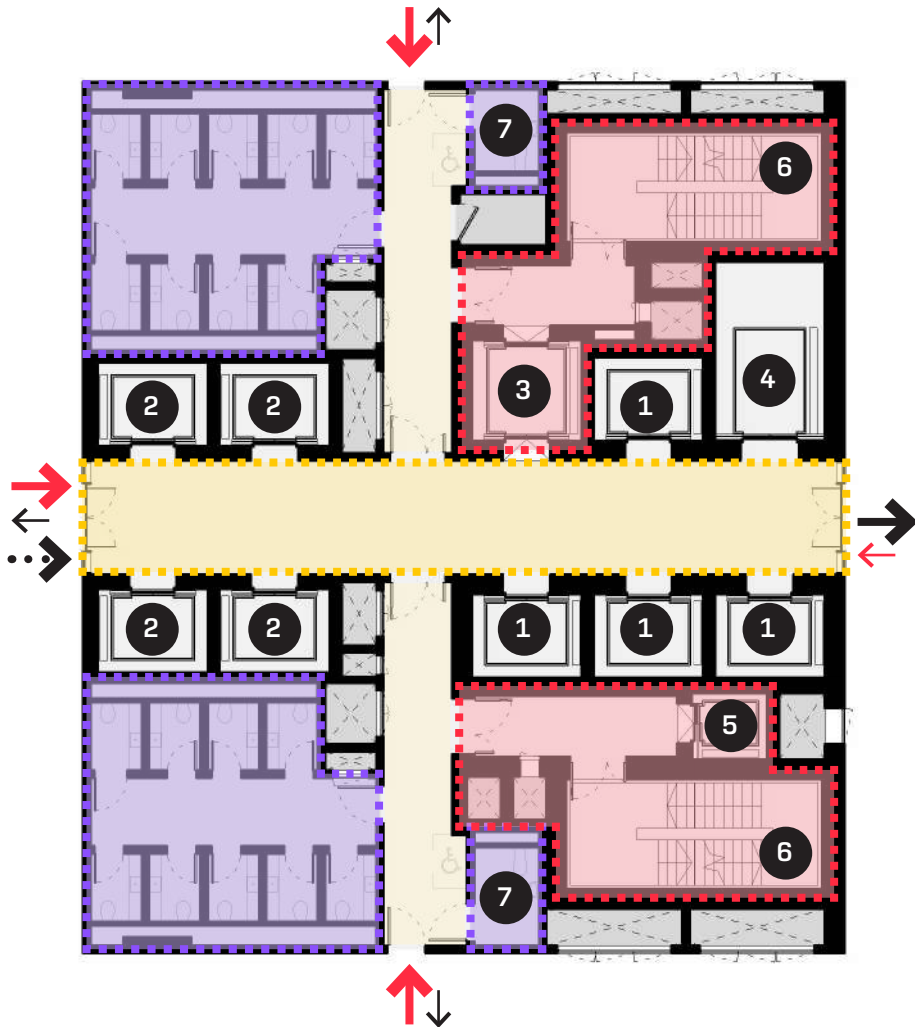
Toilets are provided as self contained cubicles, arranged in each building as two blocks. Toilets can be badged male / female / universal either individually or as a block. Accessible WCs are provided near to but outside of each main toilet block, near to the core access points to provide minimum travel distance.

MEP Risers

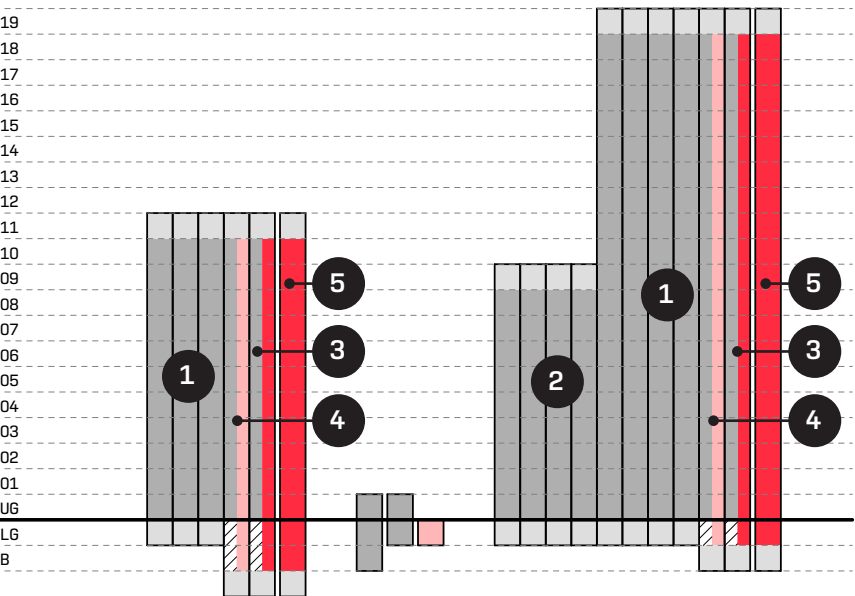
The number, dimensions and location of MEP risers has been developed to facilitate flexibility of tenancy splits and ease of access for landlord and tenant risers.



Sister C1 Core - Levels 02-09



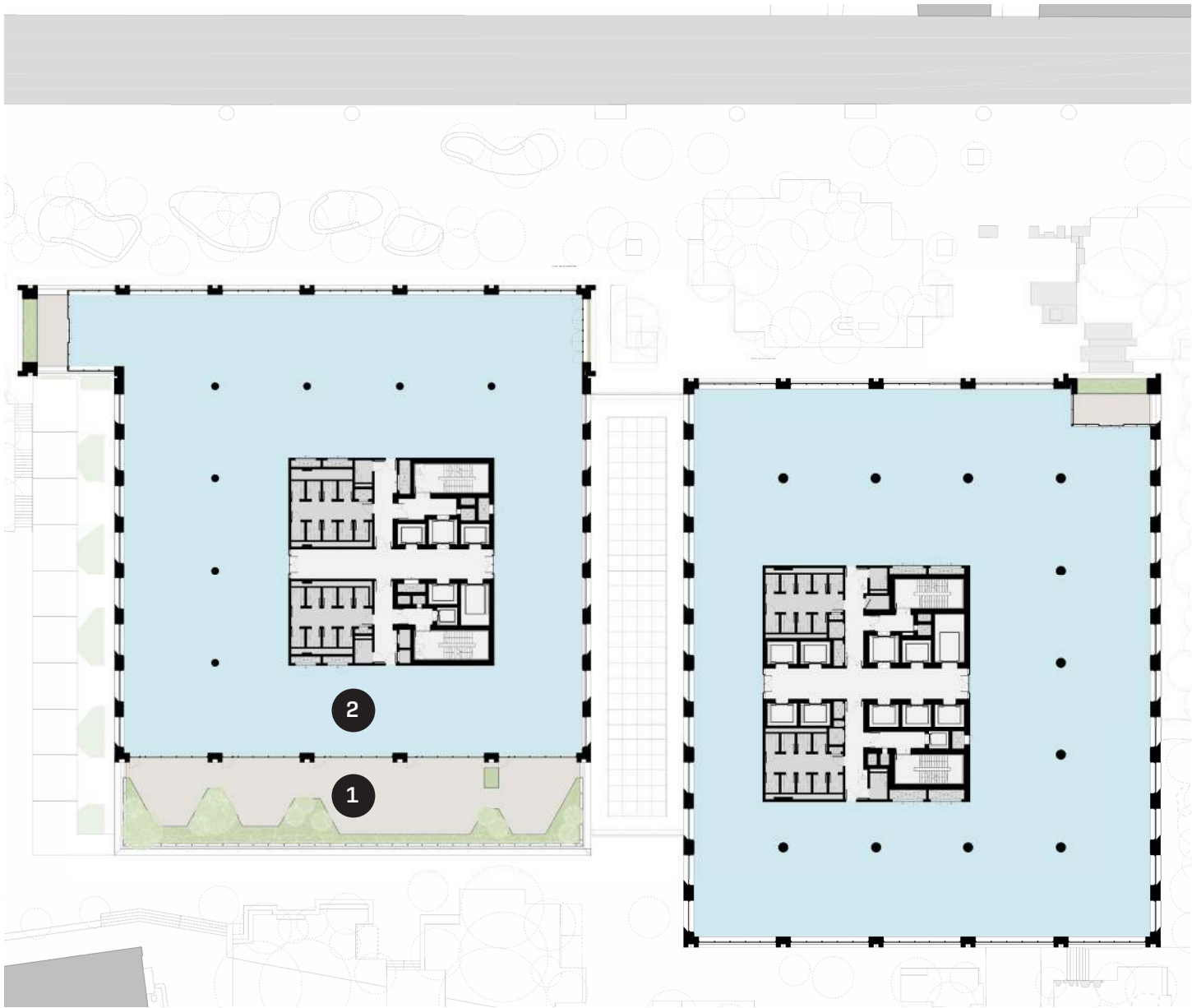
Sister C2 Core - Lower Levels 02-09



Lift Strategy

Building Cores Key

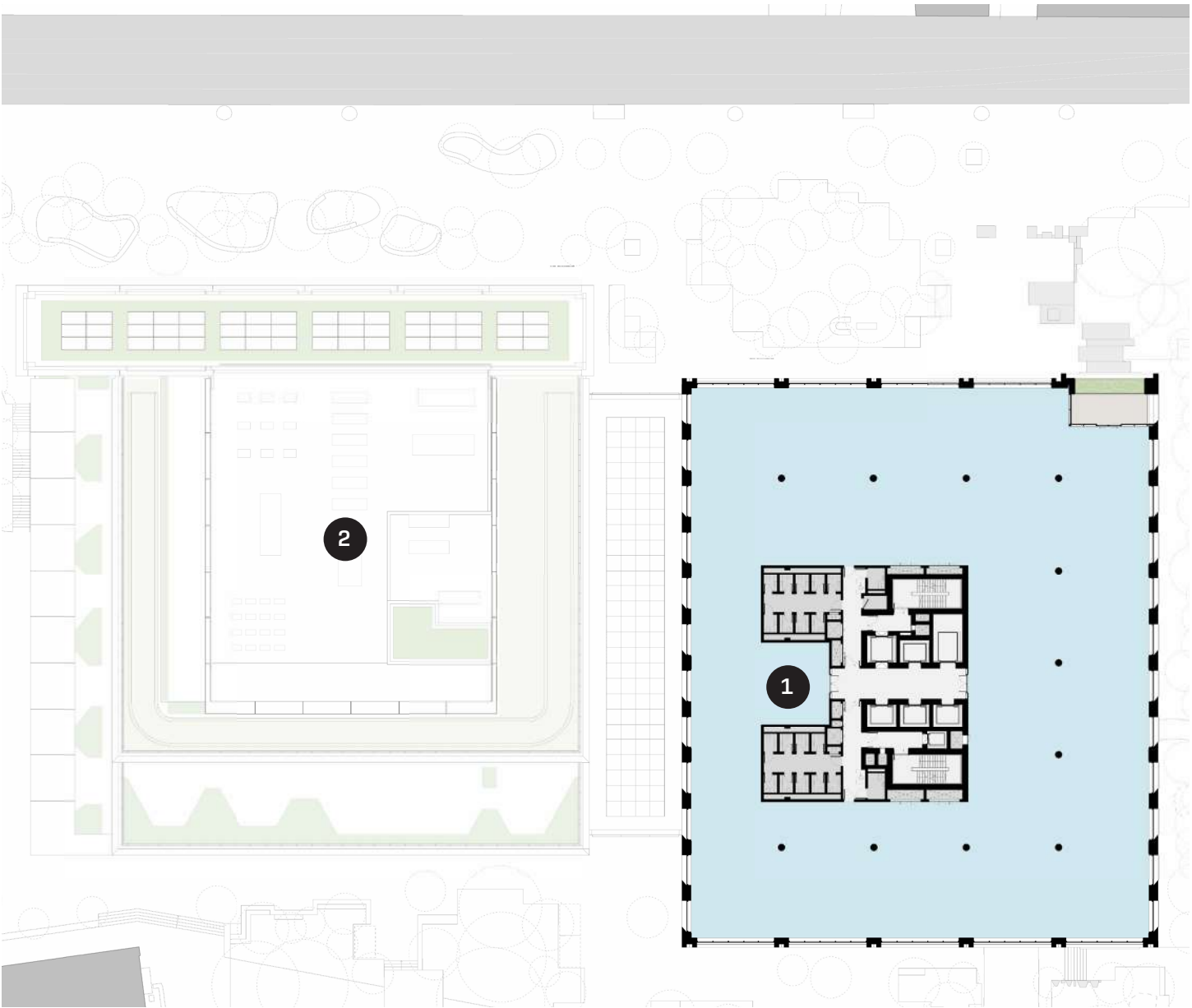
- ① Passenger lift serving all levels
- ② Passenger lifts serving lower levels only
- ③ Shared passenger / Firefighting lift
- ④ Shared passenger / Goods lift
- ⑤ Dedicated firefighting lift
- ⑥ Fire escape stair
- ⑦ Accessible WC
- Yellow dashed line Lift lobby - primary access circulation
- Yellow solid line Secondary access circulation
- Purple dashed line WCs
- Red dashed line Firefighting shaft
- Red arrow with dots Access at Upper Ground level
- Red arrow Access at typical levels
- Red arrow with tail Escape



Typical mid level plan (07-09)

A 'shoulder' setback is introduced at level 6 of Sister C1, creating an additional large south-facing terrace. This setback also reduces the floorplate depth along the southern edge. To maintain optimal spatial efficiency, the building's core is positioned ensuring a minimum of one structural bay depth of floorplate along all facades at every level.

- ① Terrace at level 6
- ② 1 bay floorplate depth



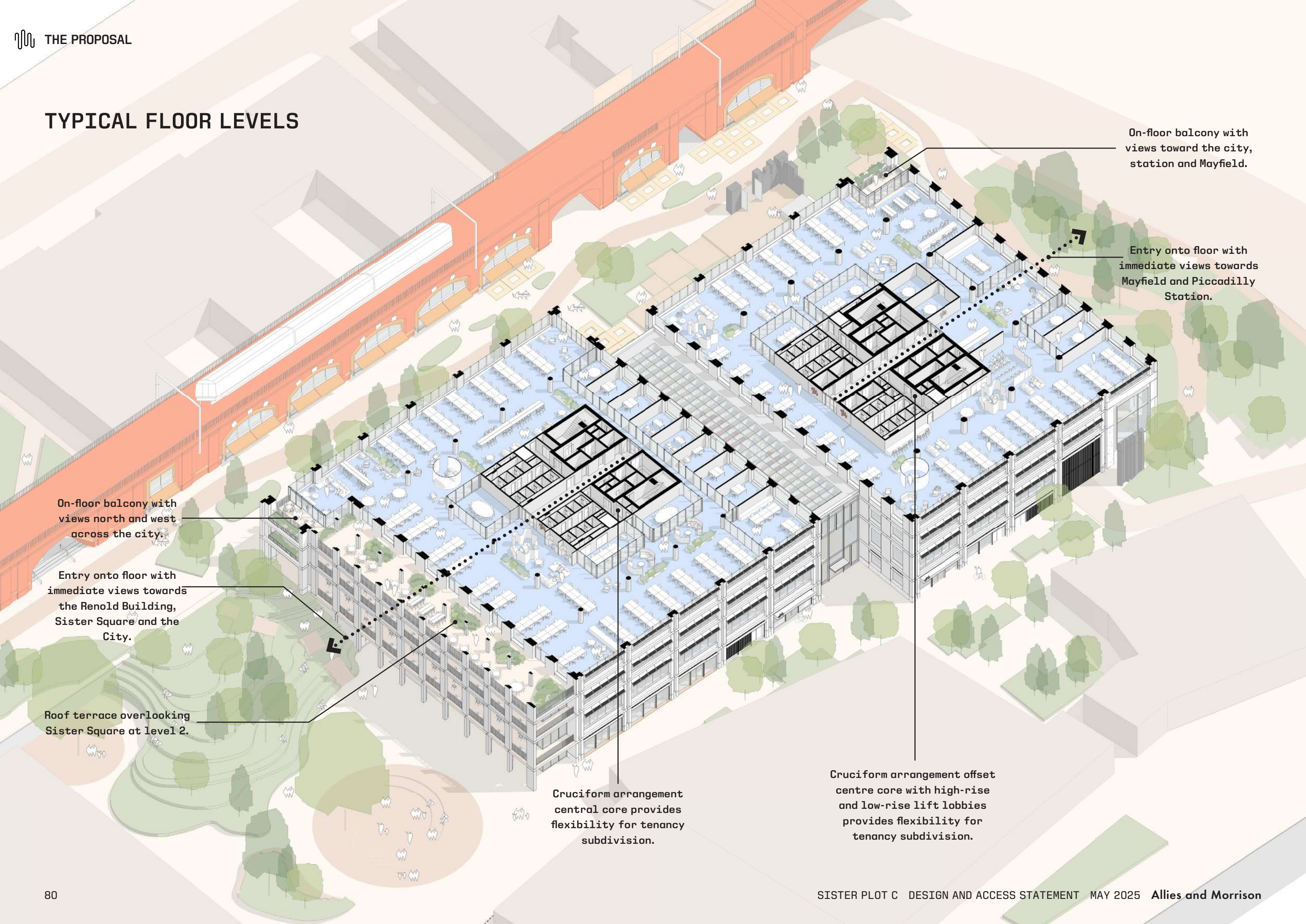
Typical upper level plan (12-17)

As Sister C1 drops away, Sister C2 gains additional views towards Sister Square and the West.

The removal of four lifts on the upper levels creates additional floorspace, which is oriented towards the west making the most on the dual-aspect views at the top of Sister C2.

- ① Additional floorspace
- ② Sister C1 roof

TYPICAL FLOOR LEVELS



On-floor balcony with views toward the city, station and Mayfield.

Entry onto floor with immediate views towards Mayfield and Piccadilly Station.

On-floor balcony with views north and west across the city.

Entry onto floor with immediate views towards the Renold Building, Sister Square and the City.

Roof terrace overlooking Sister Square at level 2.

Cruciform arrangement central core provides flexibility for tenancy subdivision.

Cruciform arrangement offset centre core with high-rise and low-rise lift lobbies provides flexibility for tenancy subdivision.

TYPICAL OFFICE FLOOR

A WORKSPACE THAT WORKS.
DESIGNED FOR FLEXIBILITY
TO SUIT DIVERSE
OCCUPIERS, WITH GENEROUS
DAYLIGHT, VIEWS, AND
ACCESS TO PRIVATE AND
COMMUNAL OUTDOOR SPACES.

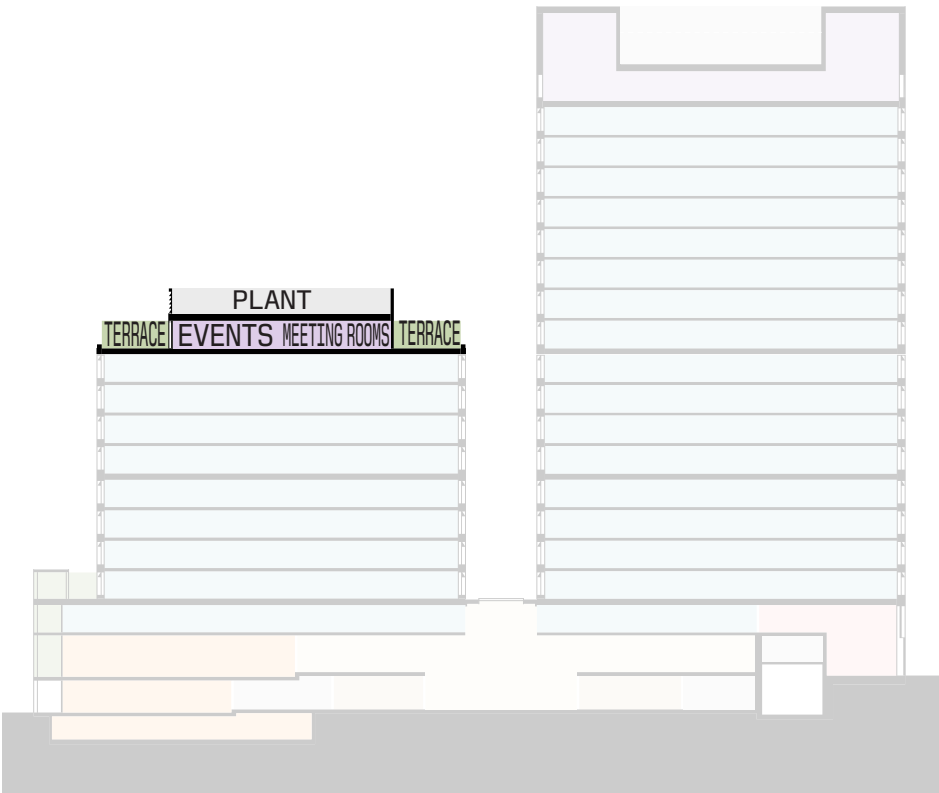
4.3.9 THE UPSTAIRS ROOMS

Introduction

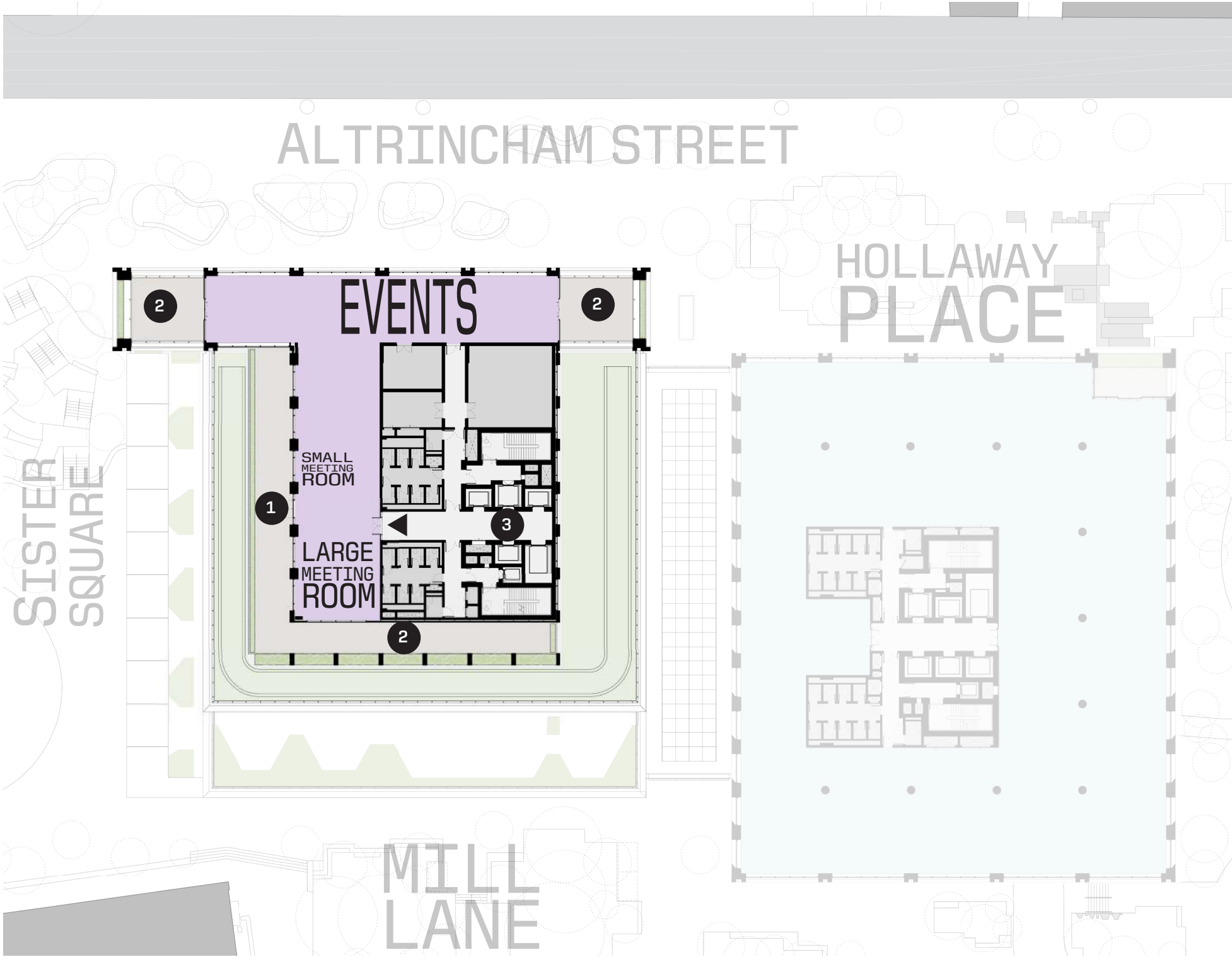
The proposal will be one of the tallest new office buildings in Manchester. Its scale will reinforce the significance of Sister on the skyline and give remarkable high-level views across and the city and beyond. The very top of a workspace building is usually home to services plant - the machines. We think its far too valuable for that, so instead we propose special spaces for users of the buildings, not just plant. The layout and design of these is specific to each building.

Sister C1

Sister C1’s L-shape roof space wraps around the core and the plant rooms, running north-south along the western edge and east-west along the north.



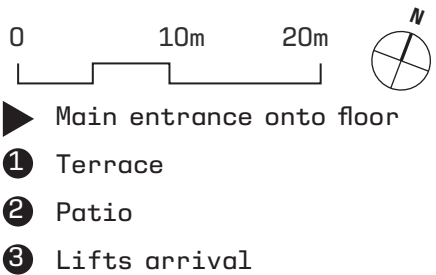
Sister C1 building upstairs room illustrative section.



Illustrative level 10 plan

A long, linear room with a higher ceiling along the north elevation, offers views in both directions: west to Sister Square and its heritage buildings, and east towards Piccadilly Station. Designed for flexibility, it can accommodate smaller events, talks, workshops, and wellness activities, with a small, adaptable bar that allows for light hospitality.

Along the west facade, a series of private meeting rooms can be rented individually or combined into a suite with direct access to the shared roof space. To the west, a terrace provides open views over Sister Square, while a covered patio to the south offers a more sheltered outdoor setting, protected from direct sunlight and usable year-round.



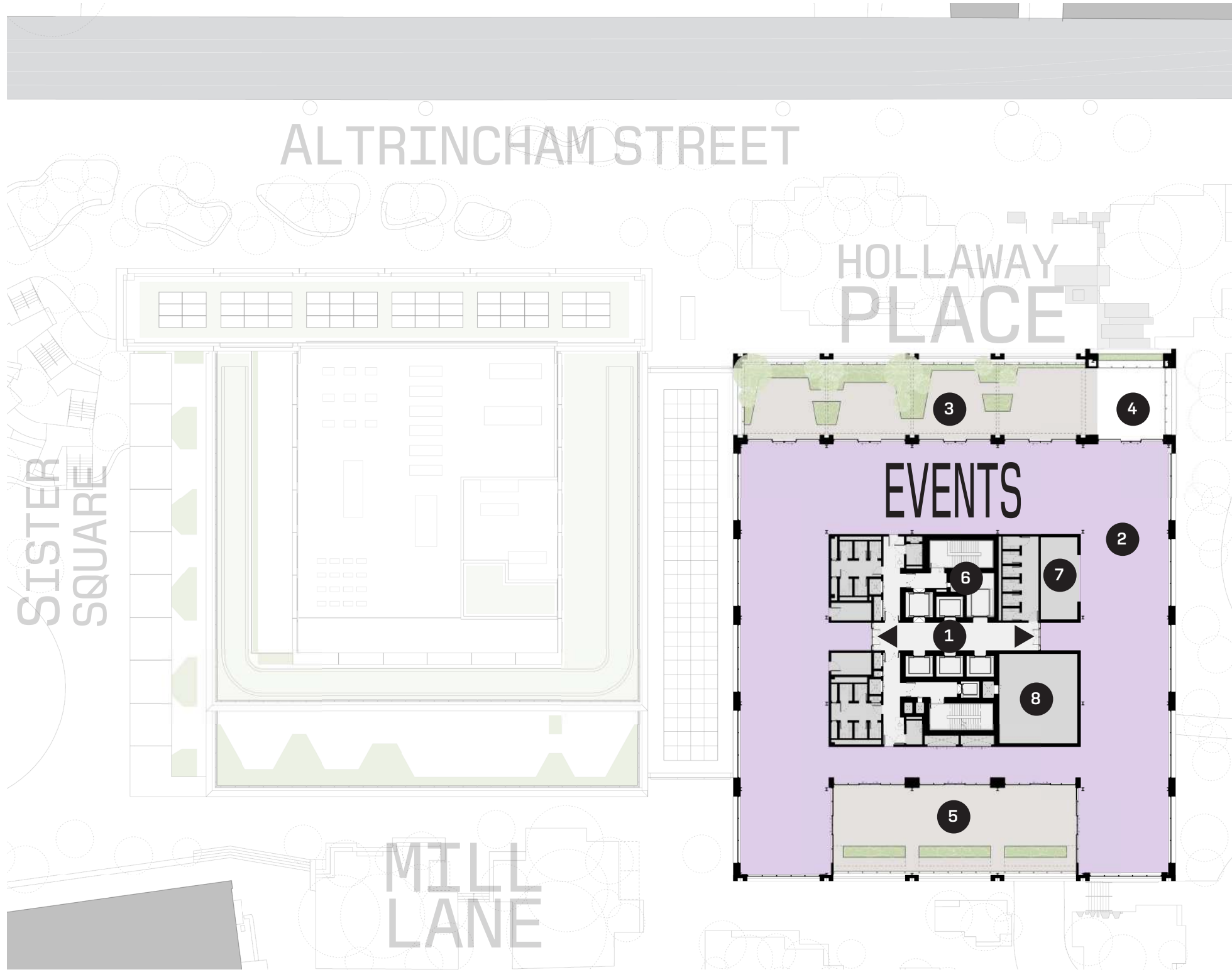
Sister C2

Special roof spaces are also proposed to the top of Sister C2, where they are crested by a series of tall, dramatic north-lit solar-roofs, filling spaces with light even on the darkest January afternoon. A large communal roof terrace to the north will give views across city while panoramic windows will look east and west from the interior spaces.

While it is a special and memorable space, it is also highly flexible, and so could range widely in use; from a rooftop restaurant, to an important event space, or an everyday meeting suite and a cafe for a large tenant.



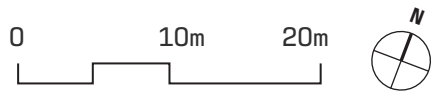
Sister C2 building upstairs room illustrative section.



Illustrative level 18 plan

- Main entrance onto floor
- ① Lifts arrival
- ② Flexible event space
- ③ North terrace
- ④ North covered patio
- ⑤ South covered terrace

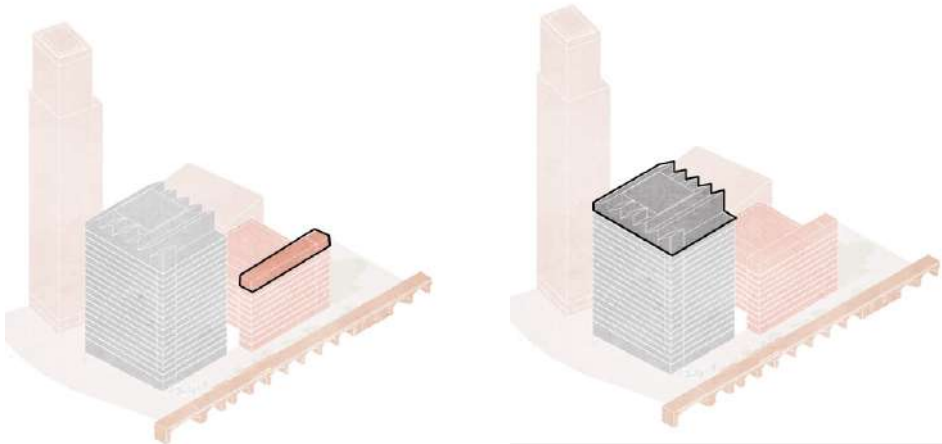
- ⑥ Building Core
- ⑦ Kitchen
- ⑧ Plant room serving roof plant above



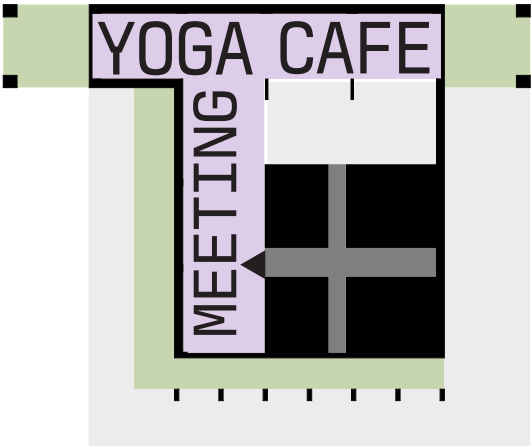
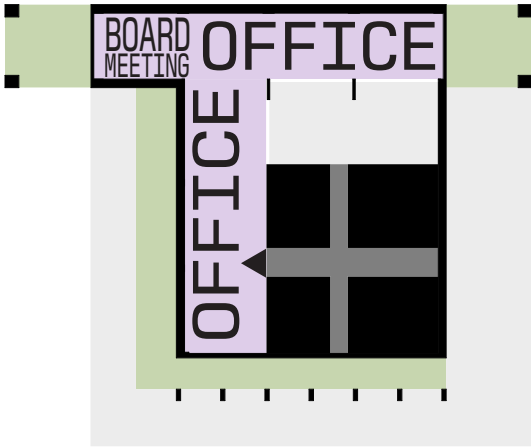
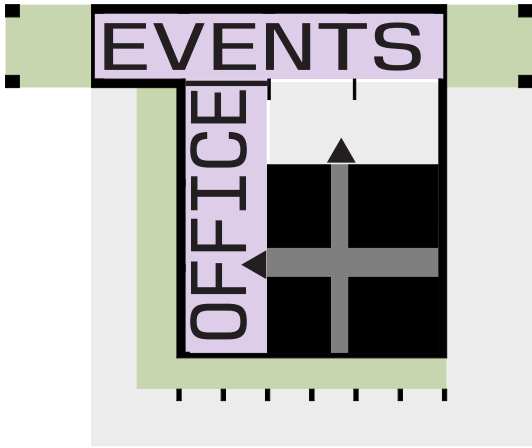
The Upstairs Rooms are designed to be highly flexible spaces that can be configured in a variety of ways to support different uses. Whether for communal, demised, or public purposes, they can accommodate everything from meetings, workshops, and presentations to wellness sessions, social gatherings, and informal events.

With generous proportions and adaptable floor plates, the spaces can be arranged as open-plan environments or divided into smaller zones, depending on need.

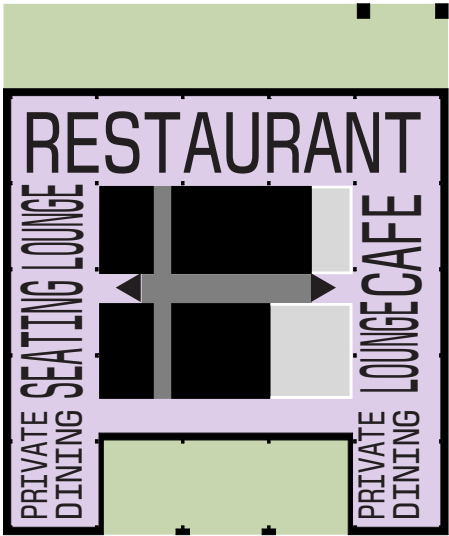
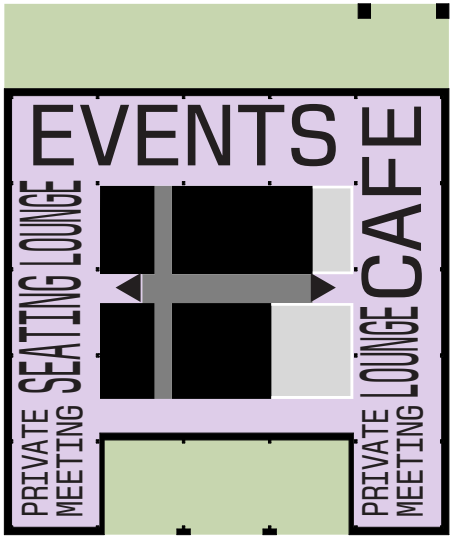
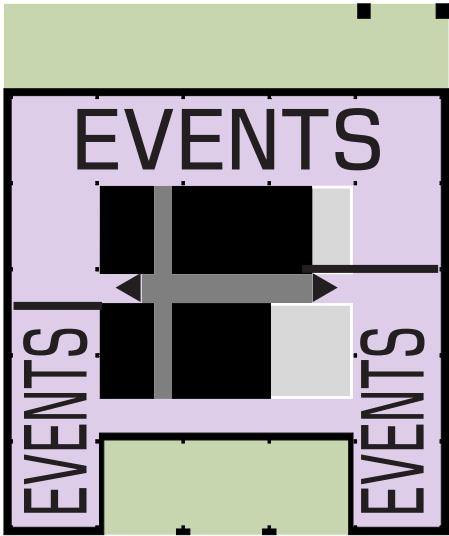
This versatility ensures they remain responsive to changing demands over time, offering active, multi-use settings that serve both everyday functions and more occasional events – all while maintaining strong connections to light, views, and outdoor terraces.



Upstairs rooms axonometric views.



Sister C1 building - Roof space flexible uses illustrative plans



Sister C2 building - Roof space flexible uses illustrative plans



Canada Water Plot A2 - Roof space flexible uses



Lockton House - Roof space flexible uses

ROOF & THE UPSTAIRS ROOMS

Generous communal lounge, break-out and flexible events space along the north of Sister C1 Upstairs Room.

Covered belvedere provides exterior spill-out space from events areas with views over the city to the north west.

Meeting room and break-out facilities with connections to west facing roof terrace.

Covered belvedere provides exterior spill out space from events areas with views over Hollaway Place and towards the Piccadilly Station.

Communal lounge, break-out and flexible events spaces around three sides of Sister C2 Upstairs Room.

Communal tenant roof terrace spans full width of north of Sister C2.

South facing loggia provides shared covered external break out space at roof level.

Upstairs room lounge and event facilities dedicated to anchor tenants around the south of Sister C2.

Partially covered south facing roof terrace provides exterior break-out space with expansive views to the south.

SISTER C1 UPSTAIRS ROOM



SISTER C2 UPSTAIRS ROOM



4.4 SCALE

4.4.1 INTRODUCTION

This section of the report seeks to explain the rationale behind, and provide justification for, the scale of the proposed scheme. It should be read in conjunction with the submitted Townscape and Visual Impact Assessment, prepared by Layer Studio and Our Studio, which assesses the magnitude and significance of the proposed scheme with respect to both local and distant viewpoints and designated heritage assets.

The proposed scheme consists of two interlinked buildings, Sister C1 and Sister C2, comprising of lower ground + upper ground + 10 and 18 storeys of office accommodation + plant above the level of Sister Square respectively. In addition to the above townscape and heritage assessment of views and an appreciation of the varied character of the local context, the scheme's location and role within the masterplan, the planning policy and economic context, and the scale of the evolving context are all factors which have influenced the final proposal. As set out in Chapter 3 of this document, several options of both height and massing have been tested in the evolution of the design. Further design refinement has sought to reconcile the scale of the buildings, as experienced in long and mid-range views, with the experience of the proposed scheme at close range.

Note: Illustrative landscape arrangement shown in imagery. Please refer to Chapter 5 of this report for detail proposal

Illustrative axonometric view of the proposal and surrounding context

4.4.2 MASSING STRATEGY

Big Sister, Little Sister

The two buildings, whilst related, have distinct roles and scales in response to their context. C2, the big sister, is a metropolitan-scaled landmark facing north and east towards the growing city. C1, the little sister, is locally-scaled sister facing west and fitting in with its close neighbours.

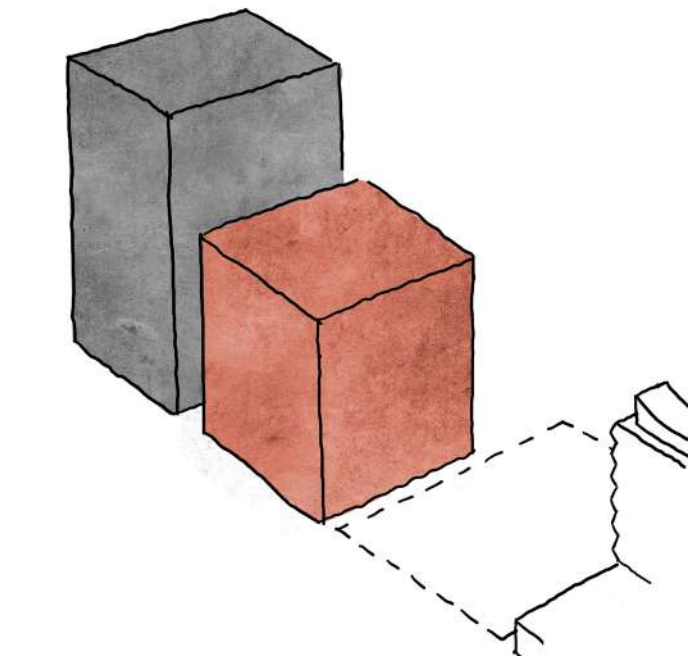
The pair are offset in plan, creating Hollaway Place in the north east of the site, the gateway to Sister from Piccadilly, and giving each building improved presence looking both east and west.

Sister C1's massing is articulated in response to neighbouring buildings and public realm, stepping down on the south in response to the Mill, and to the west to Sister Square.

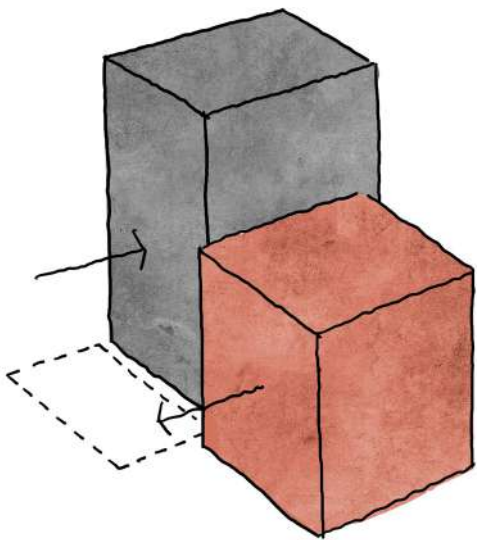
C2 has a strong pure form, with a sculpted top that forms a distinctive sawtooth silhouette visible from across the site and city.

As the northernmost roof line steps back to form the Upstairs Room's terrace, the last roof becomes a lantern-like tower facing north toward the city and the station. A linear tower-like form also marks the northern corners of the C1, this time looking east and west down Altrincham Street towards Hollaway Place and Sister Square.

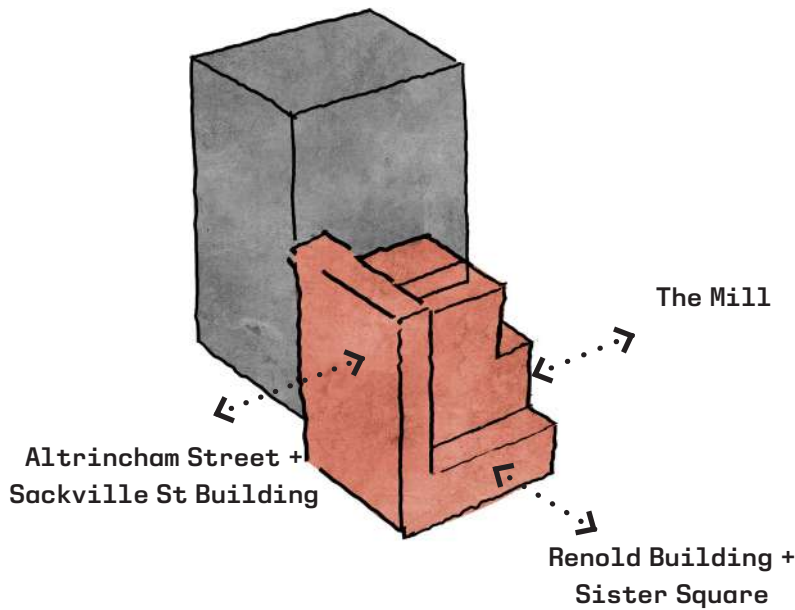
These massing articulations allow amenity spaces and landscape to rise up the building, occupying the terraces that are formed.



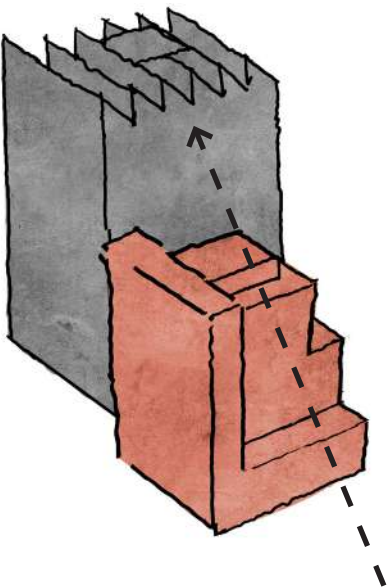
1 – Big Sister, Little Sister



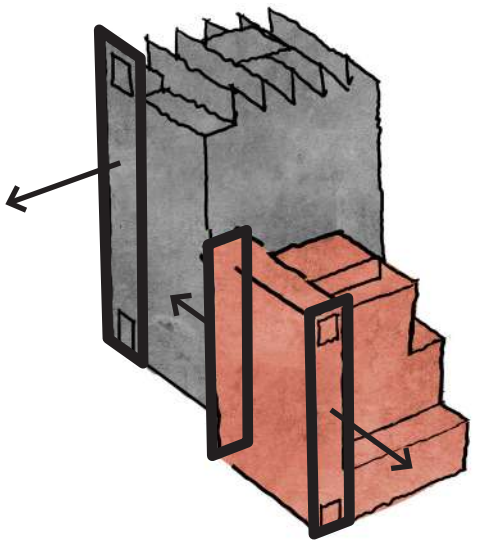
2 – Plan offset, looking both ways



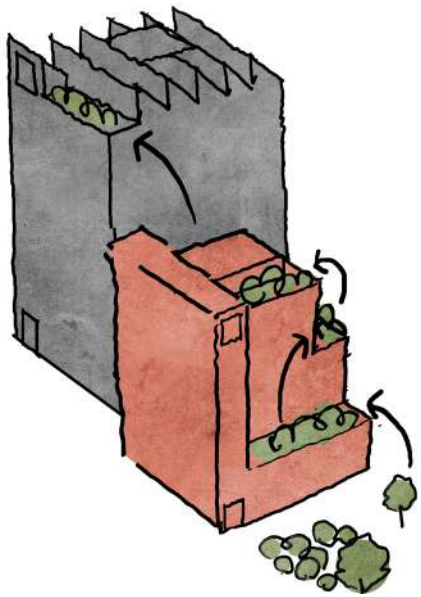
3 - Articulated massing responds to context



4- Distinctive sawtooth silhouette



5- Tower-like forms mark prominent corners



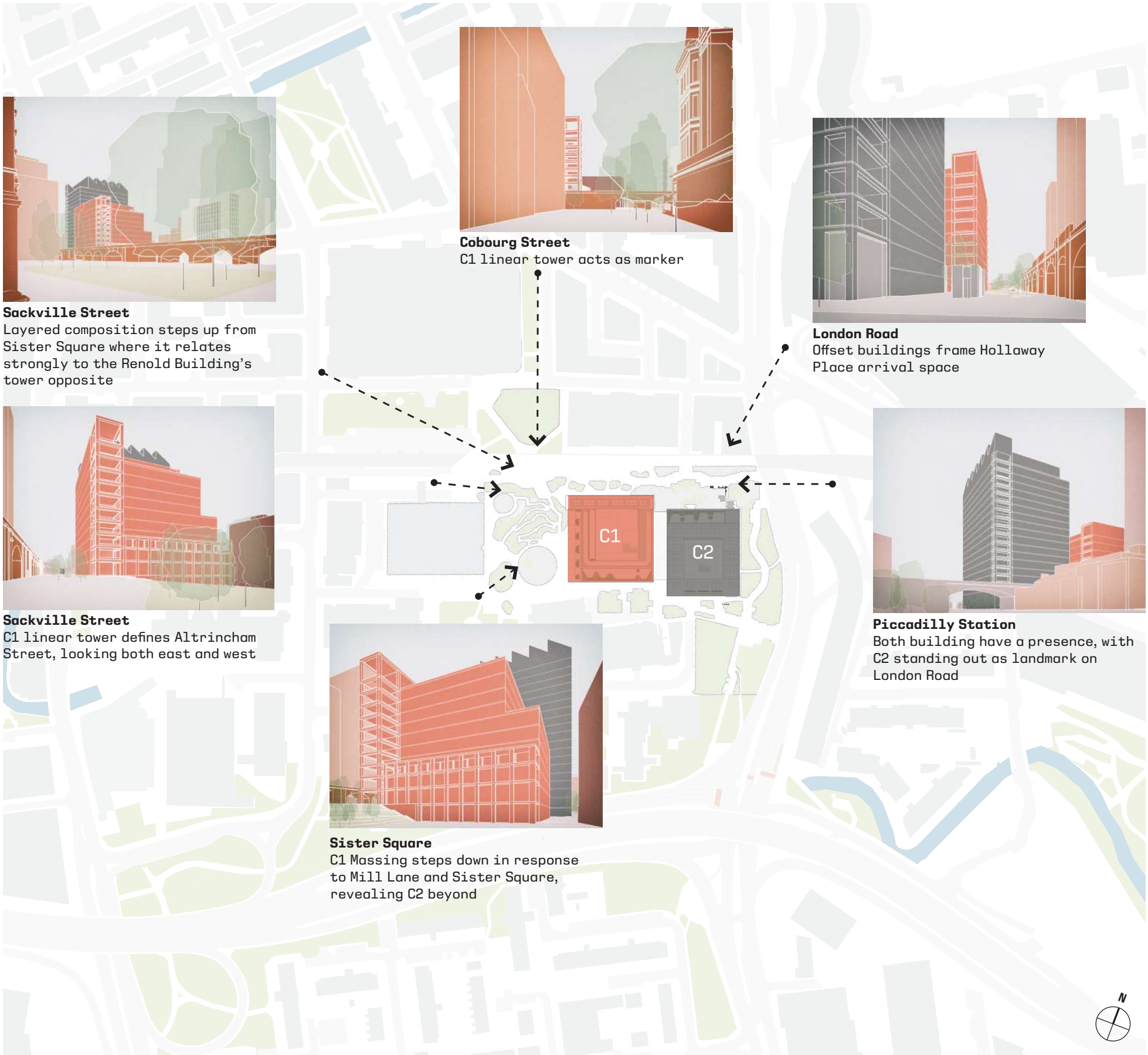
6- Terraces carry greenery up the buildings

4.4.3 SCALE IN CONTEXT

Considered in the round

The scale and massing of the proposal has been developed and refined with careful consideration of key townscape views throughout process, taking into account the existing, emerging and illustrative future SRF contexts.

Relationships to neighbouring buildings and spaces; environmental context, the layering of forms and presence of each building from different aspects; the creation of visual markers from key approaches to the site and the buildings' silhouettes on the skyline are some of the important factors that have influenced the proposed massing and articulation.



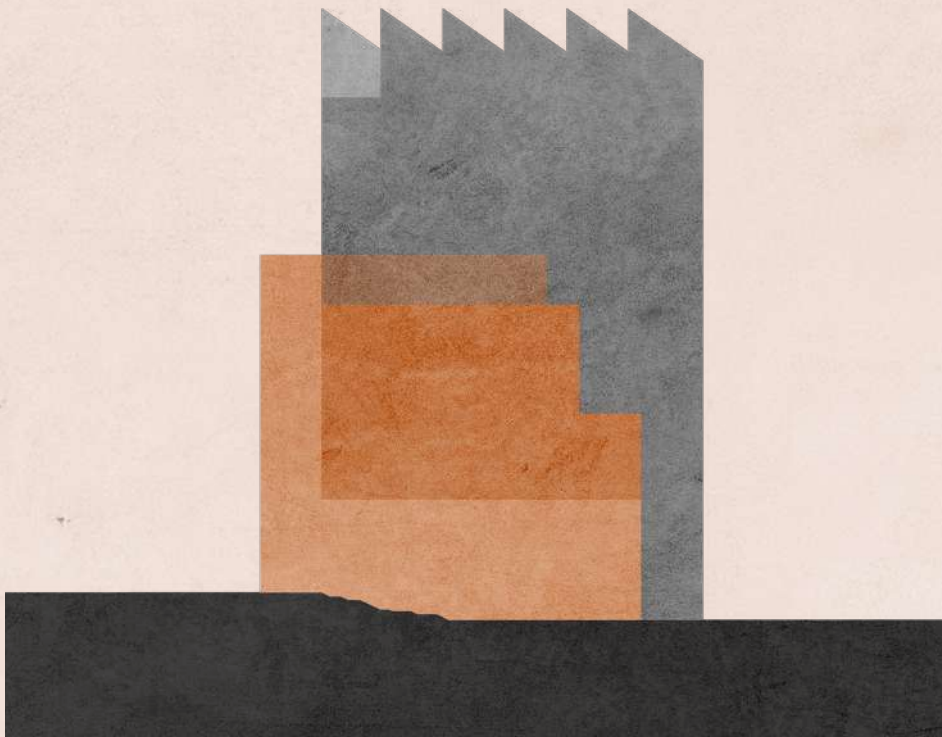
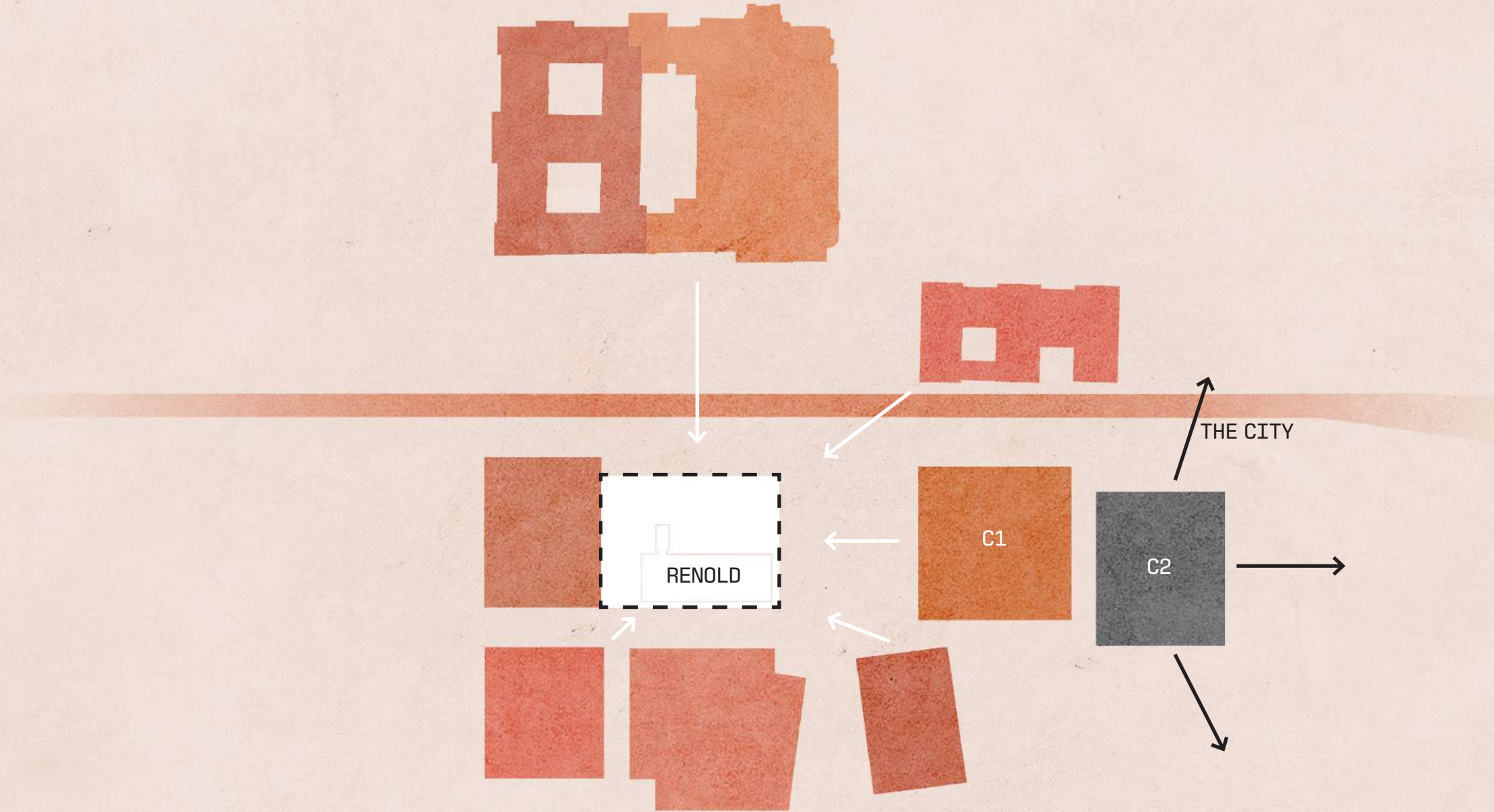
4.5 APPEARANCE

4.5.1 FITTING IN, STANDING OUT

Sister C1 and C2’s identities fit in and stand out, complementing the diversity of their surroundings, and responding to the material context outlined in Chapter 2.2.3, while confidently marking their presence on the city skyline as a new and significant addition.

The two buildings form a stepped composition, rising from west to east. When combined with their offset in plan, an elegant layered composition emerges, with each building looking past and over the next.

This composition, and the need for distinct identities for each building, has been reinforced with contrast. While the corresponding facades of each building are similar in their articulation, they vary in tone; C1 joining a brick-toned context in contrast to the white Renold Building, C2 standing out as a strong charcoal grey landmark announcing the arrival of Sister.



Above: Materiality strategy concept plan diagram

Left: Layered composition elevation diagram

4.5.2 MATERIAL PALETTE

A robust yet sophisticated material palette is proposed, with a rich variety of tones, textures and surface finishes, building on the contrasting identities of C1 and C2 respectively fitting in, and standing out.

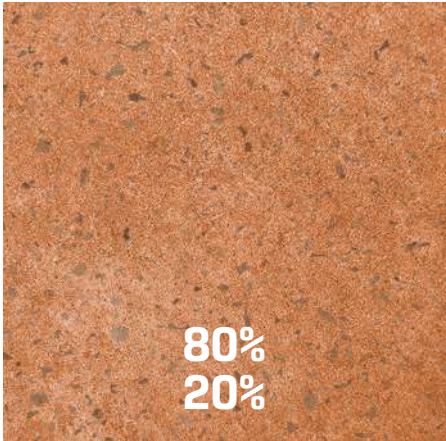
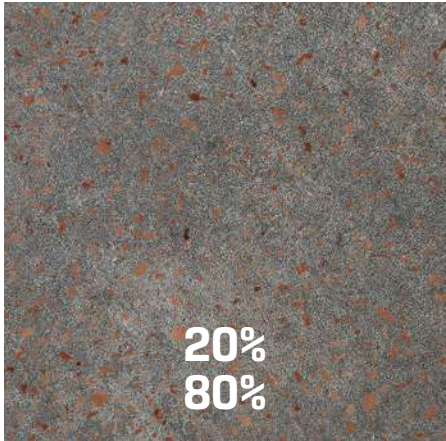
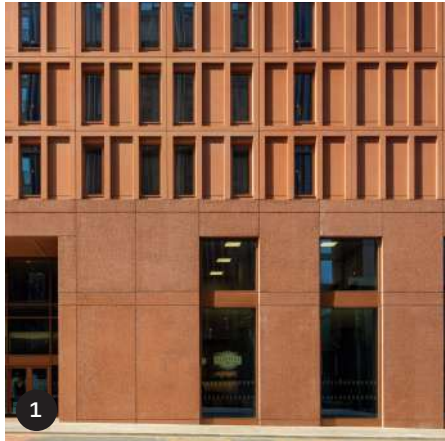
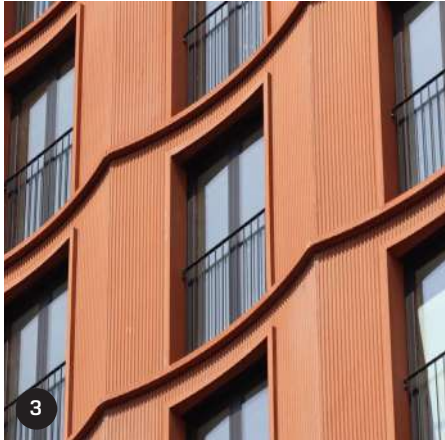
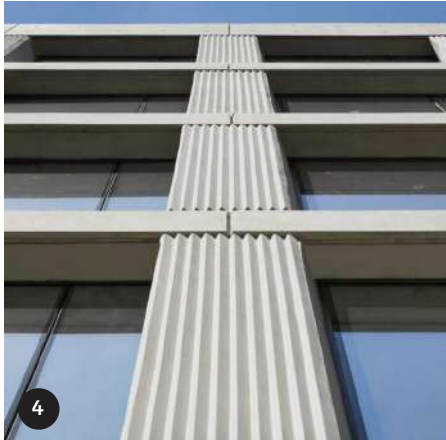
Cross-pollination of ingredients sees the predominant tone of each building appear in the other as aggregate in a conceptual 80% / 20% ratio - The brick tones of C1 feature as aggregate in the charcoal grey base tones of C2 and vice versa.

Elegantly profiled surfaces provide depth, texture, and shadow on the primary elevations, inspired in part by the surface textures of existing concrete structures across the site, particularly the Hollaway Wall.

A variety of surface finishes add another layer of refinement and interest, with polished surfaces proposed to key locations such as splayed reveal faces and pier footings, expressing aggregate tones more vividly where they can be appreciated close-up.

Complimentary tonal metalwork strengthens the contrasting identities of the buildings, with a further unifying tone providing shared consistency across the base of the building and strategically selected components.

- 1 **Maldron Hotel, Manchester**
Simpson Haugh Architects
- 2 **Rivington Place, London**
Adjaye Associates
- 3 **Stoke Goods Yard, Stoke on Trent**
Glen Howells Architects
- 4 **1245 Broadway, Manhattan**
SOM Architects
- 5 **Ruby City Contemporary Art Centre, Texas**
Adjaye Associates
- 6 **Herostrasse Office Building, Zurich**
Max Dudler Architects
- 7 **Chancery House, London**
dMFK Architects
- 8 **Bankside 123, London**
Allies and Morrison

	C1	C2	Precedents	
Tone / Mix				
Texture				
Surface Finish				
Metalwork				

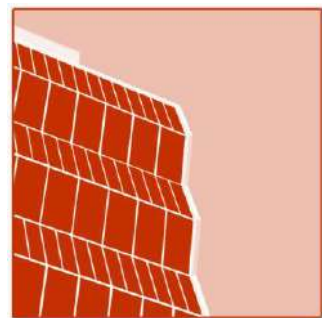
4.5.3 ESSENCE OF PLACE

As established in Chapter 2 Site Context and Analysis, the site’s built context features two predominant types of buildings. The strong, red brick ones, powerful legacies of Manchester’s 19th Century growth and the former campus’ Modernist buildings. Despite their differences, a shared lexicon of design qualities and characteristics runs through the site.

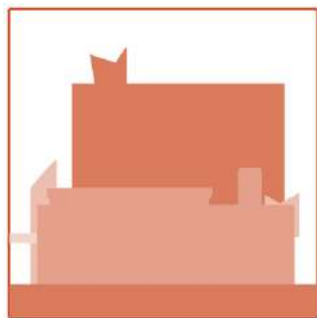
Across the contrasting tones, all are made largely from earthy materials; brick, stone and concrete. They feel reassuringly solid and undoubtedly robust.

Their silhouettes are animated by chimneys, towers, rooftop structures, and angular facades, contributing to a rich and distinctive skyline.

At street level, articulated bases frame the public realm, offering sheltered spaces and civic gestures that complete classical tripartite building compositions of base, middle, and top.



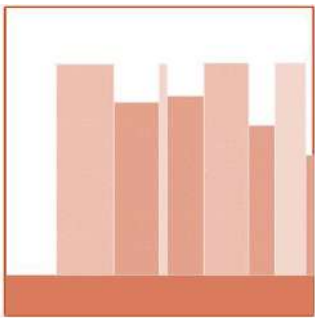
Contrast



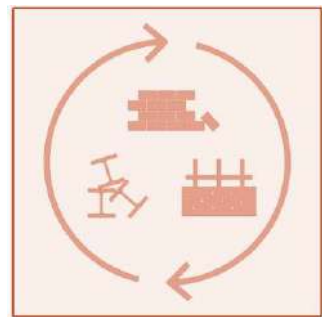
Distinctive Silhouette



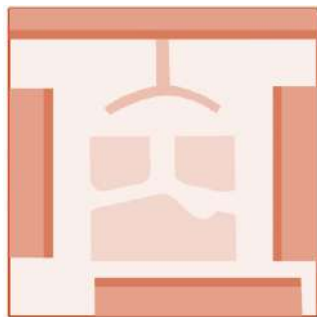
Colonnades, pilotis, overhangs



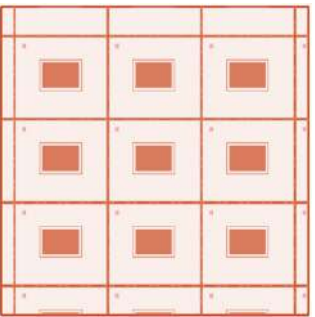
Robust materiality



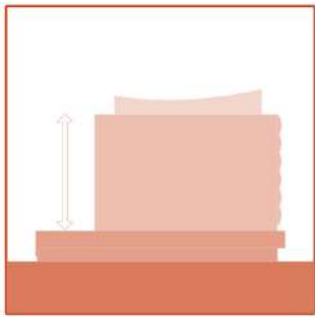
Circularity / material reuse



Providing enclosure

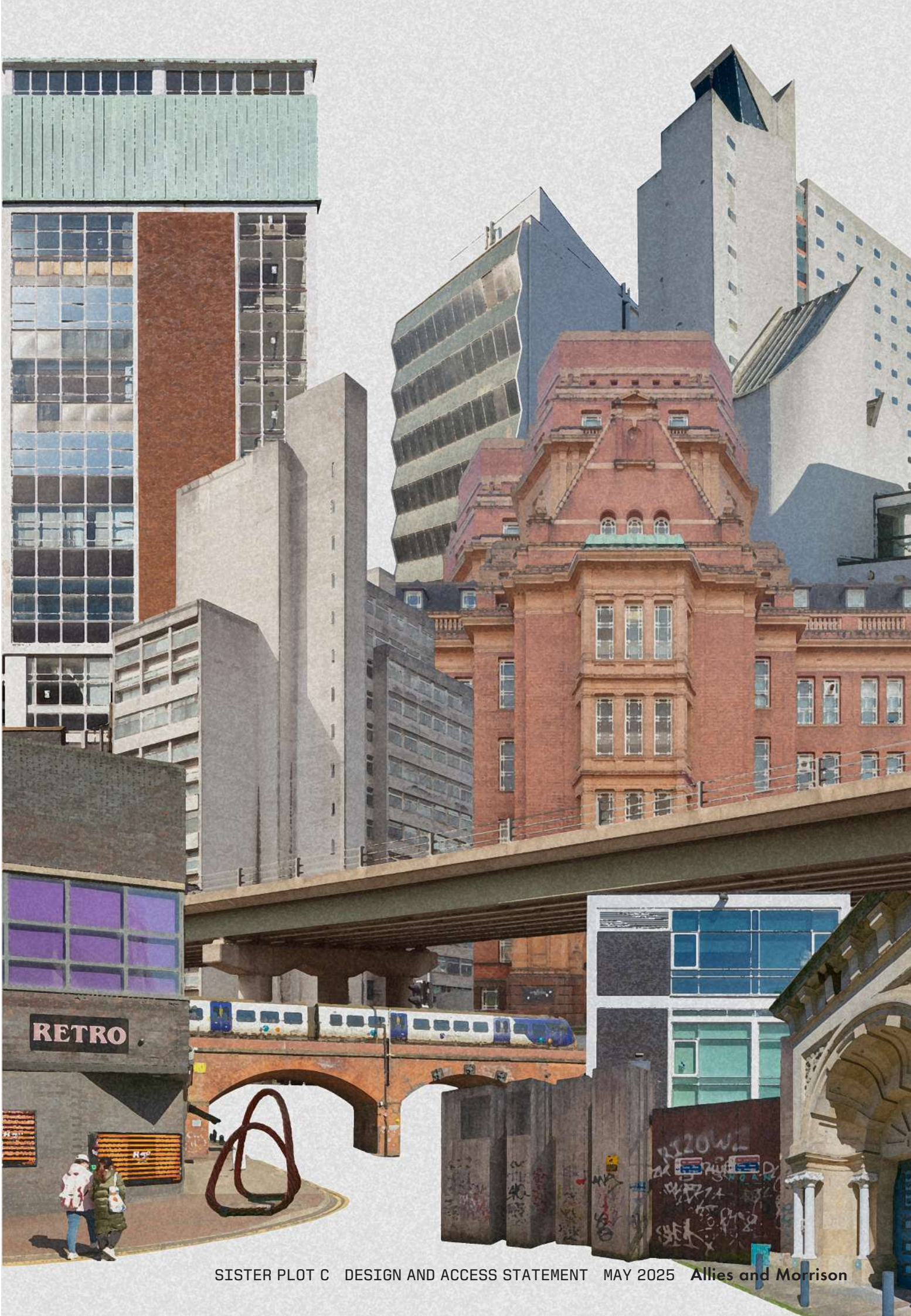


Gridded facades



Base, middle, top

Right: Existing site character collage



4.5.4 COMPOSITION & CHARACTER

In keeping with the surrounding context, ‘tops’ and ‘bases’ of the buildings are articulated to create a tri-partite arrangement within the overall facade composition and respond to the particularities of function at those levels.

Base

The base of the buildings animates the public realm with active frontages and generous, welcoming entrances, while strongly grounding the buildings and negotiating significant level changes across the site.

Middle

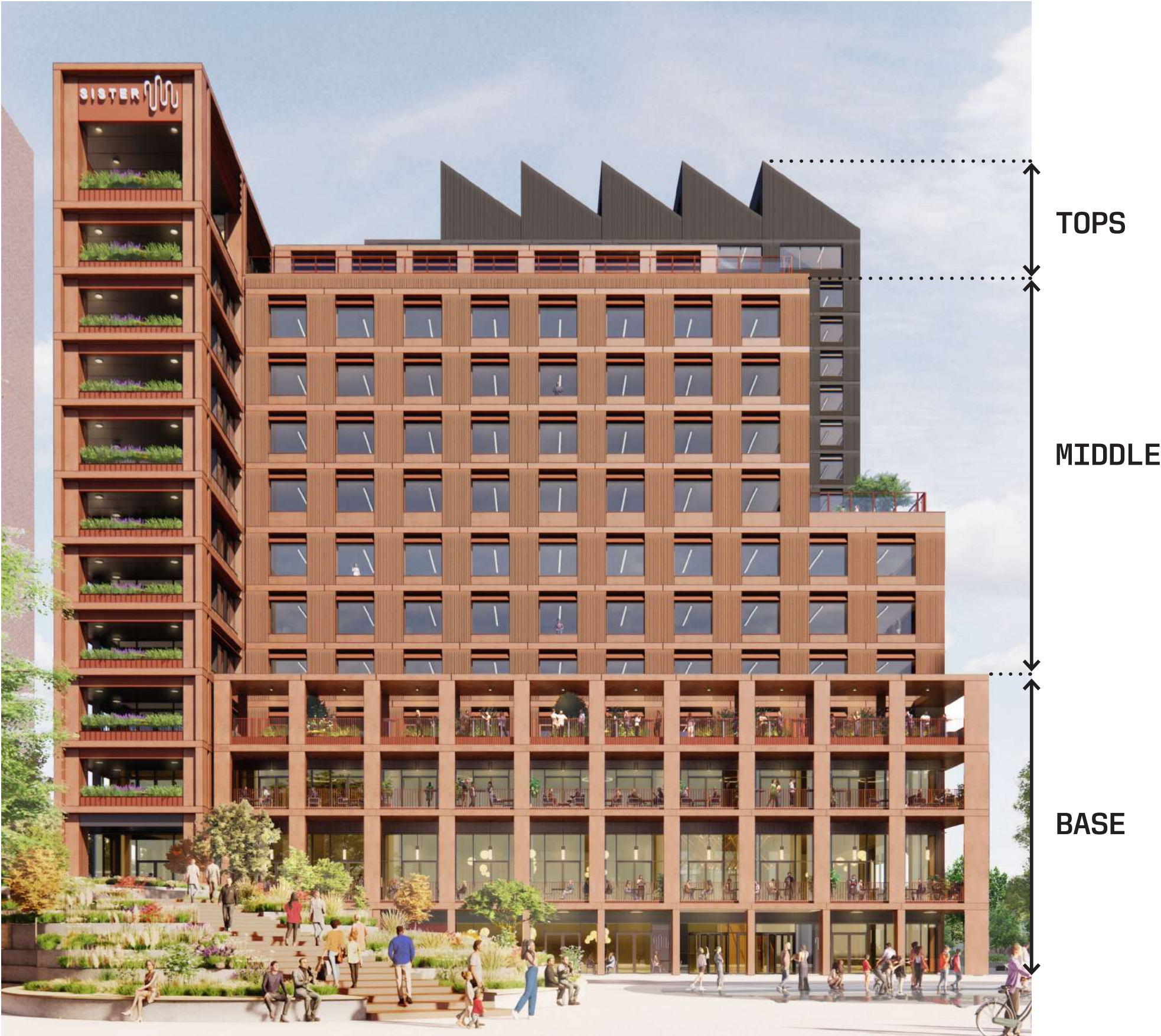
The corresponding facades to typical office levels are consistent between both buildings, responding to their orientation to provide an optimised internal office environment and experience.

Tops

Animated rooftop volumes crown each building and house the special ‘Upstairs Room’ amenity and event spaces, their distinctive forms producing memorable skyline silhouettes visible from across the city.



East elevation from Platform 14 [Our Studio]



West elevation from Sister Square

BASE

The dynamic base of the building adapts in scale and character to form distinctive volumes which complement key public spaces and establish a civic presence to both the east and west.

Refined yet robust materiality, paired with generous fenestration and welcoming entrances are consistent across the building's base establishing a coherent and engaging appearance.

The following pages explore appearance, materiality and relationship to the public realm in greater depth at these key conditions of the building base:

- Hollaway Place
- Altrincham Street
- Loggia on the Square
- Mill Lane



RENOLD
BUILDING

SISTER
SQUARE

LOGGIA ON
THE SQUARE

COLLISION
ENGINE

THE MANCHESTER
ROOM

HOLLAWAY
FOREST

Illustrative south elevation diagram through Mill Lane



4.5.5 HOLLAWAY PLACE

The stepped siting of C1 and C2, in combination with the viaduct, defines Hollaway Place while revealing the elegant vertical composition and proportions of C1's north-eastern corner, where greenery is carried through from base to top.

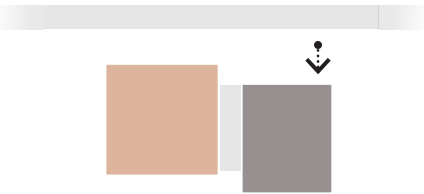
This layered composition allows the contrasting materials tones of the buildings to always be appreciated in dialogue with one another. The proximity to the red brick viaduct and the dark concrete of Hollaway Wall reinforces the contextual and considered material choices.

A civic, double-storey order is expressed at the base extending along the entire eastern elevation, and reflecting the scale of the Manchester Room behind. Flush glazing is set between precast concrete piers before stepping back to create visual relief.

View looking west across London Road to Hollaway Place

The robust precast piers lining Hollaway Forest turn the corner grounding the tall C2 building strongly, with a rich variety of surface textures and finishes that complement the board-marked Hollaway Wall and can be experienced close-up. Footings to piers are polished, accentuating their brick-toned aggregates whose colours relate to C1.

The community space is expressed at each end through large picture windows that showcase the activity and events within. At these key moments, the glazing is projected on all four sides with refined edge detailing, creating depth and shadow within the recessed metalwork surround, and allowing the glazed opening to oversail the folded section of the Hollaway Wall.



View looking south from Hollaway Place to north elevation of The Manchester Room



Physical model studies

4.5.6 ALTRINCHAM STREET

Active uses animate both sides of Altrincham Street, with generous glazing to the entrances and active frontages of C1 and C2 framed by articulated double piers. Expressed pier footings allow the north elevation's frame-like composition to meet the ground in a deliberate and grounded manner. Entrance canopies hosting building signage support wayfinding while offering shelter from the rain

The central Collision Engine volume is expressed as a lightweight, highly glazed link between the two heavy, masonry buildings. Its hierarchical composition incorporates operable windows at the upper level to enable natural ventilation.

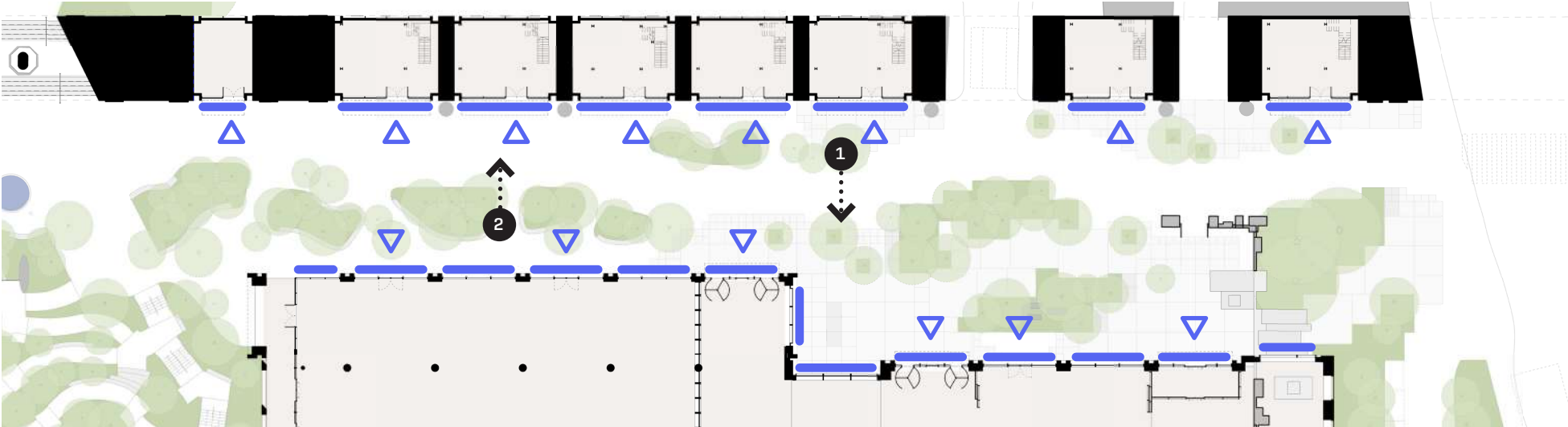
Refined glazed facades to the viaduct arches put their new active uses on display, with expressed metalwork and detailing of an industrial character. The main facades are inset from the existing arch profiles in elevation with generous 'shadow gaps' expressing the original volumes and providing flexible zones for ventilation of various potential uses. Integrated retractable awnings provide protection from the sun and the rain



1 – View looking south from Altrincham St to main building entrances and the Collision Engine



2 – View looking north to typical viaduct arch



Active frontages of Altrincham St

4.5.7 LOGGIA ON THE SQUARE



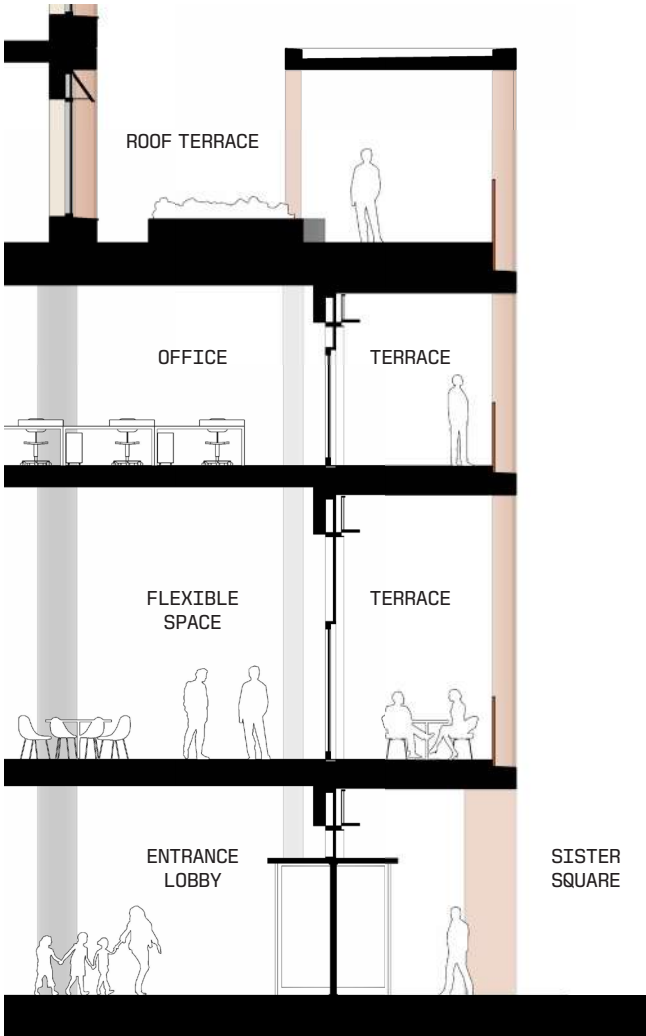
1 – View east from Sister Square of open and animated loggia elevation



2 – Upper ground spill-out space set behind precast piers



3 – Level 02 terrace covered by expressed loggia frame

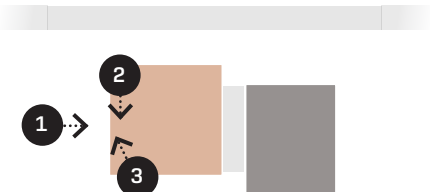


Loggia section

A lower, more open loggia volume addresses Sister Square, accommodating a variety of active uses across its four levels that contribute to the animation of the public space.

Its components and material finishes relate closely to the main building volume behind, while being reinterpreted to establish a distinct and evolving facade character.

Expressed horizontal elements from the typical facades extend to form floorplates and a roof canopy, while more slender piers retain the played detailing and open up views through, particularly at lower ground where they rotate to announce and invite entry directly from Sister Square.

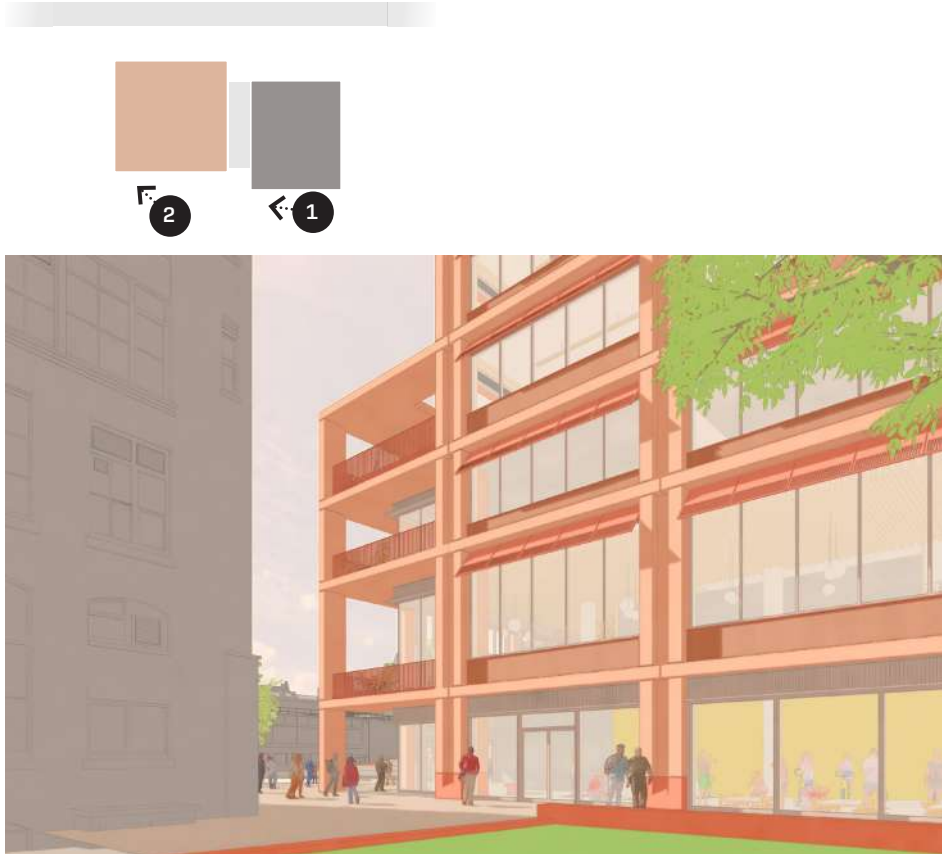


4.5.8 MILL LANE

Mill Lane opens a new route between London Road and Sister Square, revealing views toward the recently revitalised Renold Building and the contrasting materiality across the site. The interwoven tones of C1 and C2 draw from, and contribute to, this evolving palette.

The frame-like southern facades provide clear views into the office levels above ground, showcasing internal activity and promoting a sense of openness. These facades extend and evolve into the west facing loggia, marking a key corner and framing Sister Square.

Retail frontages line the route, with dedicated cycle entrances that connect directly to the enhanced cycle lane. Shared materiality and detailing, including consistent metalwork tones, bring these elements together to form a cohesive and active public frontage.

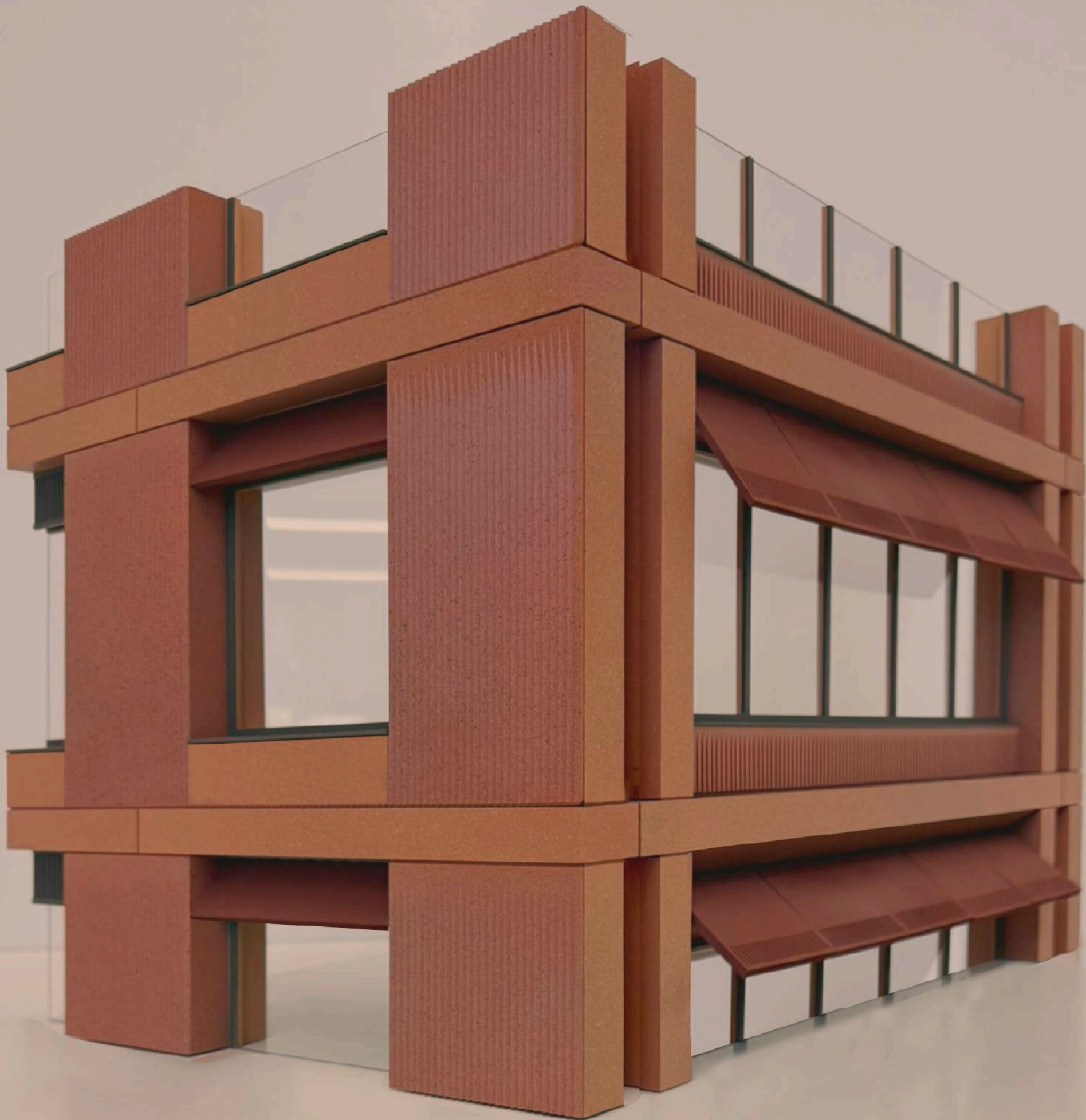


Right: 1 – View west along Mill Lane
Above: 2 – Southern loggia corner approaching Sister Square



MIDDLE

The typical facade bays at the middle of the buildings balance the performance demands of an energy efficient workplace with robust, efficient construction and installation processes, whilst achieving a considered composition and a crafted quality in their appearance.



Physical model study exploring appearance of tone, surface texture and metalwork

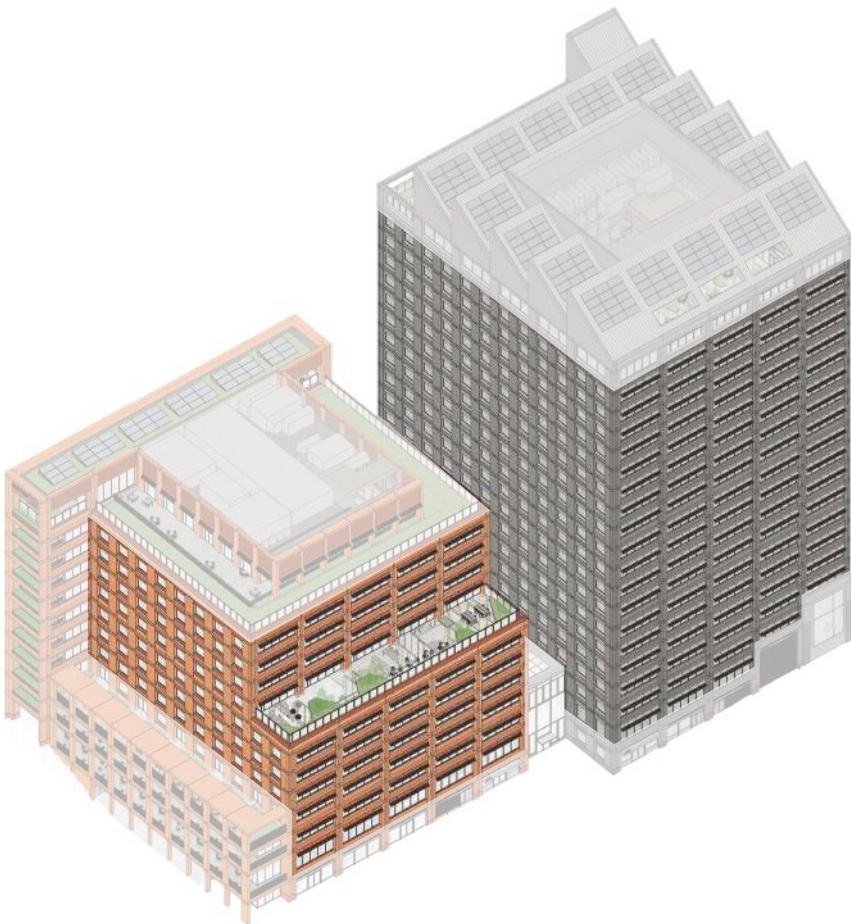
4.5.9 RESPONSIVE OFFICE FACADES

For workspace buildings, managing solar heat gains is critical for reducing operational carbon. As a result of this, the solidity and character of facades adjust dependent on their orientation, creating contrasting articulations; elevations facing east and west are more solid and wall-like while elevations facing north and south are more open and frame-like.

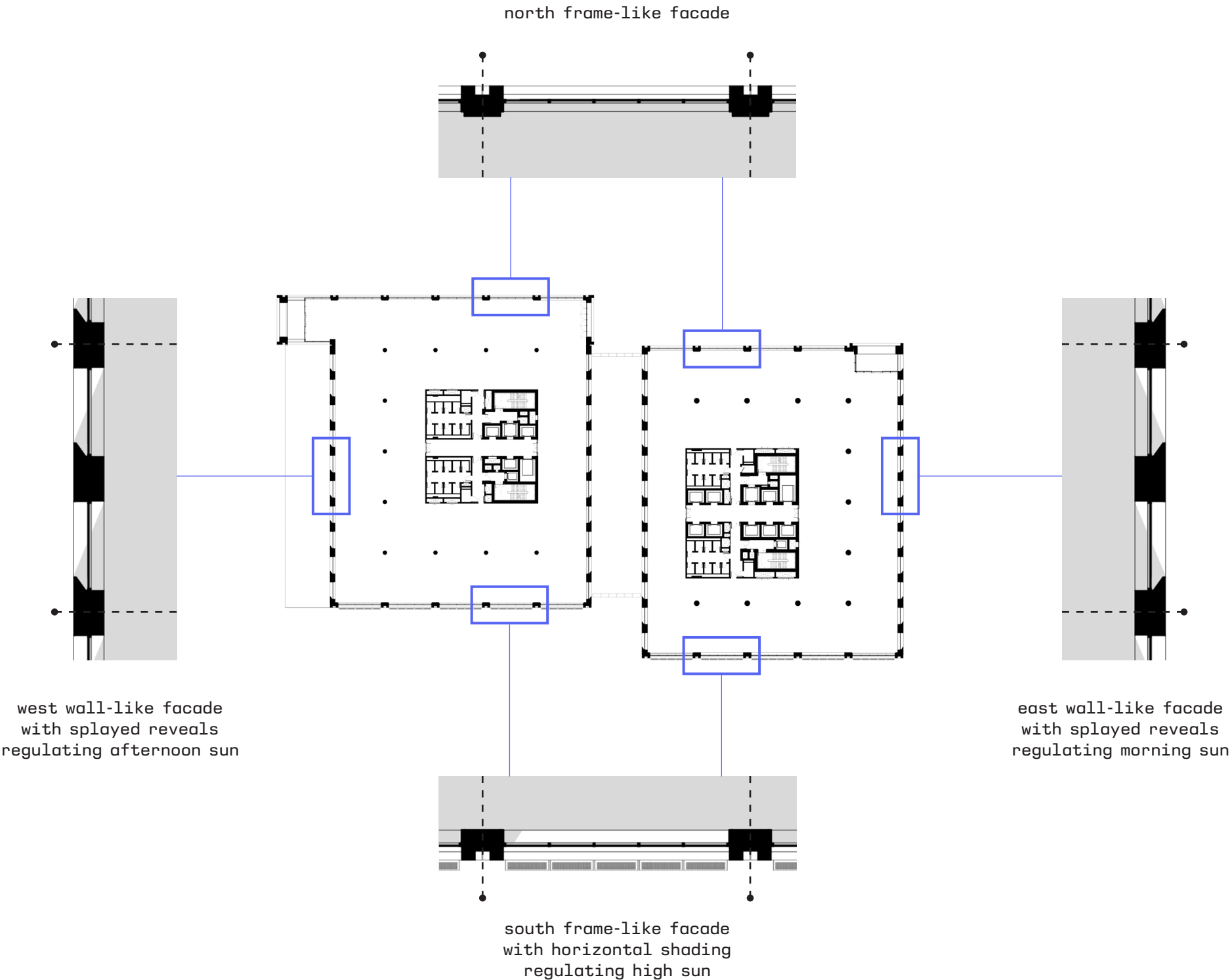
East and west facades respond to the low-angle easterly and westerly sun with additional piers and splayed reveals maximising passive solar shading.

North and south facades are more open and horizontal in emphasis, as they have either limited solar gain on the north, or more easily controllable solar gains on the south.

These responsive geometries are consistent across the middle of both C1 and C2, with tone of materiality achieving the contrast and variation.



Typical facades of C1 and C2



Orientation specific facades plan conditions of C1 and C2



4.5.10 EAST / WEST FACADES

The east and west elevations of typical office levels feature textured concrete facades with simple, repeating square openings, giving the buildings a strong sense of solidity that integrates well with their surroundings. These facades also serve to shield the interior from low-angle solar gains.

The internal elevations remain open and spacious, allowing plentiful natural light and expansive views, enhanced by inward splays to the southside of each window reveal. This significantly increases the amount of glazing, opens up views to the north across the city while minimizing exposure to southern sunlight.

The articulation of smooth continuous horizontal elements and spandrels beneath windows strengthen the expression of the profiled vertical piers, whose texture elegantly feathers at their tops.



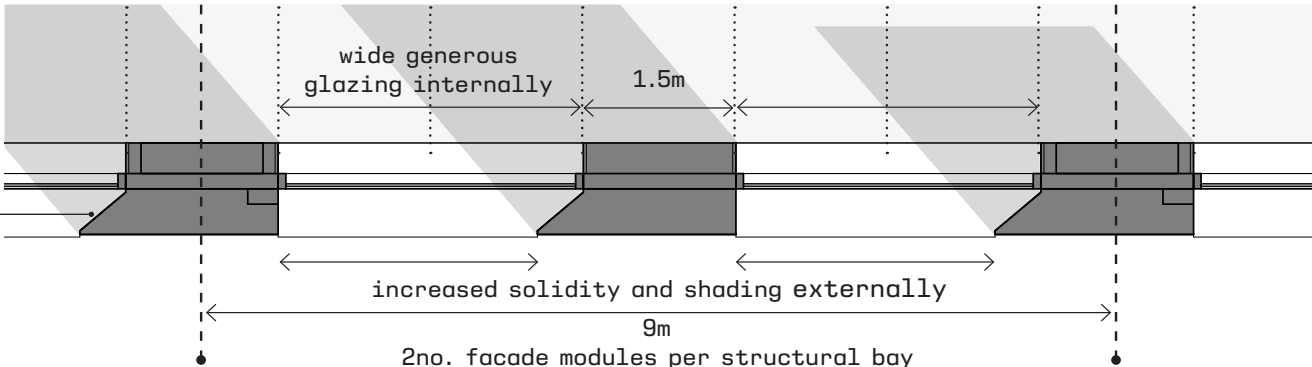
Facade study physical model



Internal elevation view of typical C1 western facade bay



External elevation view of typical C1 western facade bay



Plan arrangement of typical western facade bay

4.5.11 SOUTH FACADES

The north and south facades of typical office levels are more open and frame like - characterised by ribbons of windows that drink in the daylight. On the south, the metalwork fascia elements that conceal ventilation louvres behind simply extend to form solar shades, blocking the high southerly sun.

Seat-to-ceiling glass reduces glazing where it is needed least, while making sociable sitting-sills in every window to all typical facades.

Continuous horizontal elements are consistent across facades of all orientations, binding the contrasting facade types together.



Facade study physical model



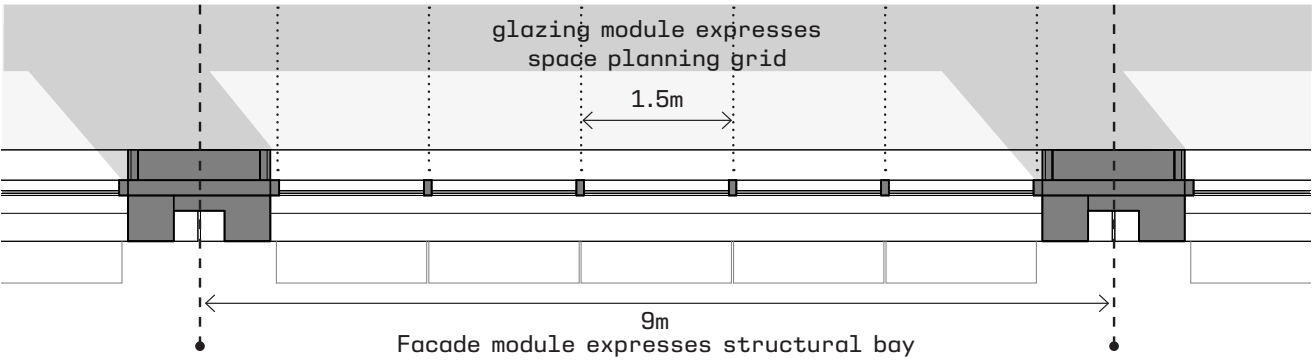
Internal elevation view of typical C1 southern facade bay

integrated window seat

- profiled pigmented precast concrete spandrel with top feathering detail
- bespoke metal fascia panel with integrated brise soleil
- smooth pigmented precast concrete double pier
- fixed clear glazing with framing
- continuous smooth pigmented precast concrete lintel



External elevation view of typical C1 southern facade bay



Plan arrangement of typical southern facade bay

4.5.12 DESIGN QUALITY & CONSTRUCTION

The use of precast concrete as the primary facade material stems from the essence of place analysis, serving as an appropriate and robust response to context. It also offers circularity potential, with opportunities to incorporate crushed material from demolition into the aggregate and mix of future elements.

Prefabricated precast panels deliver inherent benefits in terms of design quality and construction efficiency, enabling the fixing and sealing of glazing and metalwork off-site in controlled environments before being installed on site as a unitised facade system.

Complex and expressive geometries can be seamlessly incorporated through the casting process removing the need for secondary supports. This has allowed the angular language of the rooftop motif to be expressed at a finer scale on the facade. Splayed pier reveals provide passive solar shading, while elegantly profiled surfaces introduce depth, texture, and shadow on the primary elevations.



Feathered detail at top of profiled east and west piers

9m picture frame precast panels cast, including profiled surface finishes



Glazing and metalwork installed offsite, assuring quality and robustness at key junctions



Precast facade panels lifted and fixed to primary structural frame



Construction and installation sequence diagram of typical precast concrete facade panels

TOPS

Characterful, distinctive tops reinforce the contrasting identities of each building, whilst working together to add a complementary composition and memorable silhouette to the city skyline.



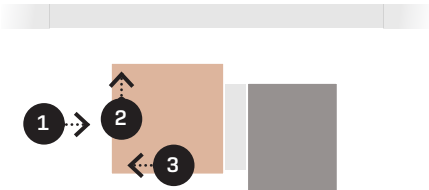
4.5.13 C1 ROOFTOP

The roof level of C1 is set back on all but the northern facade, reinforcing the clarity and linear form of the tower as it flanks Altrincham Street. Its slender, proportioned end elevations are marked at roof level by deep terrace zones that create depth and shadow, with building signage zones positioned above.

The setback rooftop volume continues the frame-like arrangement of pigmented precast piers of the loggia base and adopts the metalwork tones of the middle, establishing a cohesive architectural identity for C1. Facade openings facing the setback terrace are increased in height and width to support a range of flexible uses and to present a lighter, more open appearance.

Tall glazed balustrades line external event spaces, minimising risk at the building’s edge while maintaining expansive city views. Bespoke metalwork frames sit on the outer face of the glazing, ensuring these components are read with a rhythm and articulation consistent with the primary facades.

- bespoke metalwork plant fascia panel
- building signage zone
- frame composition of setback rooftop facade
- glazed balustrade with expressed bespoke metal frame
- profiled pigmented precast concrete parapet with feathered top detail
- larger facade openings to special use spaces
- metalwork planter



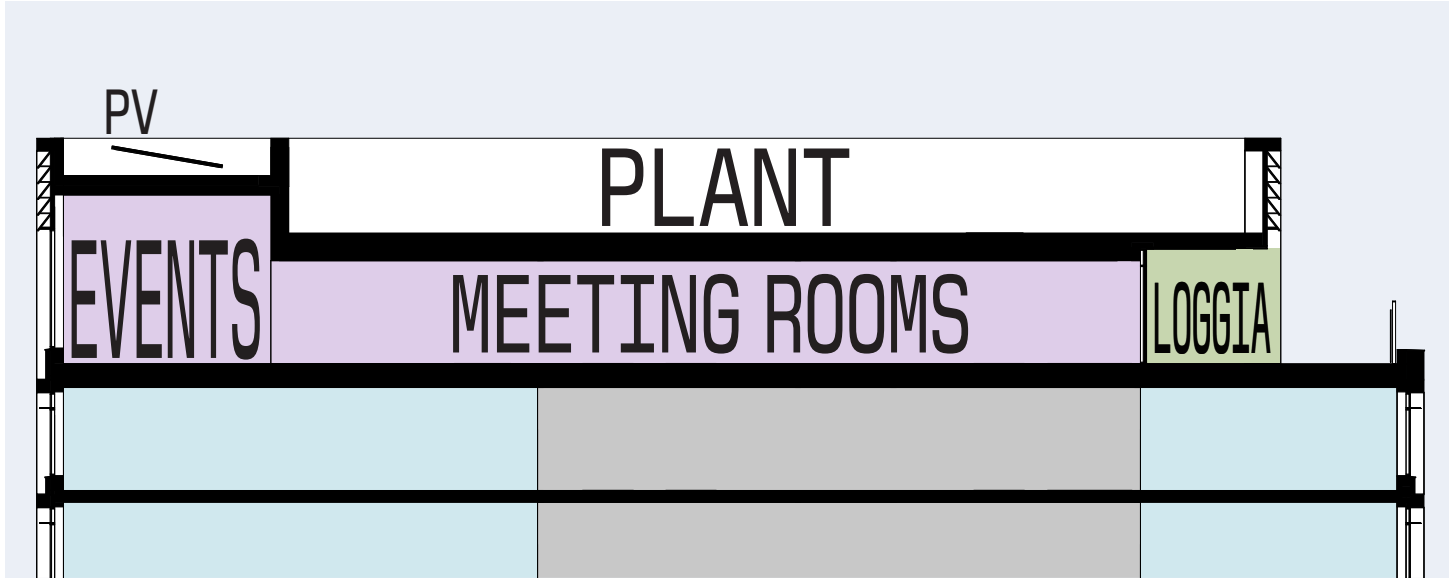
1 – West C1 top elevation view



2 – Frame composition of setback facade



3 – Shaded southern loggia



Section through inset C1 plantroom

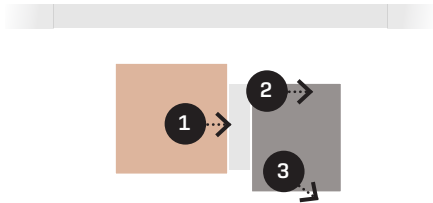
4.5.14 C2 ROOFTOP

The distinctive sawtooth rooftop form, inspired by the existing site geometries, evolves from the rhythm of the facade bays below. This begins at level 18, where vertical piers are omitted to create more generous openings, signalling a shift in use and programme. Above this, the profiled face of the piers broadens and extends, completing the building's silhouette with a sculpted roofline.

Precast piers of the north elevation continue to frame the amenity terrace with an open crown, supporting the continuous horizontal lintel which ties together the array of conditions at roof level, while maintaining consistency with the facade articulation of the building's middle.

Clerestory windows introduce light through the vertical faces of the sawtooth roofline, revealing themselves on the setback north elevation punctuating the extent standing seam zinc roof material.

- PV array to south facing sawtooth roof
- setback solid metalwork plant screen
- profiled pigmented precast concrete sawtooth top with feathered top detail
- continuous smooth pigmented precast concrete lintel
- open pigmented precast concrete frame to terrace
- glazed balustrade with expressed bespoke metal frame
- larger facade openings to special use spaces



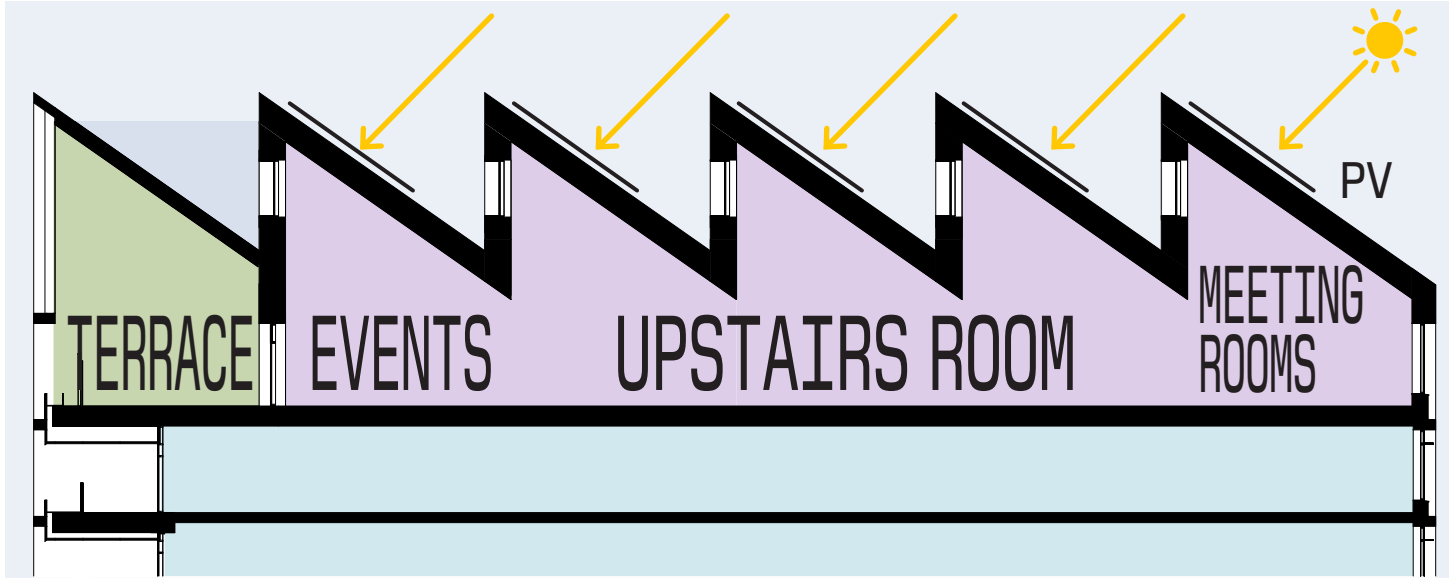
1 – West C2 top elevation view



2 – Precast crown framing northern terrace



3 – Glazed balustrades maximise views out

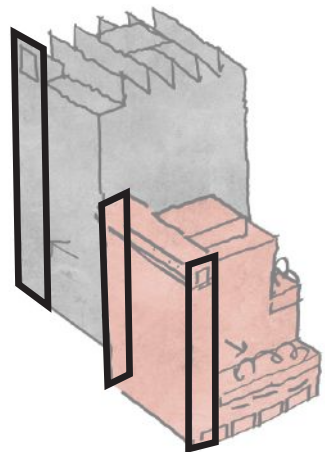


Section through Upstairs Room and northern Belvedere

4.5.14 C2 ROOFTOP

The C2 linear tower is crowned with a distinctive single sawtooth bay, completing the rooftop composition and reinforcing a key northern corner as it addresses the city. This articulated volume enhances the building’s silhouette, marking its presence in longer views.

An integrated feature signage zone further animates this corner, carefully designed to maintain open views from the sheltered terrace space behind.



Linear tower feature signage zone



Physical model study



View north east across Sister Square



View south along London Road from Piccadilly Station



5 LANDSCAPE AND PUBLIC REALM

5.1 INTRODUCTION

5.1.1 SISTER MANCHESTER

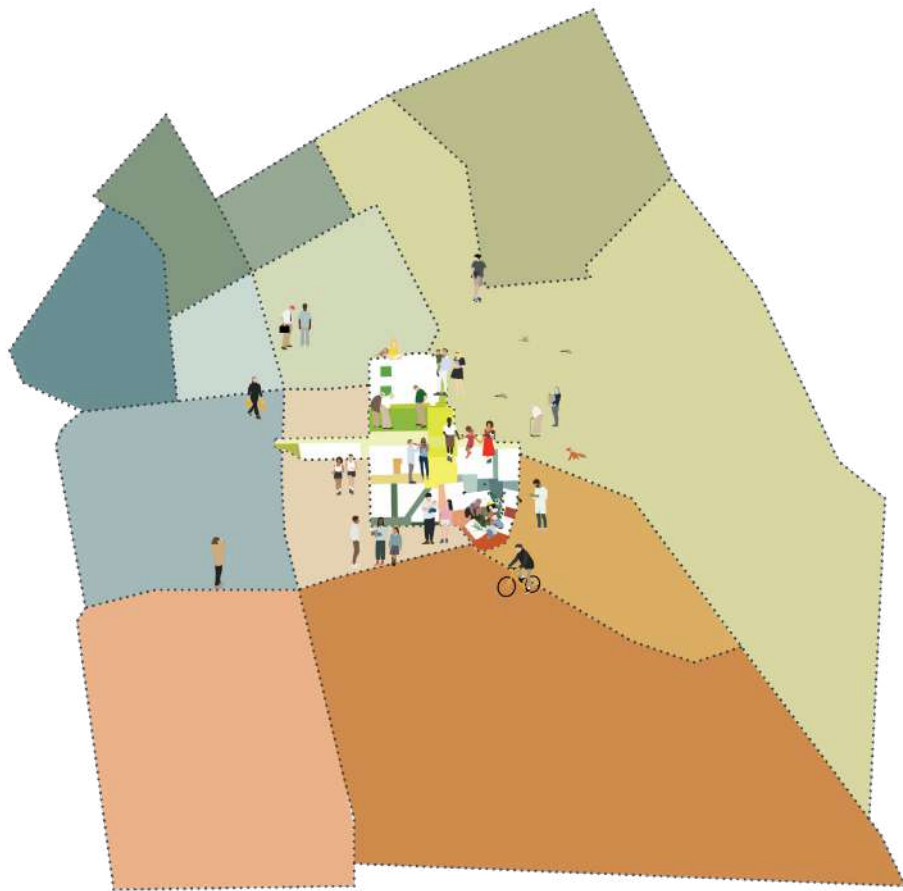
This chapter of the DAS has been prepared by SLA Landscape Architects and outlines the vision, principles and concepts which have guided the design of the landscape and public realm for Sister Plot C. SLA have worked closely with Allies & Morrison and the wider team of consultants, to ensure an integrated and holistic approach to the development. The proposed landscape and public realm design builds on the vision for the Framework Area outlined in the ID Manchester SRF (2023).

The landscape and public realm have been developed in response to the site conditions, the unique location of the Plot C site and its rich local context. This chapter describes the challenges and opportunities associated with developing the landscape proposals for the site, before presenting a series of design principles and developed proposals for each of the character areas across the site. The landscape and public realm proposals will play a crucial role in this first major phase of the masterplan, establishing vital routes and spaces for the innovation district and its connectivity with the surrounding city.

This section summarises:

- Introduction
- Site analysis
- Design development
- Design principles
- Sister Square proposal
- Altrincham Street proposal
- Hollaway Place proposal
- Mill Lane proposal
- Public art strategy
- Planting and maintenance approach
- Landscaping GA drawings

This chapter should be read in conjunction with the other drawings and reports prepared by the other disciplines in the project team, submitted as part of this planning application [referenced in chapter 1].



Sister Manchester in relation to the surrounding context



“Sister is the world’s next great innovation district, in the heart of a global city. A city known for its history of innovation and collaborative spirit. Manchester.”

- Sister Manchester

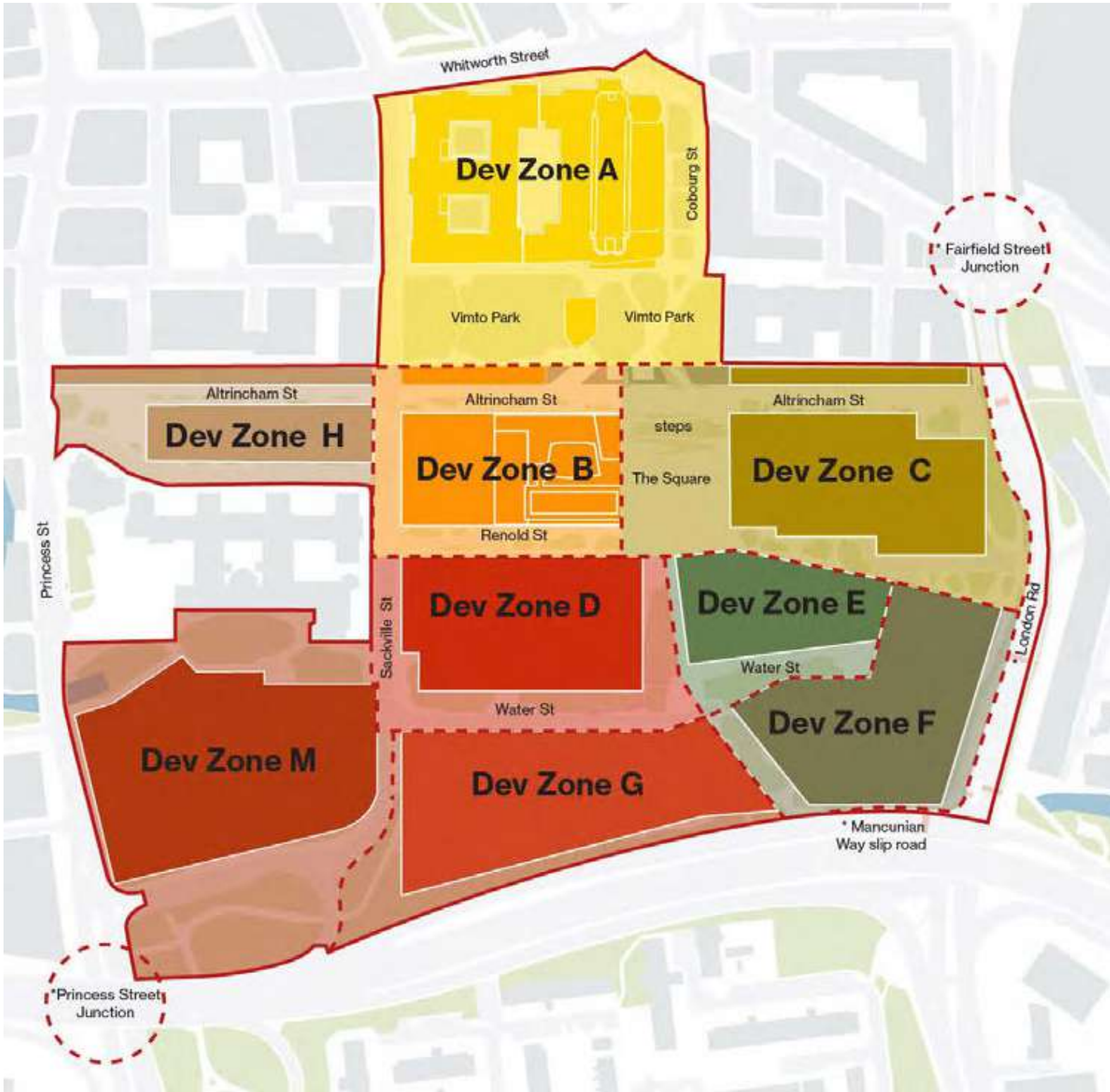
Sister Manchester is a nature-led public realm, where nature and innovation are intricately connected. Nature demonstrates that innovation is an ongoing process, constantly adapting to new challenges and opportunities.

5.1.2 STRATEGIC REGENERATION FRAMEWORK

Plot C is envisioned as a dynamic new urban district grounded in the principles developed for the SRF: connectivity, openness, and accessibility. Designed to foster inclusive movement and shared experiences, the masterplan weaves together a living landscape of green infrastructure, biodiverse spaces, and resilient ecological systems. At its heart, curated commons offer inviting, flexible environments for gathering, culture, and everyday life—encouraging a sense of belonging and stewardship. The district’s identity is shaped by its context and community, expressing a clear sense of purpose and place through architecture, materiality, and programming. Committed to a nature-based, regenerative design, Plot C sets a forward-thinking standard for urban development – one that nurtures people, place, and planet.

The landscape design of Plot C is based especially on the following SRF place-based principles:

-  Connected, open and accessible
-  A living landscape
-  Curated commons
-  An identity that expresses purpose and place
-  Sustainable and regenerative



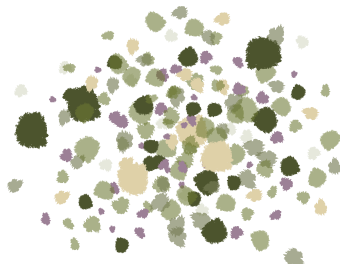
Plot C (identified as Development Zone C within the SRF) is one of nine separate zones within the Sister Manchester masterplan. It is located at the heart of the plan, and includes Sister Square and Altrincham Street.

5.1.2 STRATEGIC REGENERATION FRAMEWORK

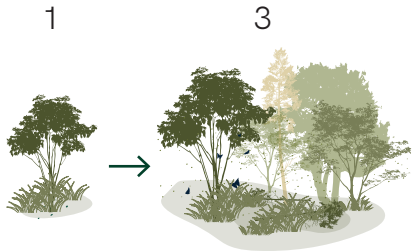
The SRF set out a series of nature commitments for the entire masterplan, including to preserve and protect existing nature, to replace any trees removed with three new trees and to use a minimum 70% of native species in the planting palette, which will also be achieved on Plot C.



Retain high value mature trees



Maximise the number of new trees sitewide



3:1 Tree replacement ratio



Min. 70% native species

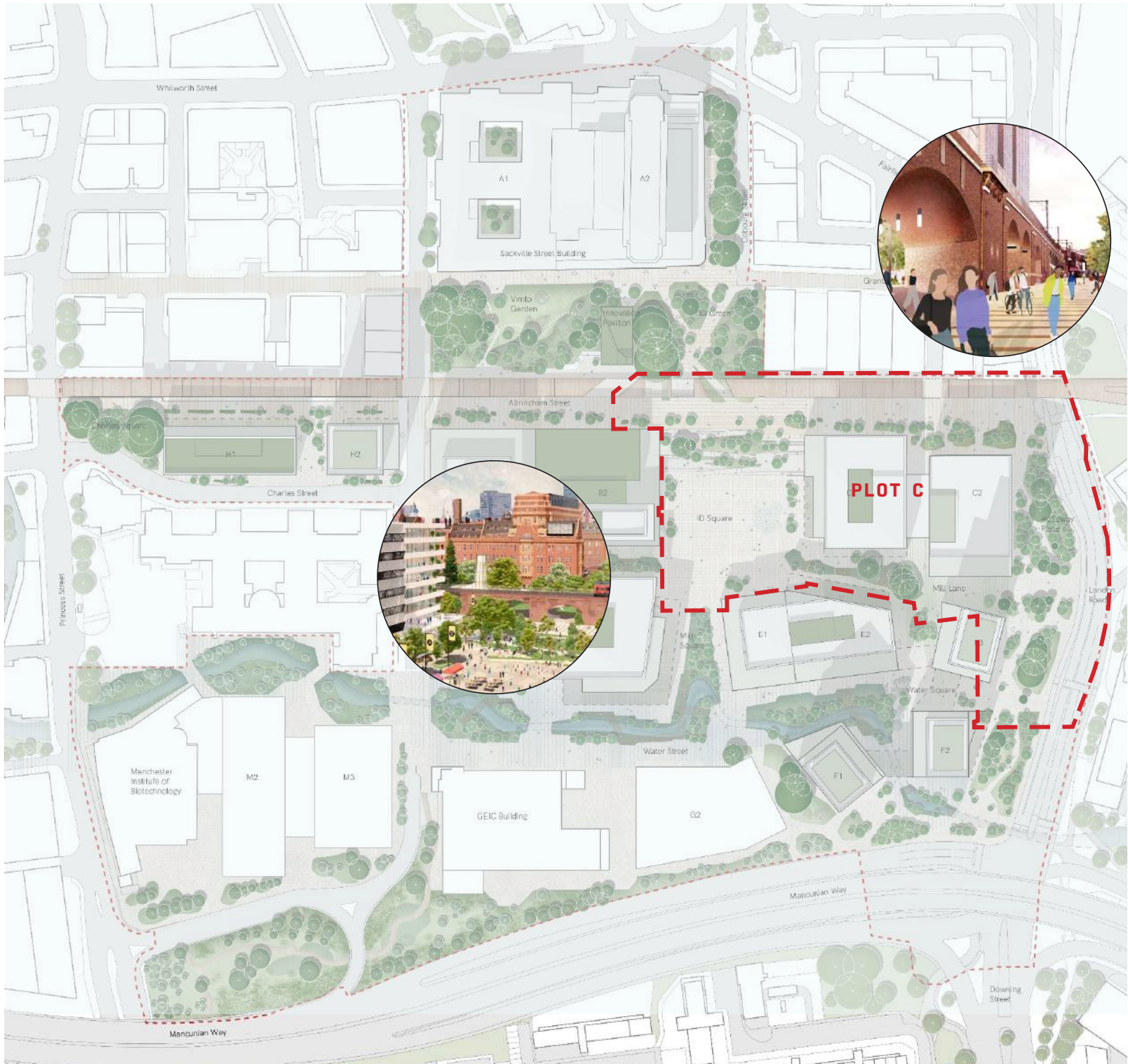


Upcycle felled trees



Bng >10%

5.1.2 STRATEGIC REGENERATION FRAMEWORK



The SRF highlighted the potential of the Altrincham Street and Sister Square character areas as dynamic and inclusive new public spaces for Manchester.

London Road is also recognized as a potential green connector and Hollaway Place the main gateway from Piccadilly.



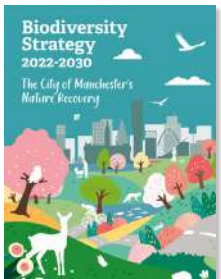
MANCHESTER CORE STRATEGY 2012-27



PLACES FOR EVERYONE 2024



MANCHESTER GREEN AND BLUE INFRASTRUCTURE STRATEGY 2015-25



MANCHESTER BIODIVERSITY STRATEGY AND ACTION PLAN 2022-2030



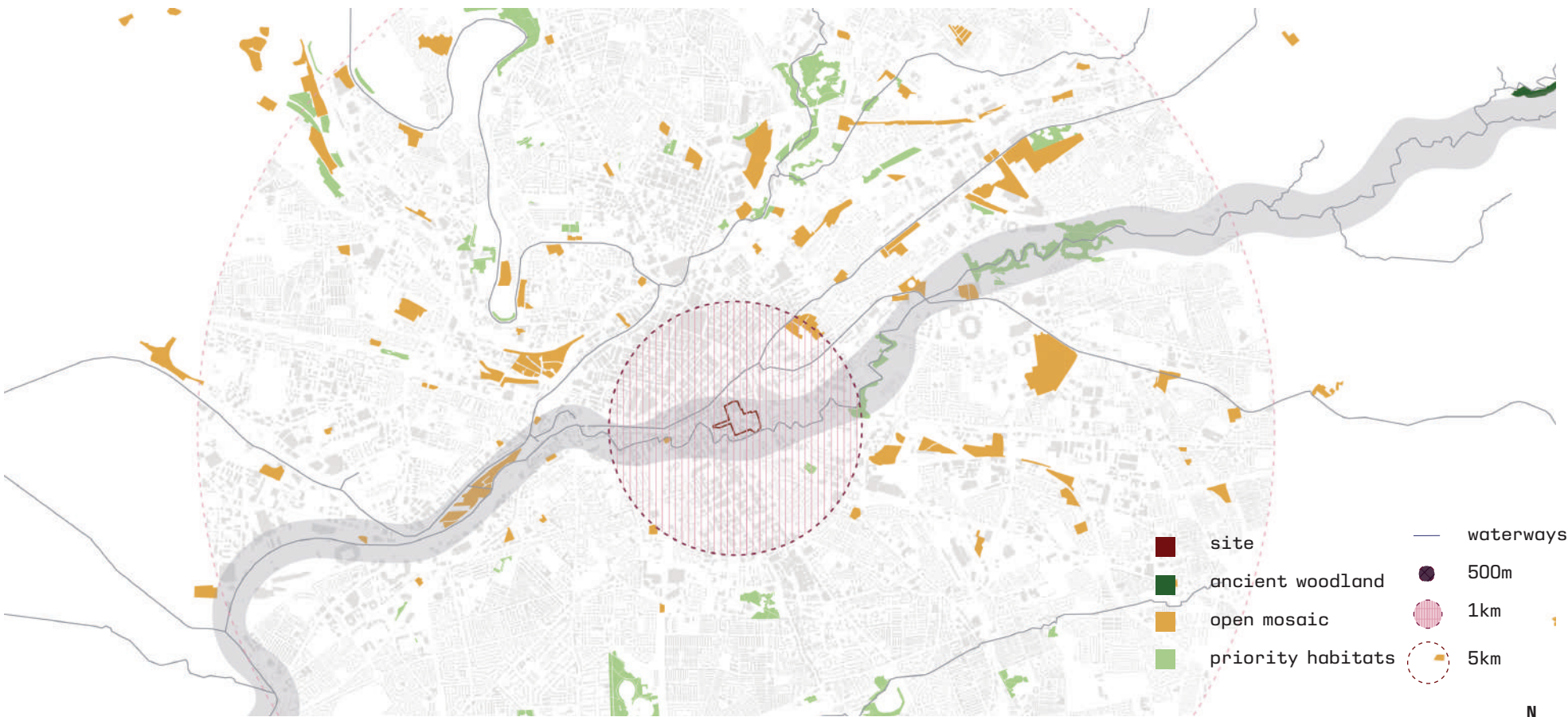
MANCHESTER CLIMATE CHANGE FRAMEWORK 2020-25

Alongside national regulation and best practice guidance, the public realm approach for Plot C has been informed by key local policies, including around climate change and biodiversity.

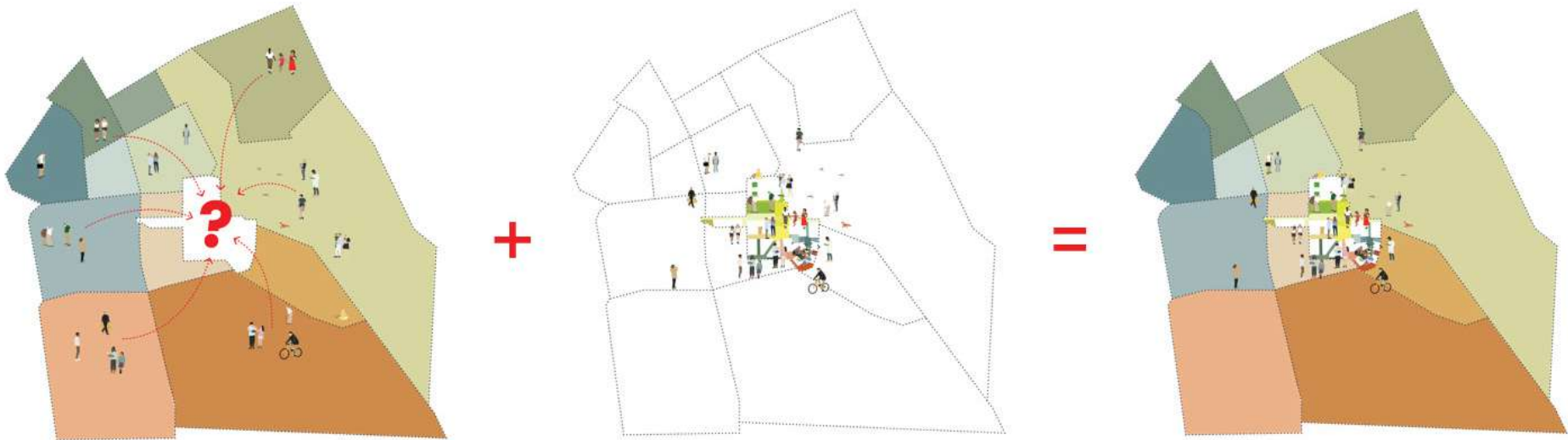
5.1.3 GREEN AND BLUE INFRASTRUCTURE CONTEXT

The River Medlock catchment area is a significant area of ecological interest, recognised by the Greater Manchester Ecology Unit for its notable habitats. The River Medlock Valley, in particular, boasts a rich tapestry of diverse habitats surrounding its watercourses, contributing to the area’s ecological diversity. While the immediate vicinity of the Plot C site [1km radius] exhibits a relatively low concentration of priority habitats compared to other parts of Manchester, it is not devoid of ecological value. The presence of deciduous and broadleaved woodland, albeit in limited quantities, adds to the area’s natural diversity. The design team mapped these key areas and potential nature connections in the analysis and scoping phase of the project.

Plot C’s ecological significance is further underscored by the presence of protected and notable flora and fauna. Within a 2km radius, multiple sightings of key species have been recorded, indicating a thriving ecosystem. On Plot C itself, there has also been solitary hedgehog sighting recorded, three separate observations of peregrine falcons, and a lone kingfisher. These sightings are indicative of the species associations typically found along water catchment areas. The Medlock River and its surrounding habitats provide essential resources and conditions that support these diverse species, highlighting the interconnectedness of the local ecosystem and the importance of preserving such water catchment areas for biodiversity conservation.



Key habitats - There is a rich diversity of habitats around the River Medlock Valley, including deciduous and broadleaved woodland.



Stitched-in - This project builds upon the masterplan principle of connecting to local neighbourhoods to create a public realm which aims to be inclusive and designed for all.

5.2 SITE ANALYSIS

5.2.1 KEY NATURE LINKS



The key nature connections and links were informed by the Strategic Regeneration Framework and further detailed site analysis.

5.2.2 NATURE CONNECTIONS

The Bee line initiative is a nationwide strategy which aims to reduce biodiversity loss through a network of interconnected habitats, serving as a lifeline for pollinators and other wildlife. By creating these “insect pathways,” the initiative seeks to combat the catastrophic decline in biodiversity that has been observed in recent years. The Sister masterplan presents a unique opportunity to revitalize and integrate areas of rich meadows and grasslands. These habitats, once common across the UK, have become increasingly fragmented and isolated due to human activity and land-use changes.

- ◆

BAT ROOSTS
- ★

KINGFISHER
- ▲

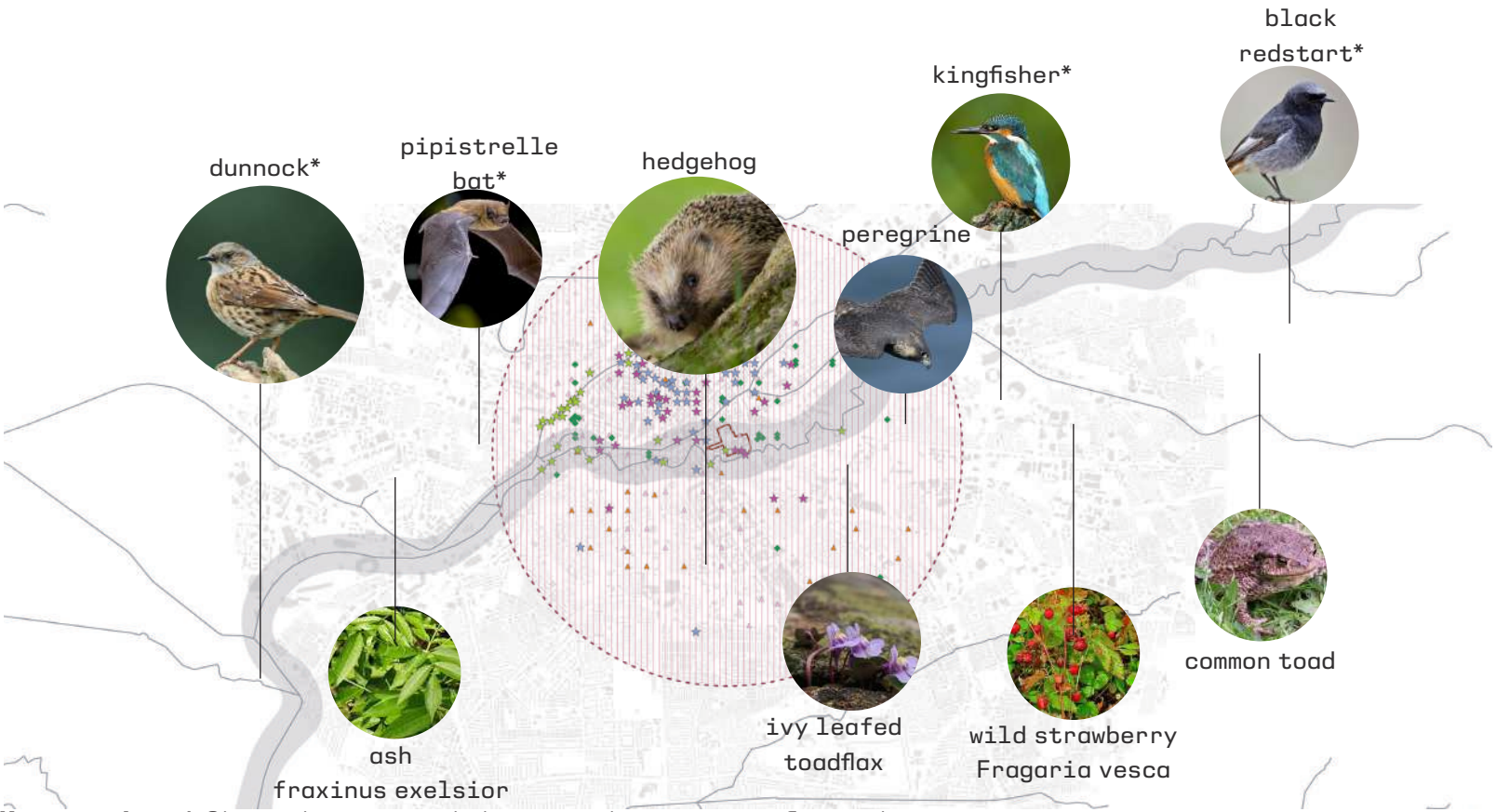
DUNNOCK
- △

HEDGEHOG
- ★

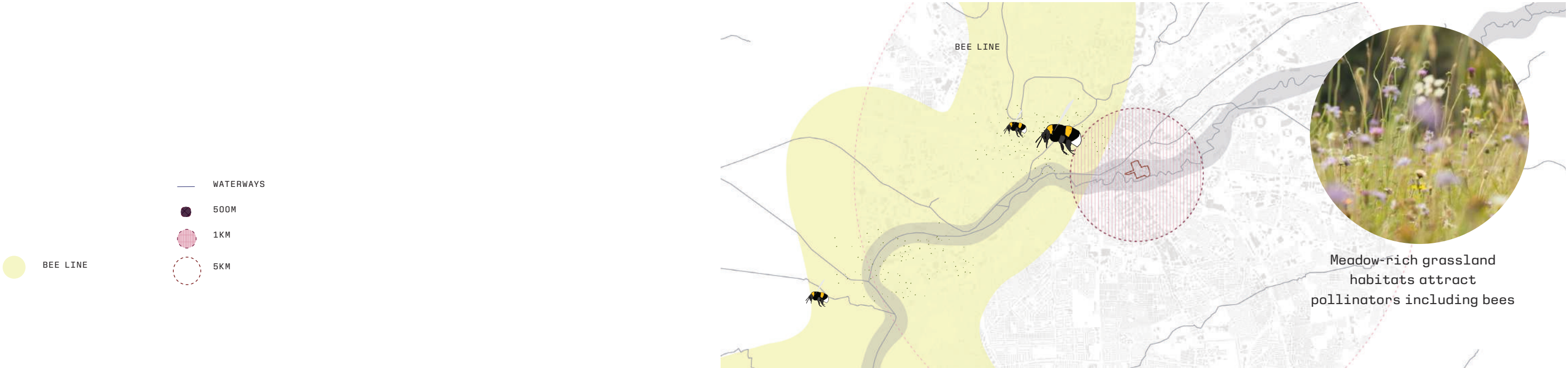
BLACK REDSTART
- ★

PEREGRINE
- WATERWAYS
- *

PROTECTED SPECIES
- 2KM



Key species. A 2km radius around the site shows a significant diversity in species, including ash, wild strawberry and kingfishers.

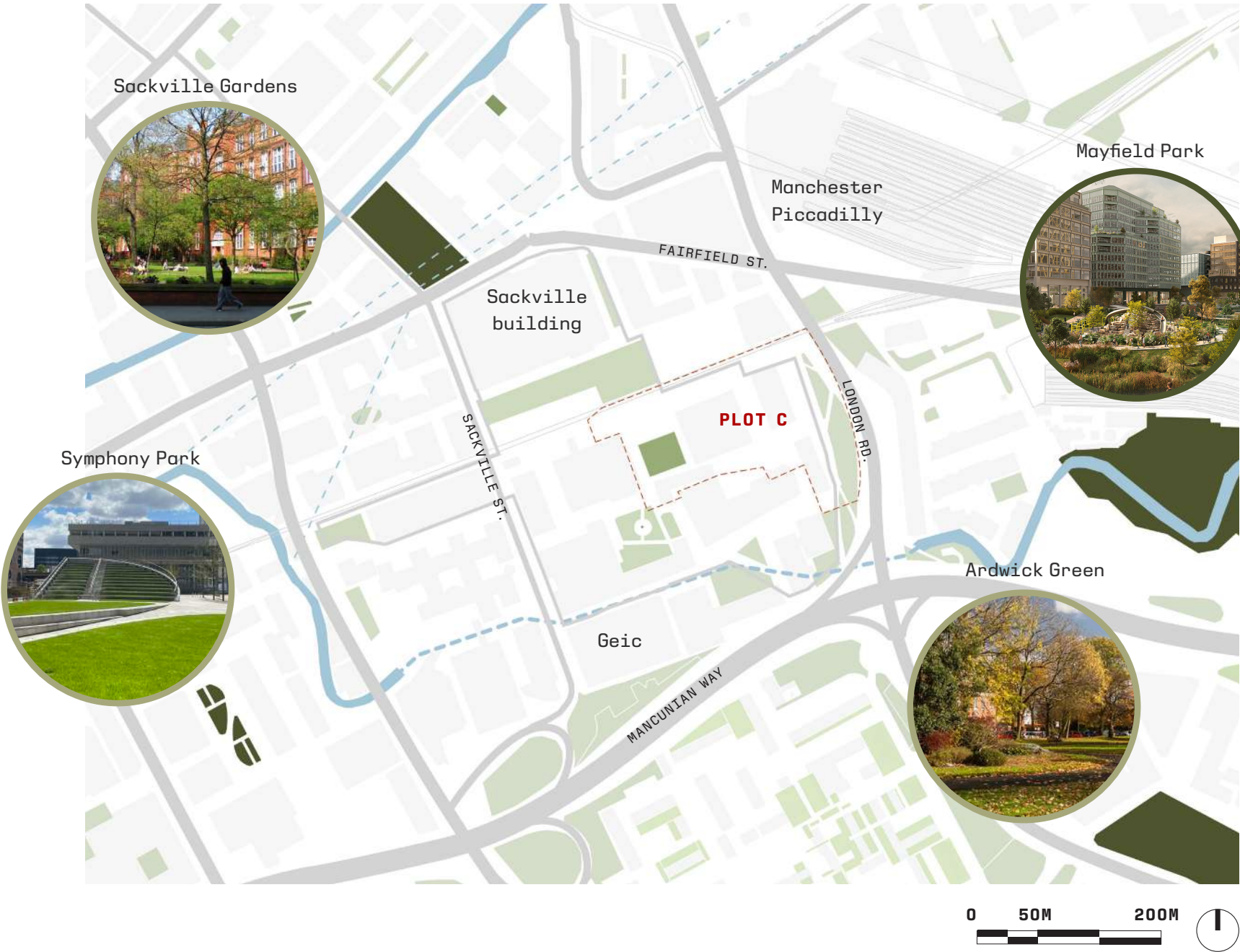


Bee line. The nationwide Beeline strategy passes within 1km from the site.

5.2.3 ADJACENT GREEN SPACES

The Sister site is in close proximity to a number of local green spaces which can be seen as an opportunity for key nature links.

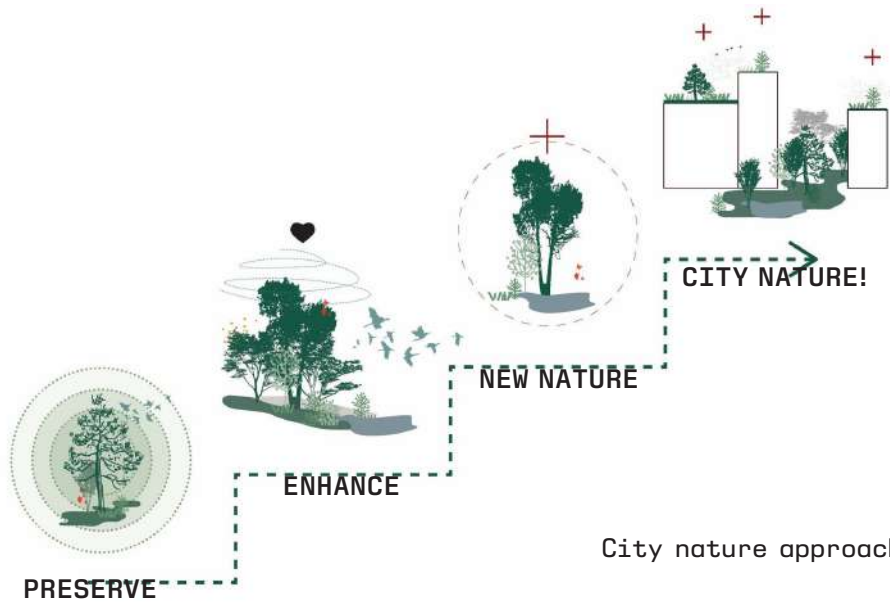
- Sackville Gardens to the north of the site has a series of lawns, flowerbeds and ornamental plantings. It is managed by the local community and includes several notable memorials and sculptures important to communities in Manchester and beyond, including the Alan Turing memorial, Beacon of Hope, and National Transgender Memorial.
- Symphony Park is a relatively new public green space, located at the heart of the £400m mixed use development Symphony Square development. It includes lawns, over 100 semi-mature trees and terraced seating areas.
- Ardwick Green is a small urban park with a rich history and diverse plant life, including a 'Plants of the world' flower bed and a children's play area. Originally a private park for wealthy residents in the early 19th century, it became public in 1867 and has since served as a vital green space for the local community.
- Mayfield Park is Manchester's first new city centre park in over 100 years and includes over 120,000 plants and shrubs, 142 trees across 58 species, a wildflower meadow, and native plants along the River Medlock corridor. Mayfield Park also serves as a community hub for events and performances. The renaturalisation of the River Medlock is an approach which is in line with the spirit of the Sister development.



5.2.4 HABITATS AND SPECIES

The Plot C site already hosts a diverse collection of flora and fauna. As a starting point, our team worked with Tyler Grange [project ecologist submitting arboricultural report as part of the Full Planning Application] to map this potential and understand more about the species already present on the site.

- Across the Plot C site, there is a number of existing habitats, majority amenity grassland, with introduced shrub and bare ground area. In Plot C, the majority of biodiversity is focused in Sister Square, such as formal planting and lawn areas, and along London Road.
- There are 72 existing trees across the Sister wider masterplan site, with a diverse range of species. There are no TPOs on Plot C. There are several trees with high quality and value across Plot C.
- There is also an opportunity to connect to the University of Manchester tree trail by adding new trees. There are also around 130 trees and shrubs growing in the temporary tree nursery outside of Plot C site, south of the Renold Building which can also be used to inform the planting palette across Plot C.



- | | |
|------------------------------------|----------------------------|
| ● trees [high quality and value] | — introduced hedges |
| ● trees [medium quality and value] | ■ bare ground [J4] |
| ● trees [low quality and value] | ■ amenity grassland [J1.2] |
| ● trees [recommended for removal] | ■ introduced shrub [J1.4] |



5.2.5 EXISTING SITE - HISTORICAL CONTEXT



Industrial Manchester

During the industrial period, the site was built up with industrial buildings and worker’s housing, with a raised viaduct connecting to Piccadilly Station. [Image source: UMIST in 1942, UMIST, CC BY-SA 2.5].



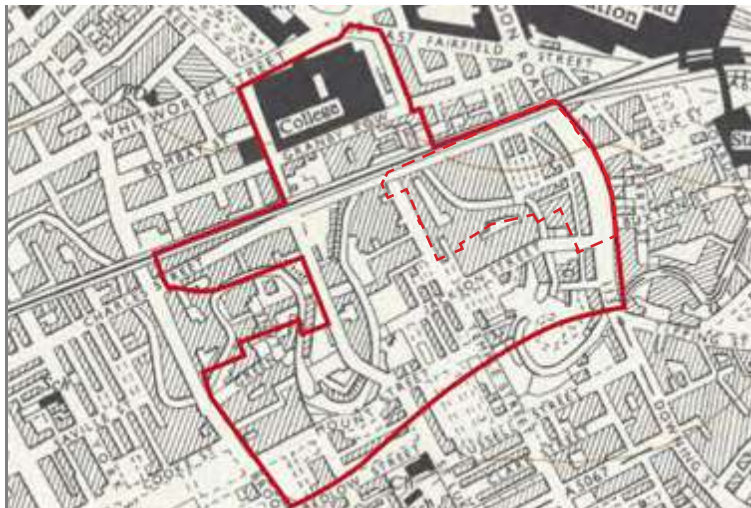
Mid-century campus

The butterfly stairs were designed by Thomas Worthington & Sons and completed around 1962 as part of the expansion of the UMIST campus. [Source: SLHA, ID Manchester, pp. 170]



UMIST campus

The landscaped quadrangle as seen today, which lies south of Altrincham St and forms a nodal point within the UMIST campus, framed by the surrounding buildings. [Source: SLHA, ID Manchester, pp. 169]



1856

The River Medlock is illustrated in early 19th century as running through the centre of the masterplan area, with warehousing developed directly around it. The viaduct can be seen to the north of the site.



1923

The construction of the Sackville St building commenced in 1895, designed by Architects Spalding & Cross, and opened it’s doors in 1902. The building was further extended in 1919, and finally completed in 1957. This started a wave of development on the wider site as it transitioned from an industrial complex to a modernist university campus.



1972

In 1966, there was another substantial phase of redevelopment, in which a new ‘Education Quarter’ was envisioned, led by Hubert Worthington. The central intentions of the Worthing masterplan involved “...separating individual blocks by lawns and trees, providing uninterrupted views of the buildings and vegetation, and excluding vehicles from the centre of the campus”, ideas of which remain relevant to the Sister vision today.

5.2.6 EXISTING SITE - CURRENT STATE

The existing conditions on Plot C include a number of elements to be retained. This contributes to giving character and identity to the site but also carry a number of challenges.

Some of the existing features of the site, such as the approximately 5m level difference along Altrincham Street down to Sister Square, or the preserving of Hollaway wall at its current location, will contribute to shaping and giving a unique character and identity to Plot C. However, these opportunities also provide constraints on visibility, perceived safety, levelling, inclusivity and accessibility. It also raises feasibility questions together with technical constraints and the meeting of rules and regulations.

Moreover, the design team is exploring the possibility for reuse of existing local materials, building upon the strong local character and identity whilst sparing resources and pushing the limits of innovation. This being a relatively new field, constraints are many - regulatory, technical, logistical...

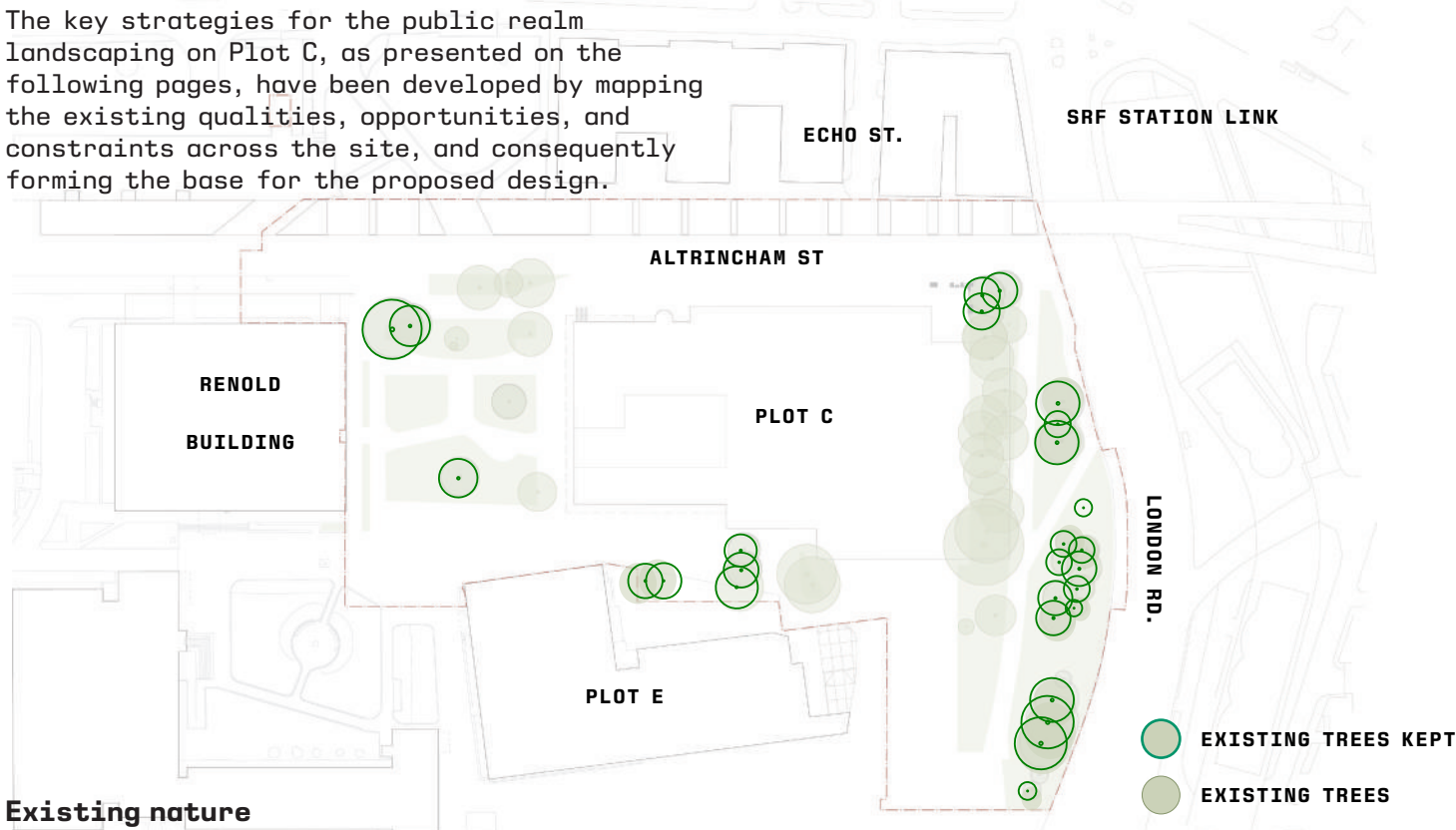
Finally proposing an intervention on Plot C whilst being part of a much larger masterplan raises a range of questions as to how to develop a cohesive overall scheme while at the same time ensuring the feasibility and buildability of one plot independently from its surroundings.



Some examples of paving materials currently found on Plot C. Some of these materials are intended to be reused in the new landscape scheme.

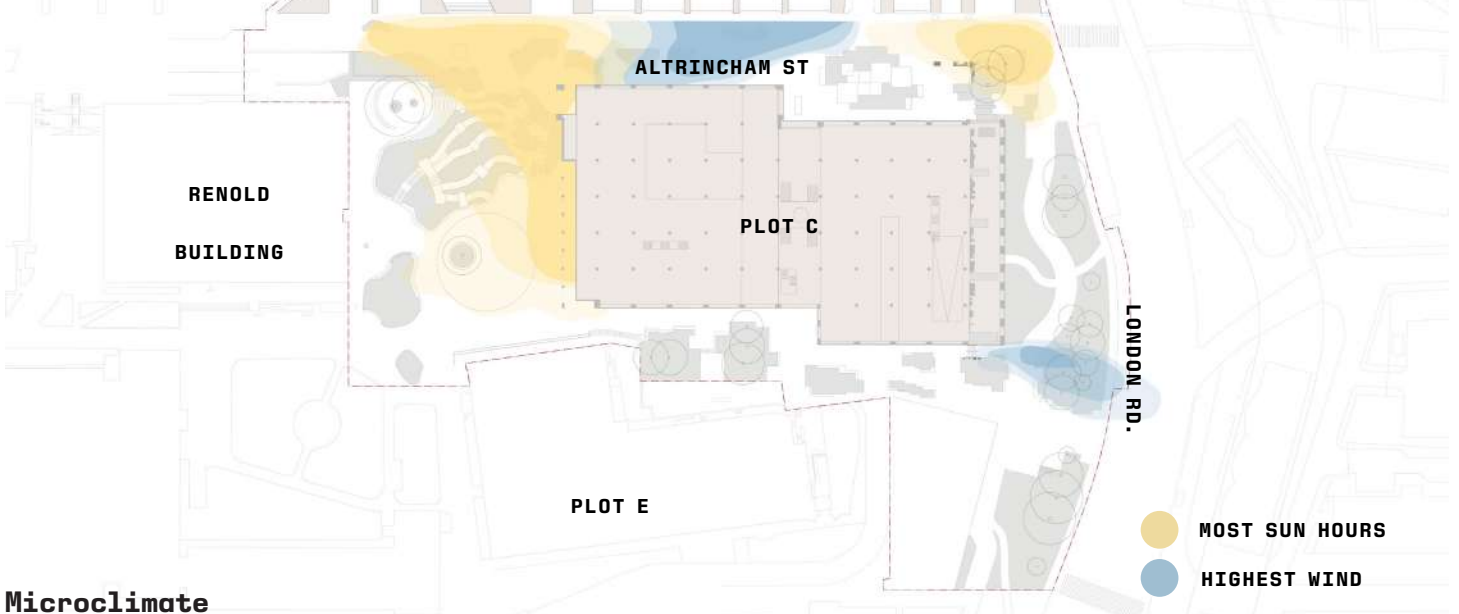
5.2.7 OPPORTUNITIES, CONSTRAINTS AND KEY STRATEGIES

The key strategies for the public realm landscaping on Plot C, as presented on the following pages, have been developed by mapping the existing qualities, opportunities, and constraints across the site, and consequently forming the base for the proposed design.



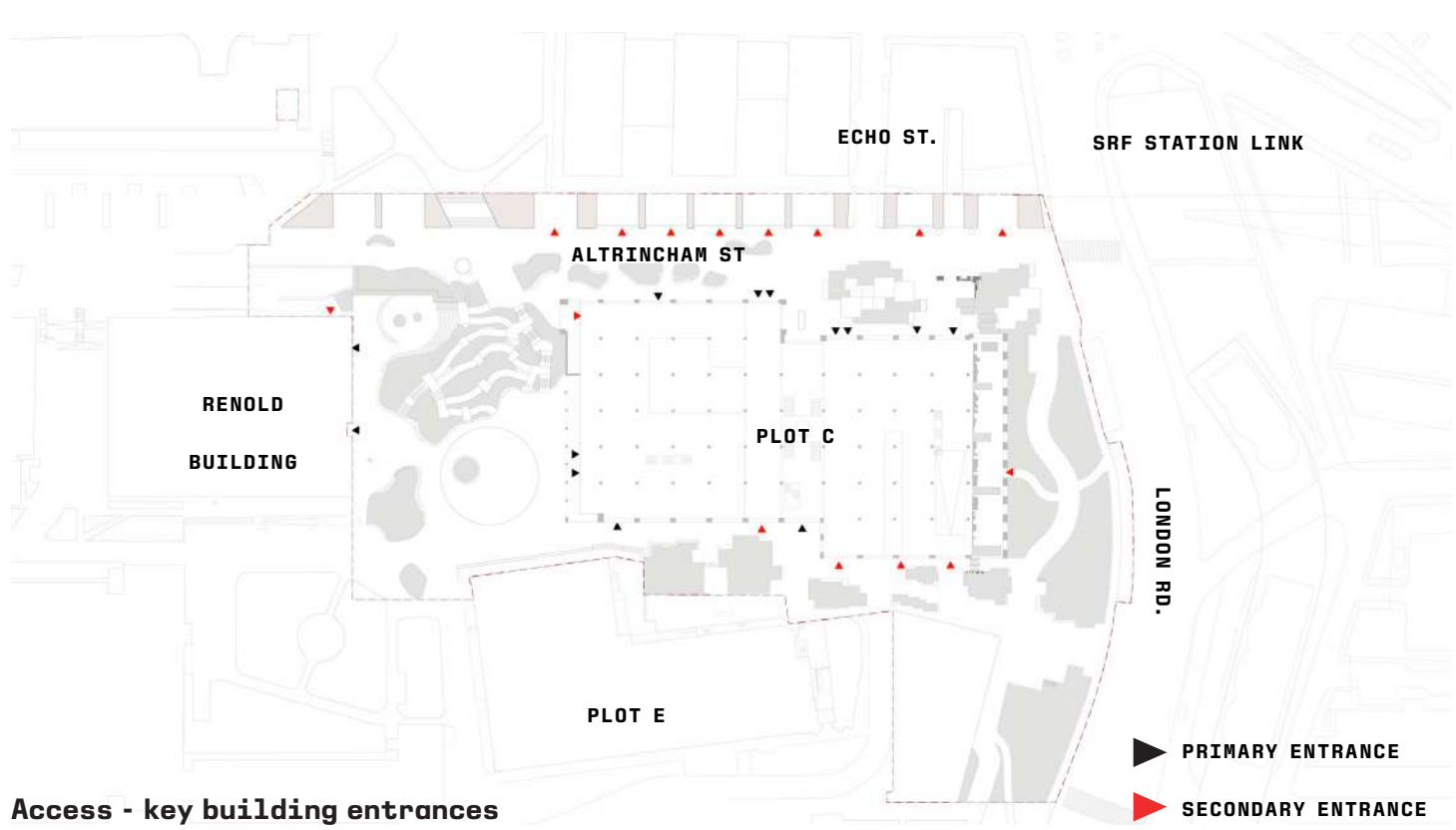
Existing nature

There is a high value tree cluster on Sister Square, and many medium value trees on the site. The aim from the SRF is to keep as many as possible (26 trees kept) and for the trees that will be taken down, there is a possibility to keep them as tree trunks for play and biodiversity and retain the same biomass in the wider Sister development area. Existing trees along London Road and by Hollaway Wall also give a unique opportunity to enhance the settings with even more nature experiences by the entrance area and along the road. From a poor to a rich environment!



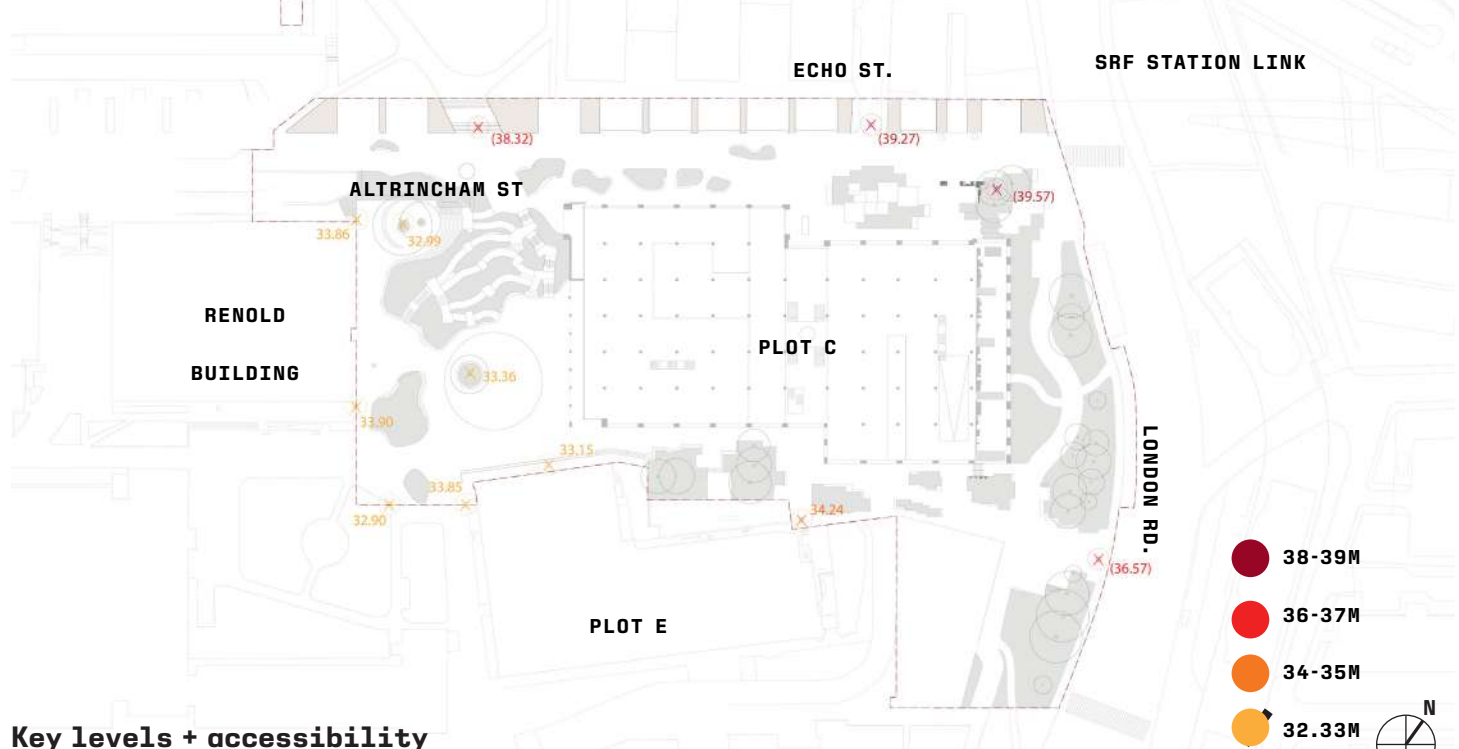
Microclimate

Careful consideration has been taken to maximise places to dwell where there is most sun and placing shrubs and trees to mitigate wind in strategic places.



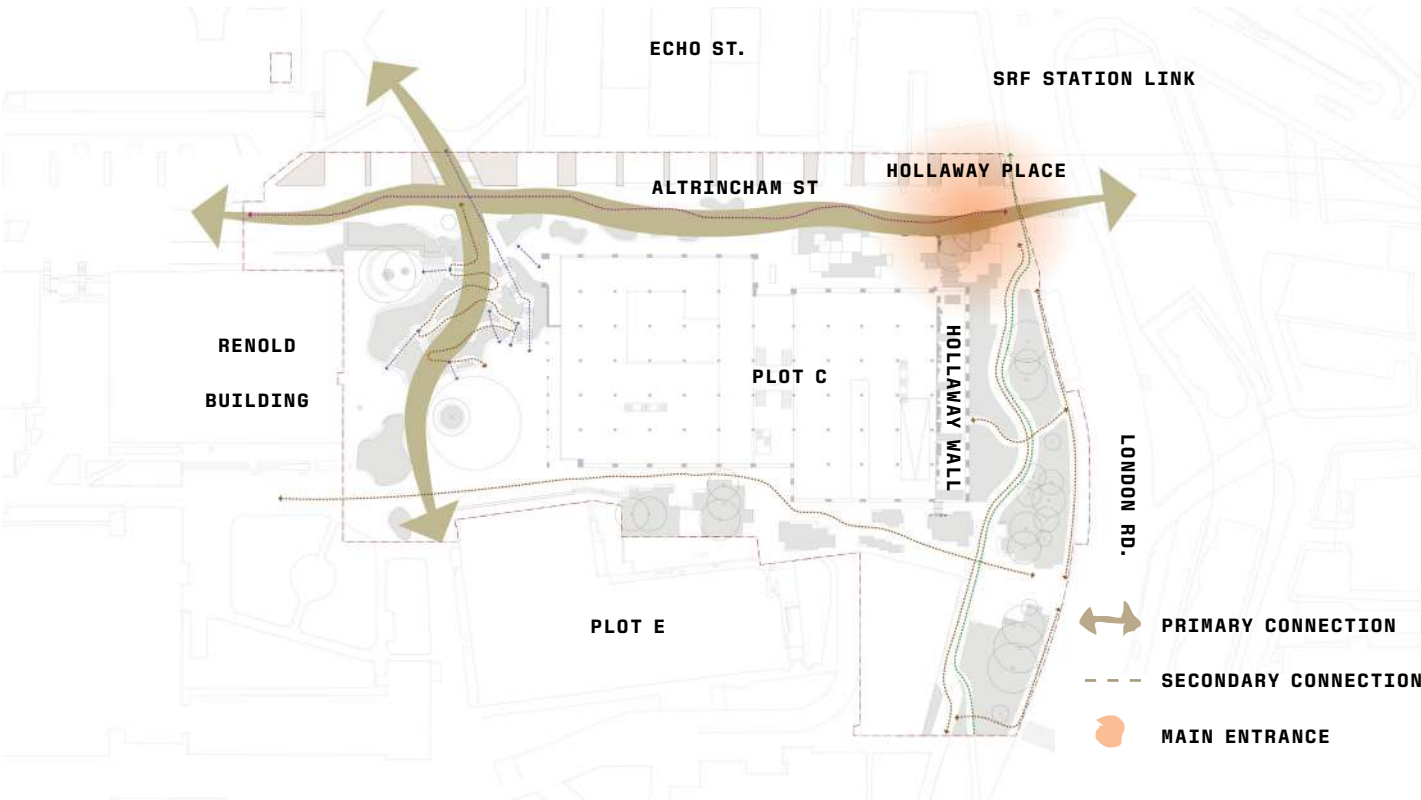
Access - key building entrances

The landscape design responds to existing and new both primary and secondary entrances across the Plot C site.



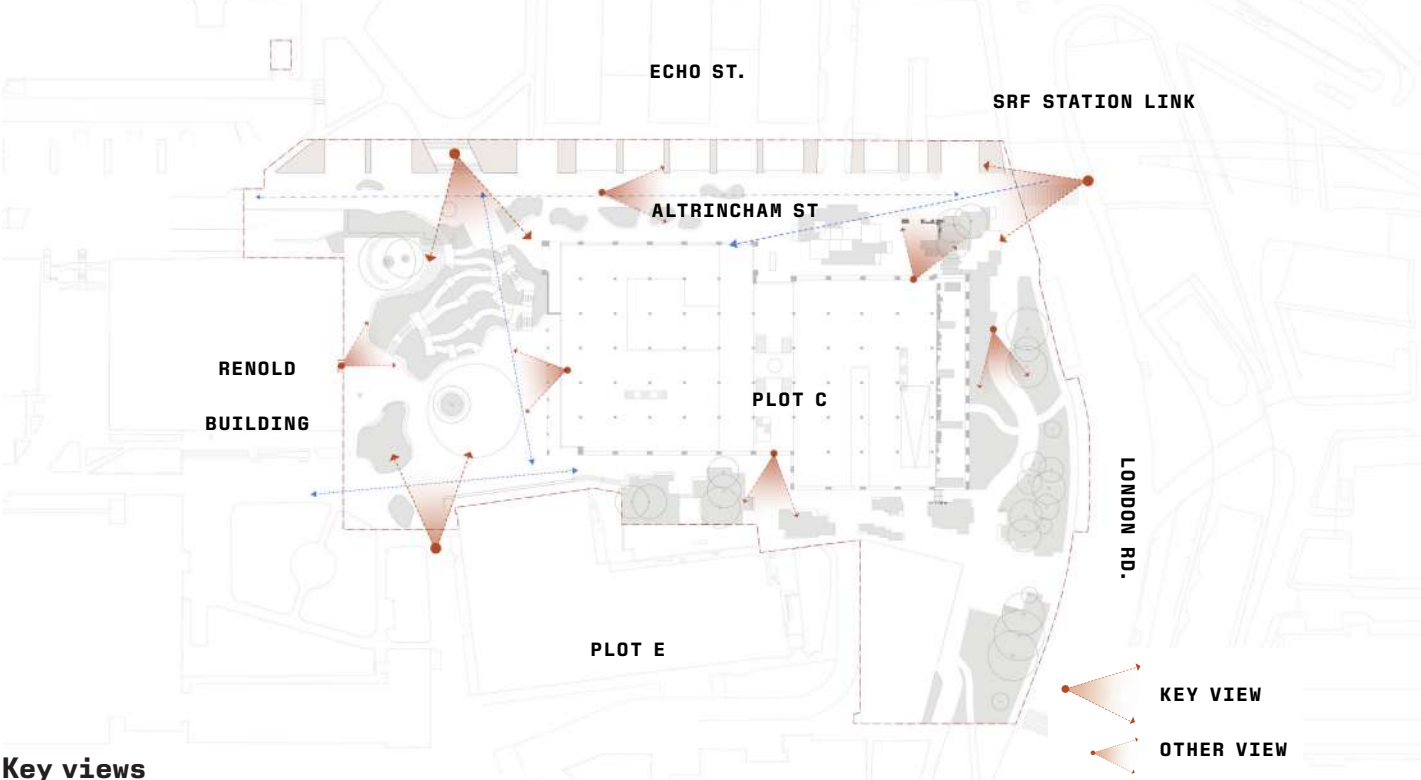
Key levels + accessibility

The level change between the upper levels on Altrincham St. and lower levels on Sister Square are decisive for the design outcome and accessibility, as also concluded in the SRF.



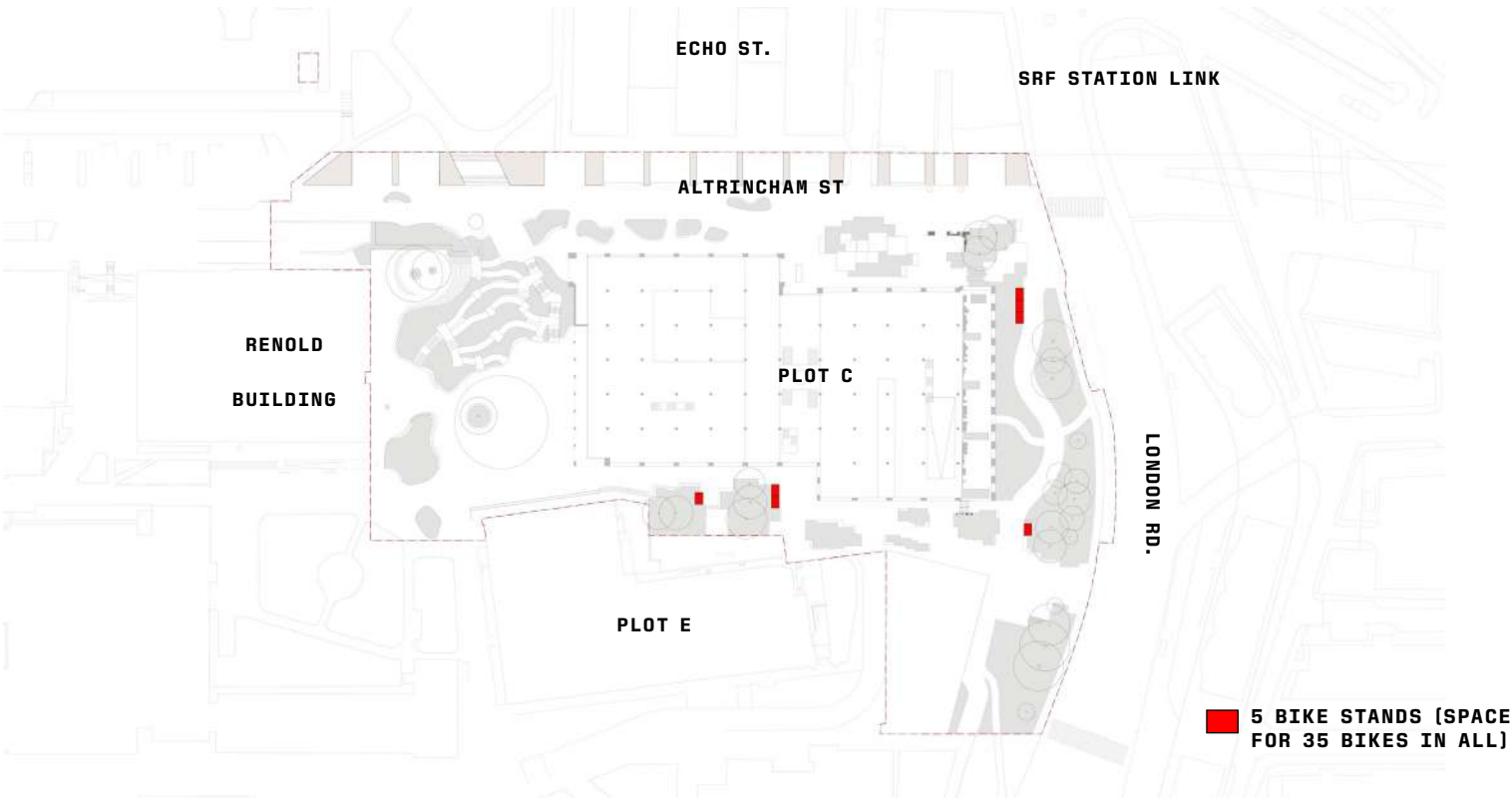
Movement across the site

The primary connections on the Plot C site stretch along Altrincham Street from east to west and from Vimto Garden down to Sister Square and the south - SRF recognised these routes as needed to be fully accessible and enhanced. This is facilitated by the removal of the Butterfly Stairs and associated oval column. See p.84. Secondary connections along London Road and Mill Lane are also enhances as attractive and accessible routes.



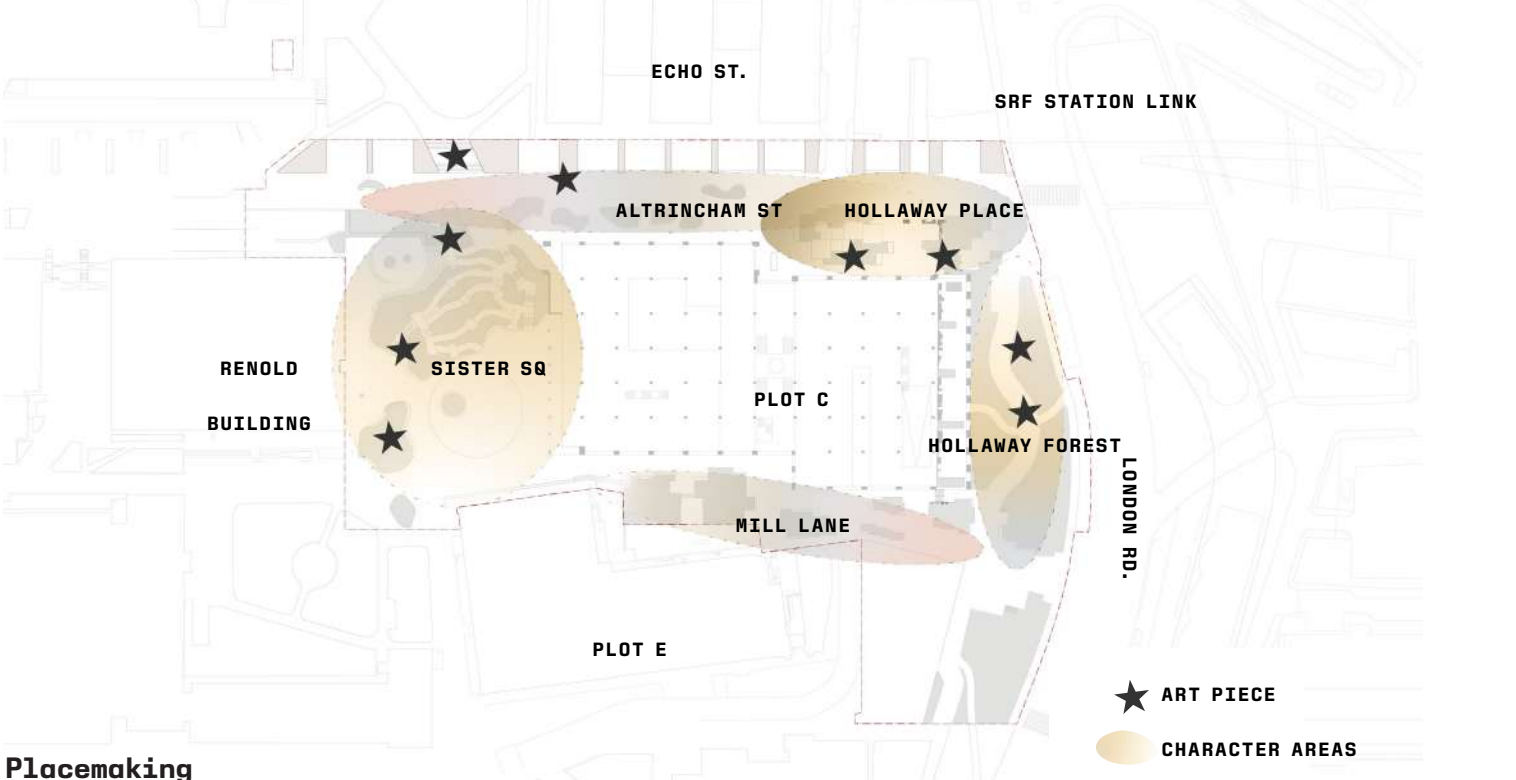
Key views

Key view lines are maintained and highlighted in the design, especially when arriving to the site by Hollaway Place and the south-north connection by Sister Square.



Cycle parking

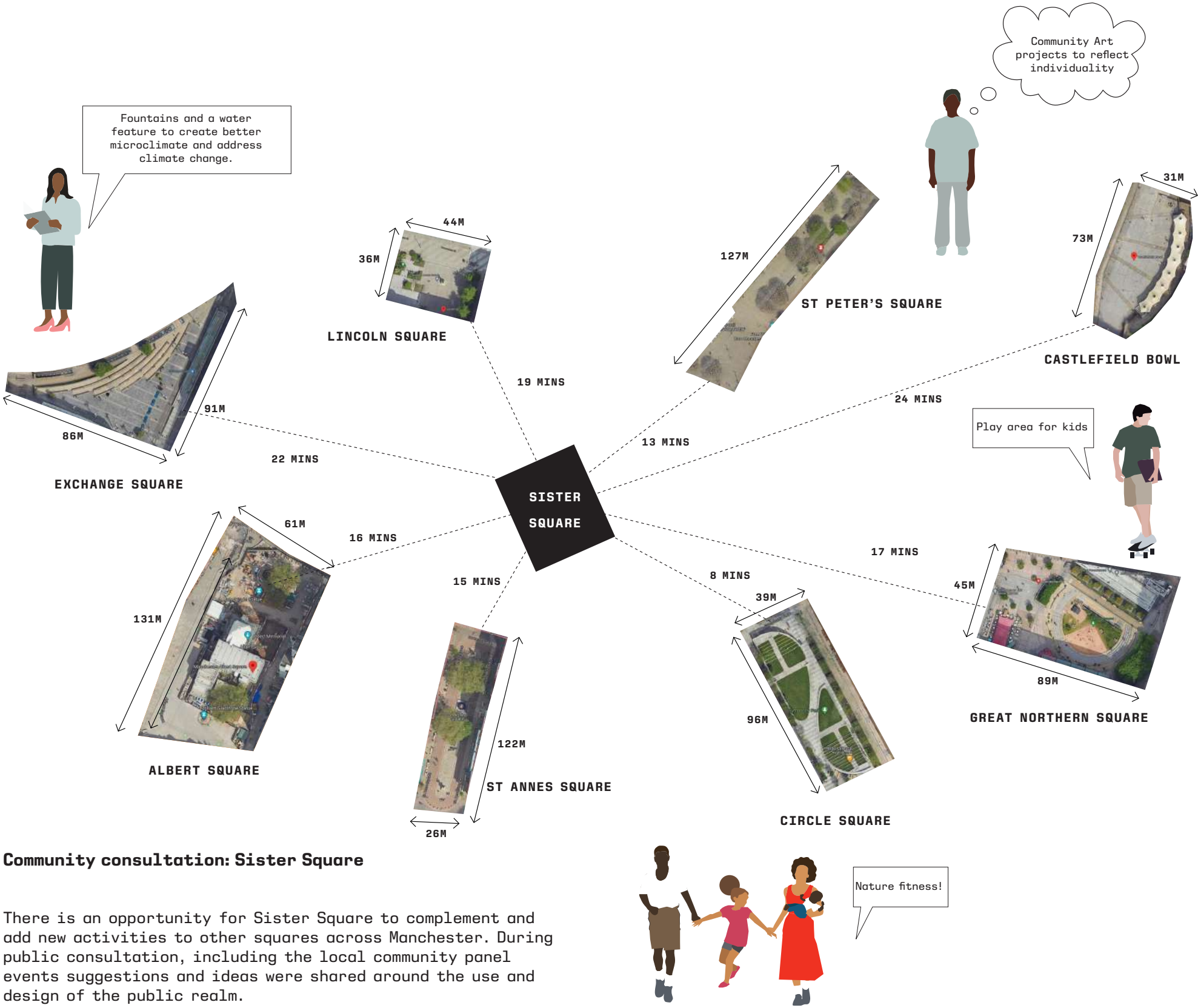
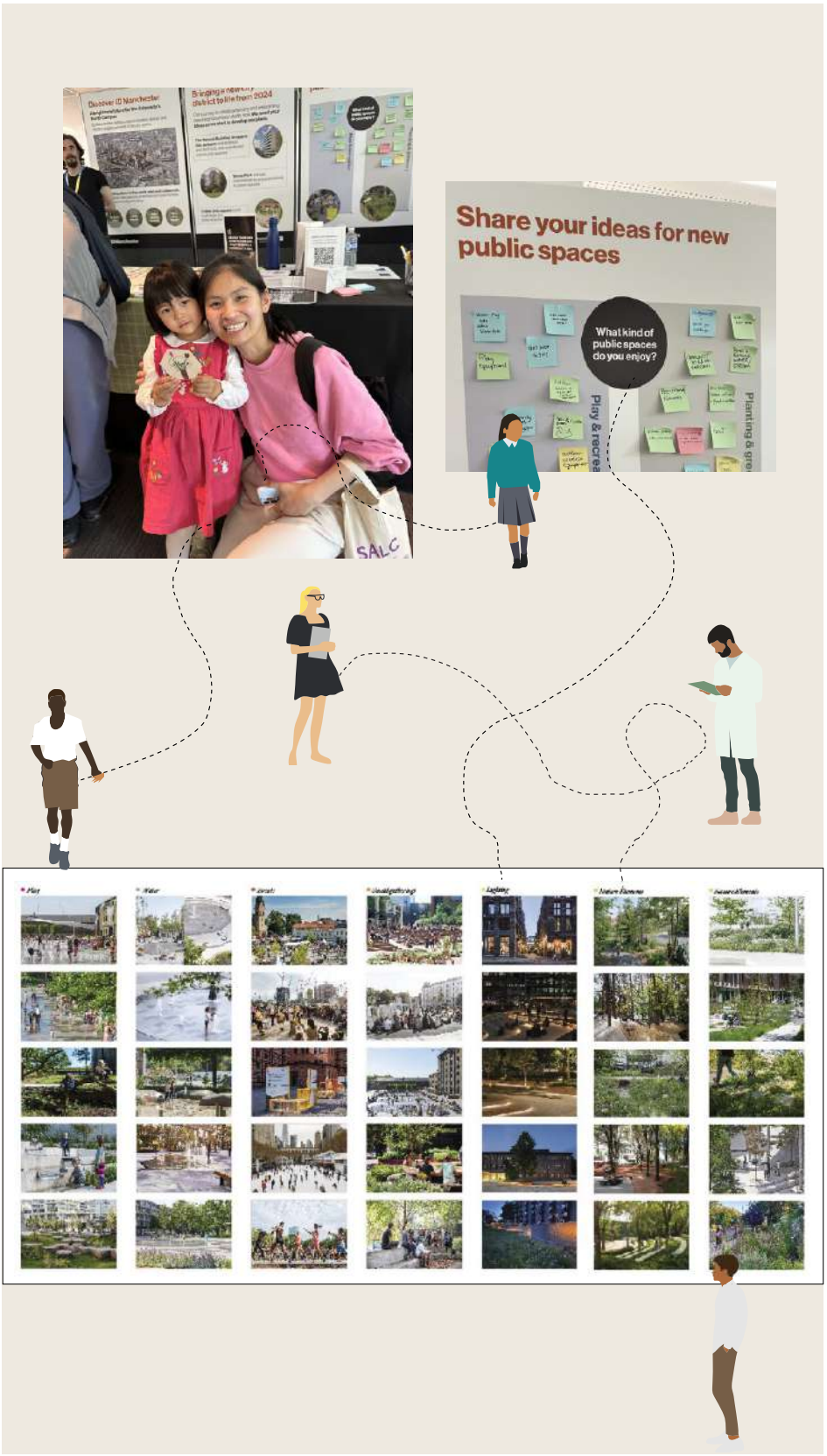
Cycle parking will be provided inside the Plot C building, but also in the public realm, close to strategic entrances. In total 35 bike stands embedded in green pockets.



Placemaking

The Plot C site consists of five well-defined areas with their own character, with an opportunity to create an attractive series of public space. The identities of the areas are strengthened by preserving the unique heritage elements and art pieces. See pp.145-146.

5.2.8 POSSIBILITY FOR ACTIVITIES AND EVENTS



5.3 DESIGN DEVELOPMENT

5.3.1 DESIGN EVOLUTION OF PUBLIC REALM AND LANDSCAPING PLANS

The public realm strategy for Plot C has undergone an extensive design evolution, shaped by the site’s complex topography, existing heritage, ecological value, and the ambitions set out in the SRF principles and client brief. The process has led to a series of distinct character areas, each responding to opportunities and constraints to create an inclusive, connected, and insights-driven urban environment.

Initial site analysis identified key spatial challenges—including a 5m level change along Altrincham Street, the retention of the historic Hollaway Wall, and existing trees. These informed a strategy that balances:

- Placemaking: Using the site’s inherent character to shape identity and atmosphere.
- Inclusion & accessibility: Designing for seamless movement and access throughout the site.
- Ecological enhancement: Building upon existing biodiversity, protecting mature trees, and creating microclimates with planting and wind mitigation
- Heritage integration: Reinterpreting existing features like the Butterfly Stairs and Hollaway Wall as assets within a contemporary public realm.

The SRF set clear priorities: high-quality public spaces, flexible use, ecological integration, and a strong pedestrian-first approach brought the following principles, which have guided the design, as described hereby.



A human collider

Spaces like Sister Square and Mill Lane are designed for spontaneous encounters, collaboration, and community activation—bringing people together informally throughout the day.



Connected, open and accessible

Interventions like the reconfiguration of the Butterfly Stairs and the 1:21 [with level landings] ramped route between Altrincham Street and Sister Square ensure barrier-free access across changing levels.



A living Landscape

Plot C’s public realm is designed as a living landscape – a dynamic, evolving environment that enhances biodiversity and supports daily life. By preserving as many as possible existing trees and integrating native planting, rain gardens, and local water management, the landscape fosters a healthier microclimate. The different character areas, such as Hollaway Forest and Sister Square, offer varied nature experiences, from wildlife habitats to spaces for relaxation. This landscape is envisioned to adapt over time, promoting environmental resilience and creating a regenerative urban ecosystem that nurtures both nature and community.



A flexible framework for flexible buildings

The landscape anticipates change—built to adapt alongside the buildings it supports, providing soft thresholds and spill-out zones that can shift in purpose over time.



Platform for the future, built on foundations of the past

Design interventions like the adaptive reuse of the Butterfly Stairs and Hollaway Wall embody circular economy thinking and heritage-led innovation, linking the site’s industrial legacy with its future as a civic and cultural hub.



Curated commons

Public spaces are flexible and layered—hosting events, nature, movement, and pause. These spaces support everyday life while accommodating programmed uses such as outdoor lectures, markets, or art installations.



Critical mass

Plot C supports critical mass by creating active, connected public spaces that attract people throughout the day. With key pedestrian and cycle routes, accessible entrances, and spaces for events and everyday use, the landscape encourages constant movement and interaction, contributing to a vibrant, well-used district.



An identity that expresses purpose and place

The reuse of materials, referencing of industrial elements, and integration of key views and structures [e.g. Hollaway Wall] contribute to a place-based identity specific to Sister.



Sustainable and regenerative

Tree retention, replanting strategies, SuDS integration, and microclimate-sensitive planting support environmental goals, while reducing urban heat island effects and managing stormwater.



Creative meanwhile use of buildings and spaces

Spaces like Mill Lane and Hollaway Place are designed to allow for evolving uses, small-scale events, or community-driven activity during different phases of development.

5.3.2 BUTTERFLY STAIRS

The Butterfly Stairs, originally known as The Sir Hubert Worthington Stair, are a modernist architectural feature located at the former UMIST campus on Altrincham Street in Manchester and to the north of the proposed Sister Square. This structure, along with its associated walkway bridge, has recently been granted a Certificate of Immunity from listing by Historic England, effective from October 10, 2024, to October 9, 2029.

The Butterfly Stairs form part of a larger architectural ensemble within the former UMIST campus, which has been undergoing significant changes in recent years. The University of Manchester has been consolidating its facilities, with many teaching and research functions relocating from the North Campus to other areas.

While the Butterfly Stairs themselves are not listed, they are considered an important part of the site’s heritage; however we see 4 key changes from the original design intentions, including the nature of the quadrangle they aimed to frame, that the buildings are proposed to change layout and function, and the back of house service road and paved paved footpaths will no longer be necessary with the construction of the service tunnel. In addition, the original ornamental pond has been since infilled with cobbles and a flower bed.

The first step in our design process was to understand the key elements of the stairs in more detail, including the loose blade column; structural supports; concrete treads; concrete platform and steel railings to see how they could be adapted into the concept design for Sister Square.

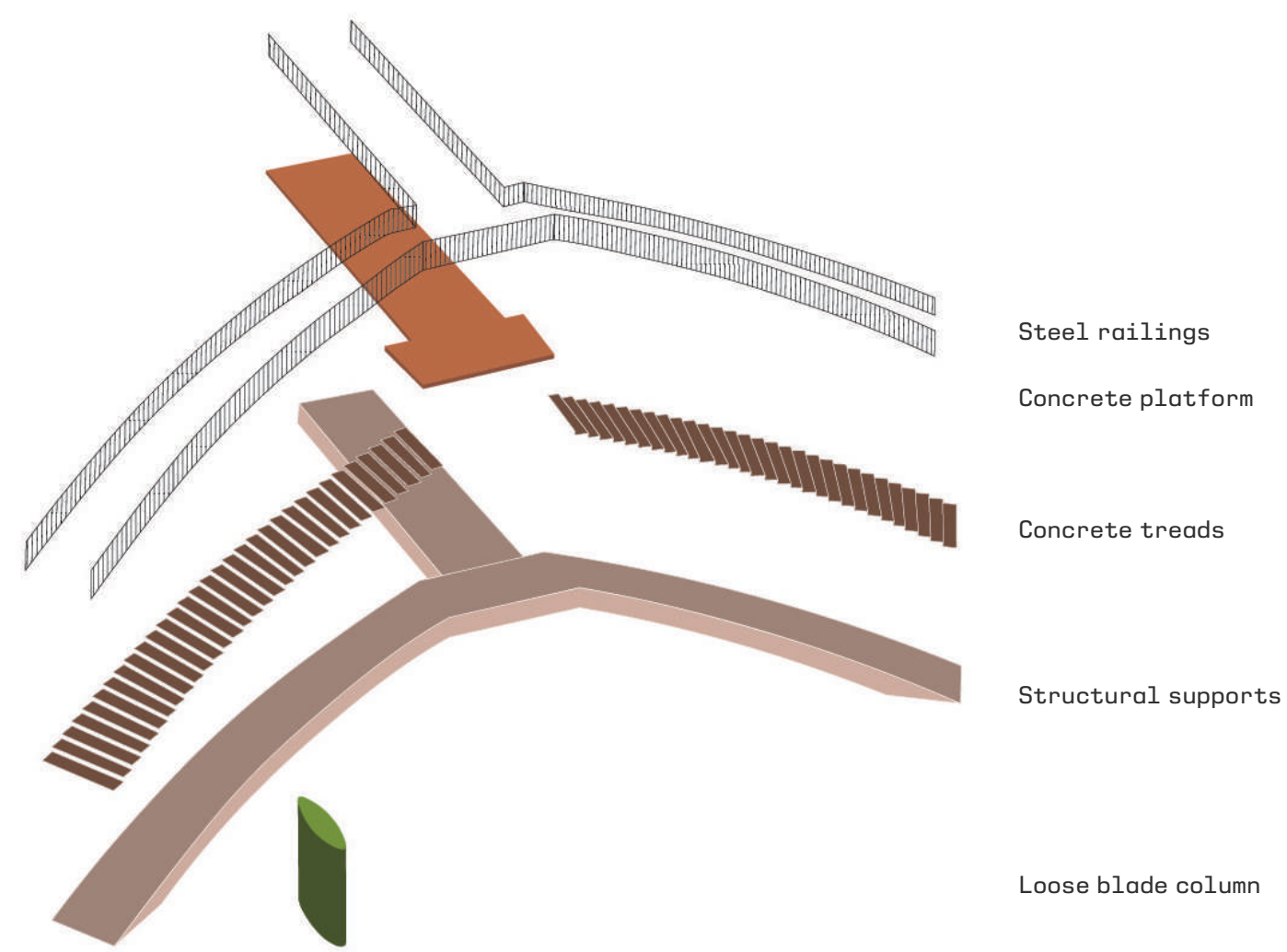
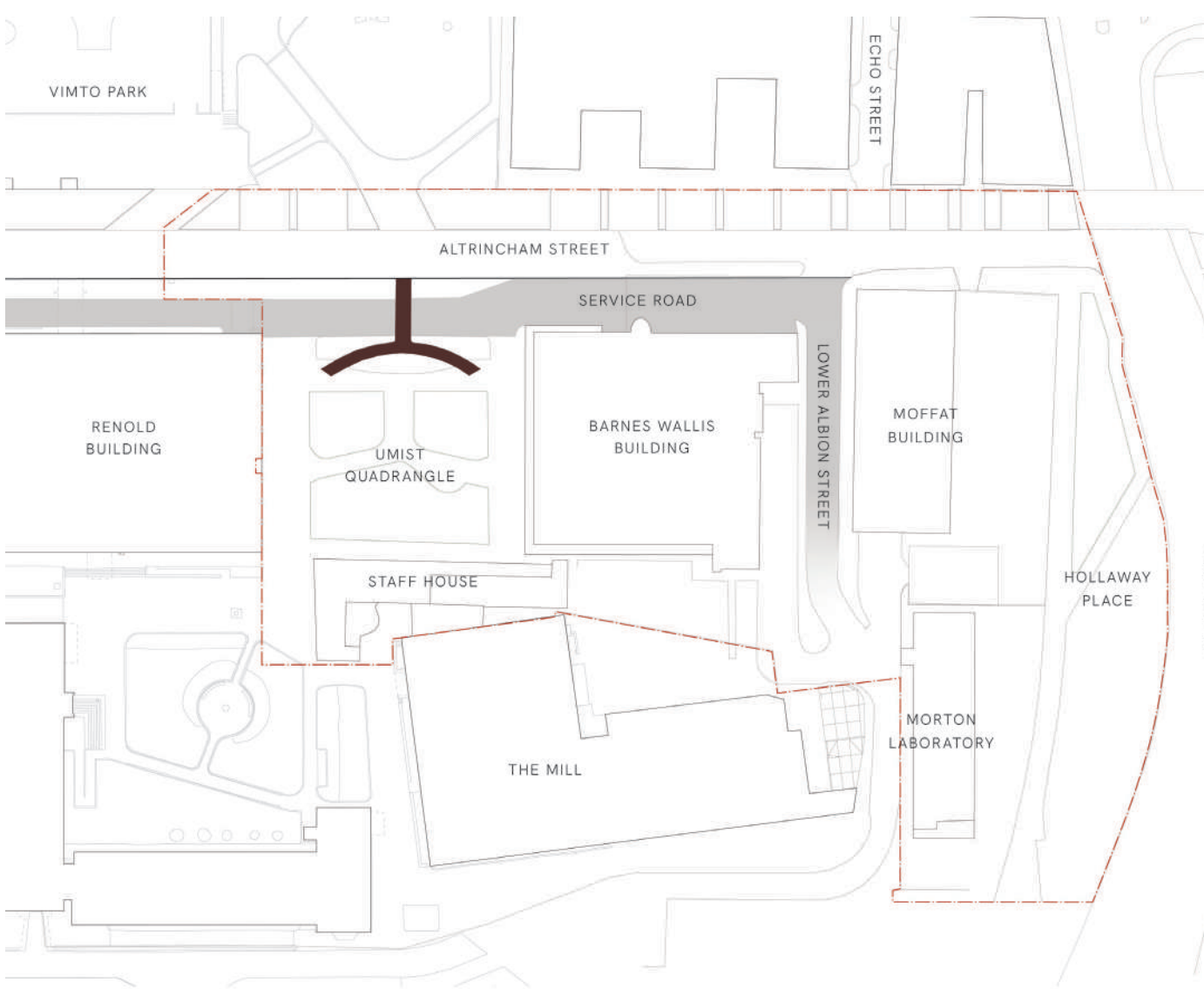


Newly completed butterfly stair, 1962. Photo: SLHA, ID Manchester, pp. 170



Butterfly stairs today © Google Earth.

5.3.2 BUTTERFLY STAIRS



Key components of the Butterfly Stairs and Walkway Bridge, formerly known as the Sir Hubert Worthington Stair.

The Butterfly Stairs are located to the south of Altrincham Street, providing a stepped connection between the north and south areas of the former UMIST campus.

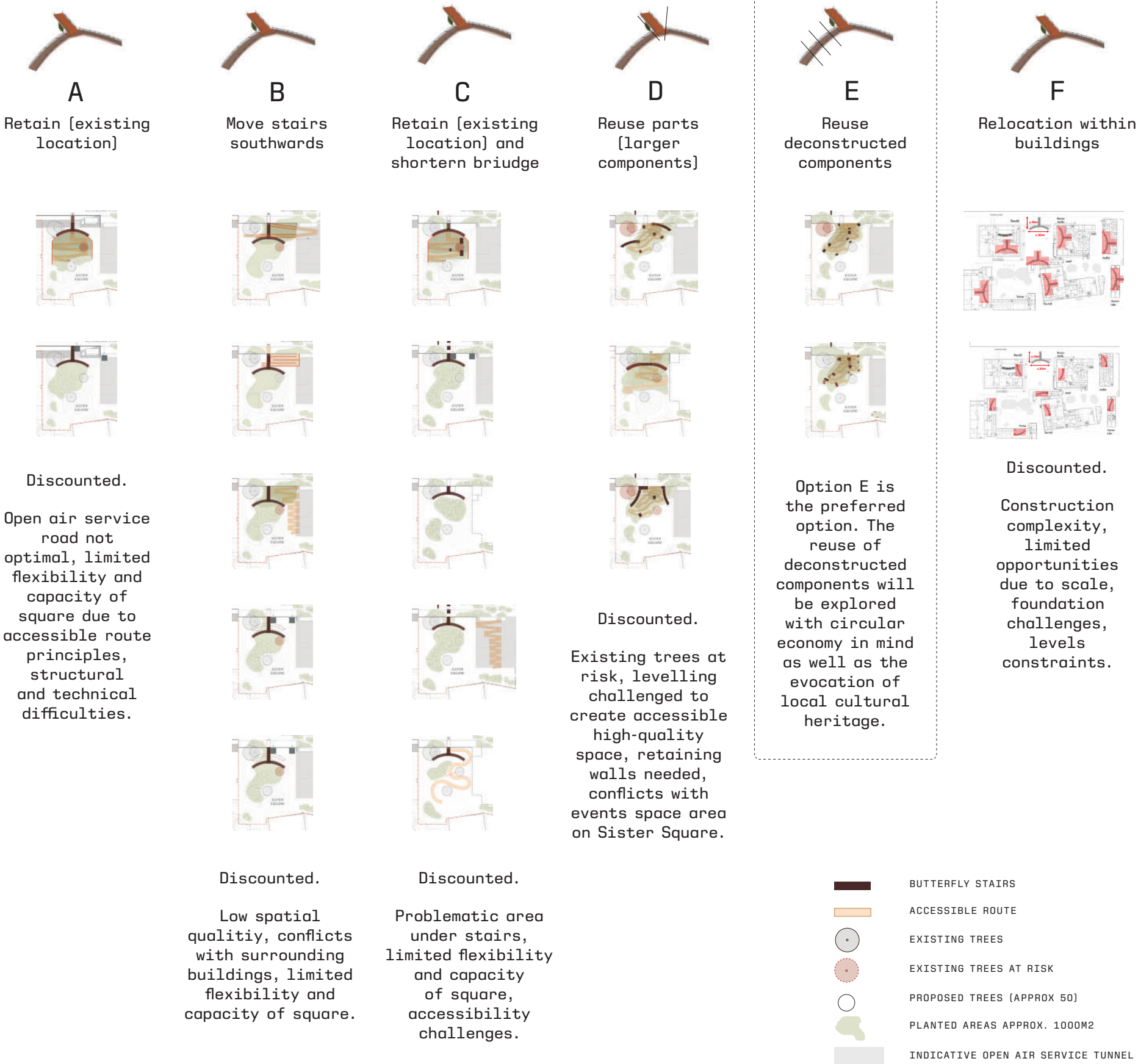
5.3.2 BUTTERFLY STAIRS

How to incorporate the Butterfly stairs into the Sister Square transformation?

The design team developed 19 distinct design studies, organised into 6 main approaches. This process included detailed input from the consultant team and each option was evaluated against an agreed framework. The outcome of this study was presented to Manchester City Council officers at a pre-application meeting in December.

- A. Retain stairs in existing location, with no service tunnel: this does not achieve a car-free masterplan and would result in a loss of existing high-value mature trees.
- B. Moving the stairs forward: the design team looked into multiple options for moving the stairs while adding an accessible ramp.
- C. Keeping the stairs in the existing location but shortening the bridge: an option was presented with a curved, snaking bridge, however the flexible area which can be used for events would be reduced.
- D. Reuse parts of stair as larger structural components: this is the preferred option as it promotes the active reuse of historic elements, it maintains access routes and ensures a car-free masterplan
- E. Reuse deconstructed components: this would ensure an accessible route could be achieved, which ensures design flexibility

Option E is the preferred option. The reuse of deconstructed components will be explored with circular economy in mind as well as the evocation of local cultural heritage.



5.4 DESIGN PRINCIPLES

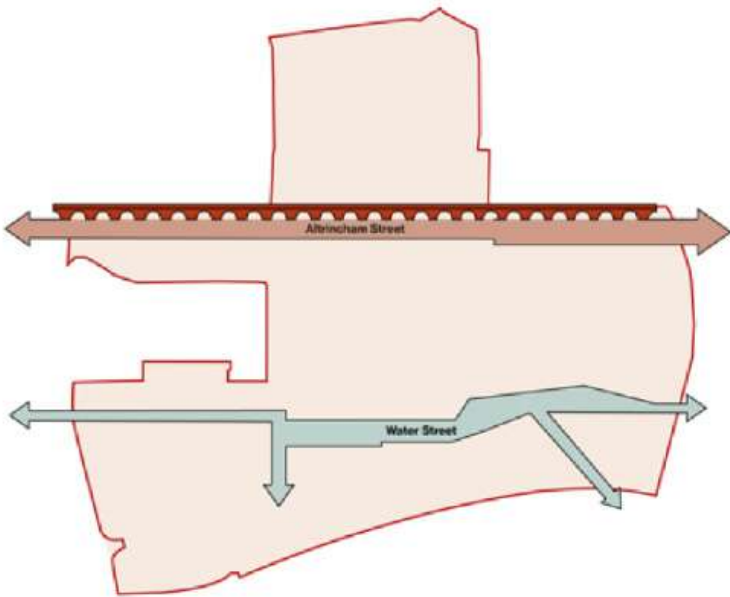
5.4.1 SRF PLACE-BASED PRINCIPLES CONNECTED, OPEN AND ACCESSIBLE

The SRF set out principles for the Sister site to be connected, open and accessible, with Sister Square in the center of the new, characterful routes and spaces, welcoming people into and through the heart of the place.

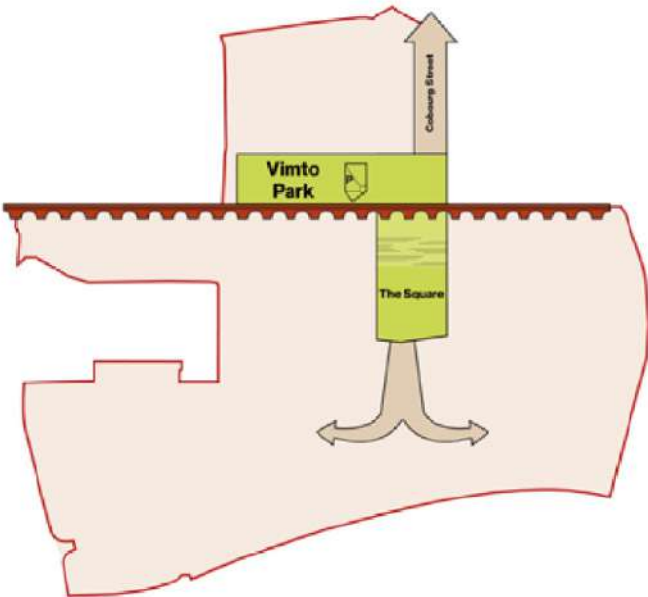
The former Bowling Green is to be transformed into a new civic-scale square forming the centre-point of Sister development. The square is to be of a scale and design capable of hosting a variety of public functions and activities.

Plans that successfully address the level change to create a seamless link between the northern and southern areas are to transform the space and make it an accessible route. However, the existing Butterfly Stairs are a constraint to this principle. This can instead be achieved by introducing generous steps within the civic square, incorporating gentle slopes and seating, trees and green infrastructure to make the space a functional part of the square as well as an accessible route.

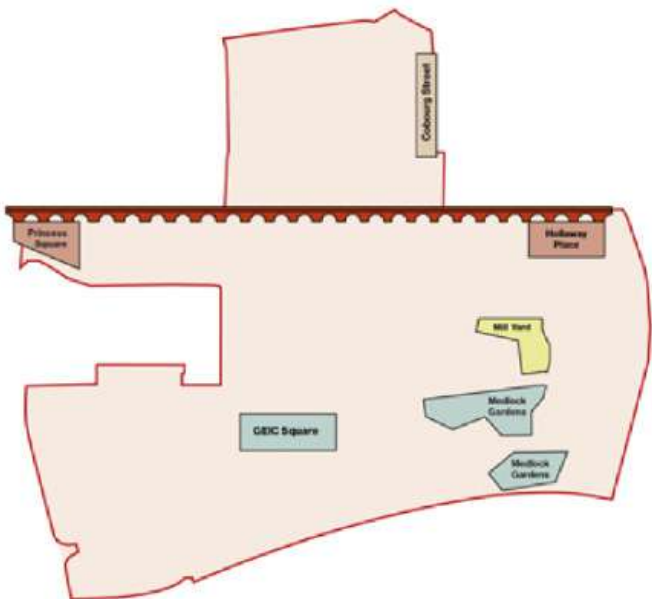
Alongside Sister Square, Hollaway Place at a crucial corner of the site, was set out to be a new entrance area of great importance to the wider Sister site. Also, Altrincham Street was defined as an important east-west connector. Furthermore, secondary routes such as Mill Lane were identified to tie the place together.



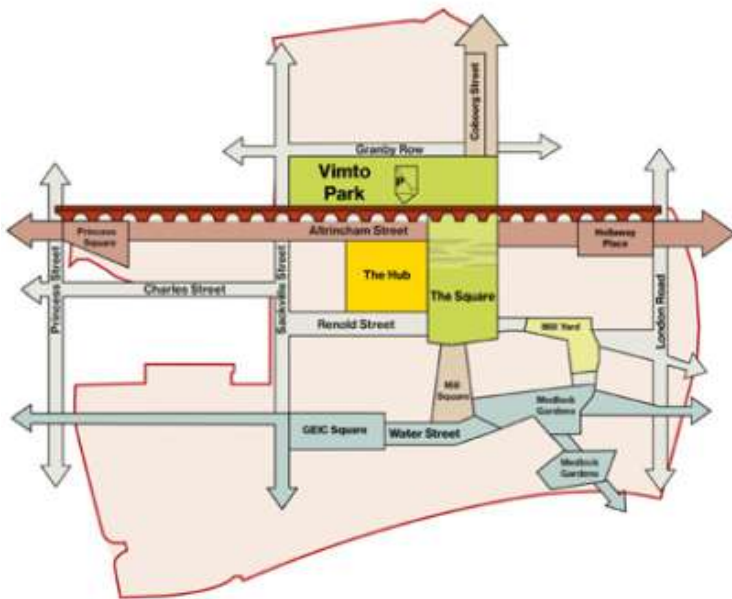
1. In the SRF, two principal east-west routes were set out to be created between London Road and Princess Street. Altrincham Street at the upper level could be widened to create a generous, safe thoroughfare leading from Piccadilly Station and Mayfield through to the Corridor, enlivened by re-activated railway arches.



2. In the SRF, a central north-south “spine” was envisaged, leading from Cobourg Street through the shared spaces at the centre of the Framework Area down towards Water Street, with the new civic center Sister Square at the heart of the SRF area. The existing situation with the Butterfly Stairs retained is a constraint to this vision.



3. Welcoming, outward-looking threshold spaces were to be created at the edges of the Framework Area, each with its own character, to act as animated gateways to the Sister site. The green space along London Road, which is currently a very poor and uninviting environment, presents a particular opportunity to transform this part of the city, improve links with Mayfield, and integrate with longer-term plans relating to HS2.



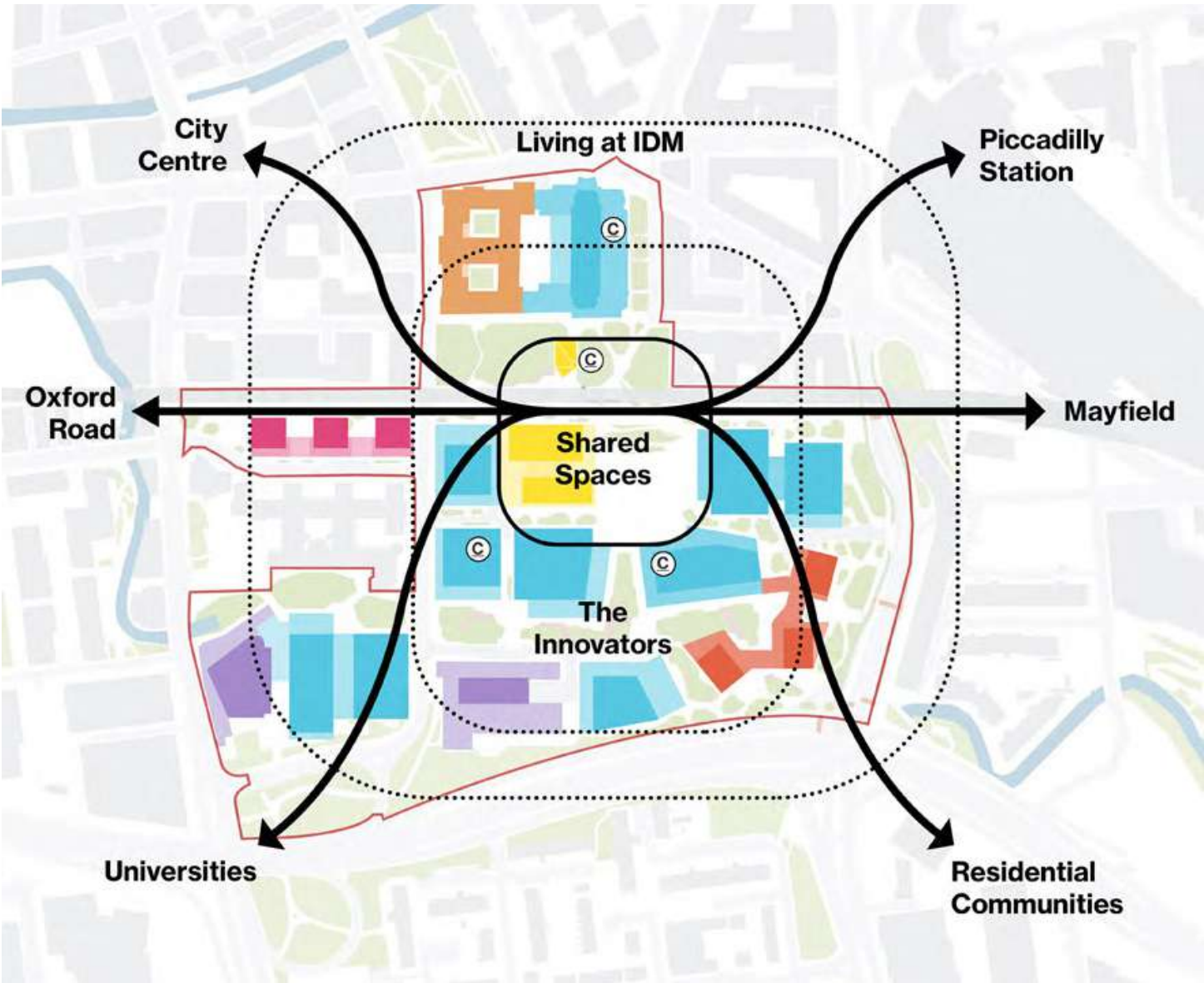
4. In the SRF, the equal importance of secondary routes and spaces to tie the place together and strengthen connectivity was also key. These opportunities include Altrincham Street, Hollaway Place, along London Road, and Mill Lane - areas that could be transformed into characterful places and “found spaces” between buildings old and new.

5.4.1 SRF PLACE-BASED PRINCIPLES

HUMAN COLLIDER + CONNECTED, OPEN AND ACCESSIBLE

The Sister site, as set out in the SRF principles, is not only to be connected, open and accessible, but also a human collider. This unfolds into the following:

- Strengthening movement patterns of people entering and moving through the Framework area, including key routes, such as the east-west connection along Altrincham Street.
- Widening of Altrincham Street, including new dwell spaces and the introduction of cycle lanes off public roads. Forming one of two principal east-west routes to be enhanced [identified within SRF], to create a generous, safe thoroughfare leading from Piccadilly Station and Mayfield through to the Corridor.
- Creative, landscaped solutions to provide accessible routes that address the large level changes, without the need to rely on lifts in the public realm.
- Restricting vehicle access [other than maintenance and emergency vehicles] from entering principles areas of the public realm and limiting deliveries and servicing to the periphery of the SRF Area, including utilising level changes to introduce a concealed servicing tunnel underneath a widened Altrincham Street.
- Designing Sister Square [including scale] to be capable of hosting a variety of public functions and activities - a new civic square at the heart of the SRF area.
- Supporting the creation of a central north-south spine, from Cobourg Street to the north towards Water Street [through Sister Square].
- Creating a welcoming, outward looking space at Hollaway Place. Hollaway Place is identified as one opportunity area for intervention around the periphery of the SRF area to help knit Sister into the urban fabric of the city by repairing the entry sequence to the Oxford Road Corridor from Piccadilly for pedestrians and cyclists.
- Creating a welcoming, outward looking space along London Road, which within the SRF is recognised as being a transformative opportunity given the existing very poor and uninviting environment.
- Successfully addressing level changes to create a seamless link between north and southern areas, making the space an accessible route for all - namely between Altrincham Street and Sister Square [currently the Bowling Green], through the removal of the Butterfly Stairs.



Key SRF diagram explaining the Human collider concept.

5.4.1 SRF PLACE-BASED PRINCIPLES A LIVING LANDSCAPE

The SRF envisioned a living landscape, making use of planting and water within the public realm to support people’s well-being, habitats, biodiversity, and climate change mitigation, with Sister Square central to this development. A diverse urban patchwork celebrating Manchester’s spirit!

The different streets, squares and green spaces envisaged within the public realm were in the SRF framed to play an important place-making role and contribute to the Framework Area’s climate resilience. High-quality open spaces with a distinct identity were to celebrate and build upon the Framework Area’s character and sense of place, creating a new place for future generations. An opportunity to showcase the heritage of the area within the public realm was identified, whilst restoring the ecological value of bluegreen habitats in nature areas and creating access to a thriving and innovative urban life.

The concept of “city nature” is defined in the diagram on this page, illustrating a sustainable and regenerative approach to public spaces, as shown in the SRF. Adopting this approach in the landscaping at the Sister site can help to deliver the vision for a nature-led place in the heart of the city.

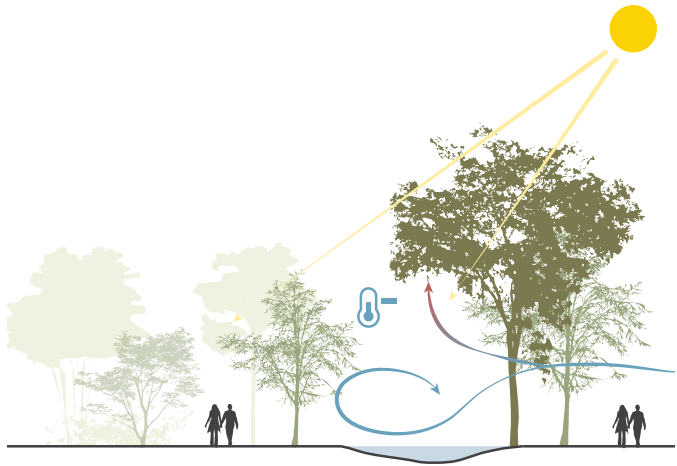
Furthermore, the SRF principles included natural low points in the topography to be utilised for water capture, creating varied and changing landscapes across the site.

Biodiversity principles such as connectivity, local dicersity, habitat variations, and allowing natural processes and dynamics to take over were also set out as living landscape principles.

Finally, an important part of the living landscape principles were the trees and planting, which not only contribute to a biodiverse natural environment, but also provide a variety of ecosystem services beyond being able to support local fauna species.

Within the Framework Area, it was envisaged that:

- High value mature trees will be retained wherever practicable.
- Where trees are lost, they would be replaced at a ratio of at least 3:1 if the vision for a genuinely nature-led place is to be achieved.
- New planting would include around 70% native species to promote biodiversity and habitats.
- Opportunities could be explored for felled trees to be re-utilised on-site - for example as public realm furniture and play elements or woodchip and habitat creation - reducing offsite transportation and processing and their associated carbon emissions.



Microclimate

Creating a pleasant atmosphere at street level can encourage people to be outside and enjoy the public realm, leading to thriving urban spaces. Microclimate considerations should therefore be considered through the design and selection of hard and soft landscaping materials and orientation of buildings and spaces. Integration of soft landscaping and trees within the public realm and planting on building terraces can provide shade and shelter from the sun, wind and rain making for a more comfortable environment for people to dwell. Selection of high albedo materials [i.e. those that absorb less heat] can further mitigate heat island effects in high-density urban environments.



Playful public realm for all ages

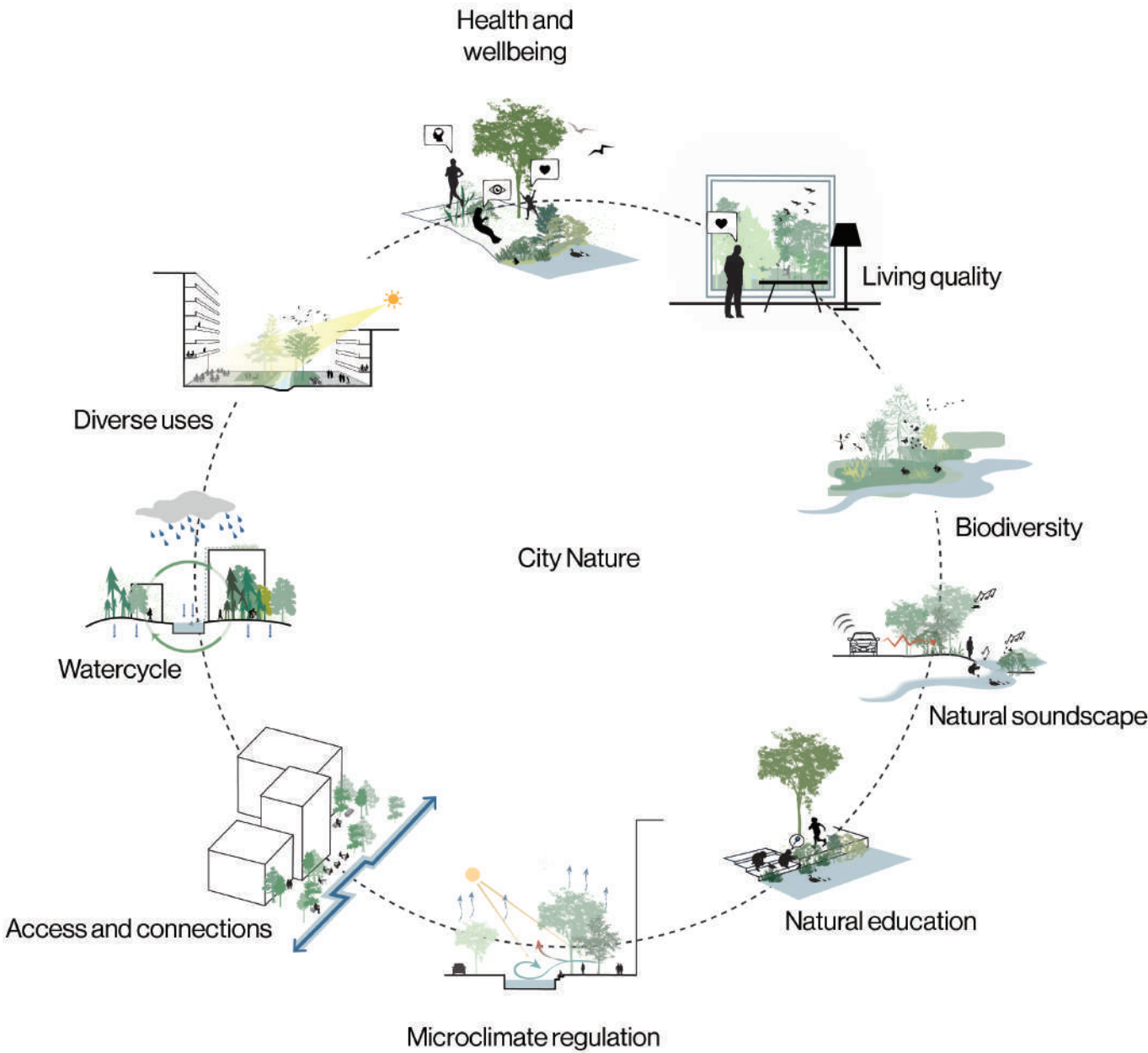
Future users of the public spaces will include those working within the Sister site and the wider city centre, local residents of all ages, and visitors to the city. Well-designed, nature-led public places can meet the needs of each of these groups, promoting equity through free access to nature. The design of public realm can encourage interaction and play, letting children and adults enjoy nature, heritage and water assets. This could include both formal play elements and opportunities for spontaneous, incidental play within the landscape.

5.4.1 SRF PLACE-BASED PRINCIPLES

LIVING LANDSCAPE + SUSTAINABLE AND REGENERATIVE

The plot C design principles elaborate not only on the Living landscape principle, but also on the SRF place-based principle Sustainable and regenerative. The following key moves draw from both principles:

- Delivering a significant betterment on the regulatory 10% BNG target [16.80% net gain for habitat areas and 233.45% net gain for hedgerows];
- Integration of soft landscaping and trees within the public realm and identified opportunities for planting on the terraces of C1 Building and C2 Building to create a comfortable environment for dwelling [including by providing shade and shelter];
- Delivering a variety of spaces within the public realm, including features that encourage interaction and play, to promote enjoyment of nature, heritage and water;
- Improving access and links to nature through significant enhancements to the existing, underutilised public realm e.g. widening of Altrincham Street, creation of an ecological link within Sister Square and the formation of ‘Hollaway Forest’ adjacent to London Road;
- Including new planting being a minimum of c. 70% native species to promote biodiversity and habitat;
- Retaining trees on the site, where it has been practical, including high value mature trees. 26 existing trees are proposed to be retained within the Site [of the existing 54]; and
- Planting 270 new trees, making a significant contribution to the SRF vision for over 400 trees across the SRF Area, whilst also exceeding the tree replacement ratio of at least 3:1 within SRF [with a 10:1 ratio] to ensure a nature-led place is achieved.
- Integrating upcycled materials into the hard landscaping materials to reduce waste and environmental impact [e.g. demolition materials repurposed, such as within aggregates];
- Incorporating reclaimed materials recognising celebrating the historic character of the Site and wider area; and
- Introducing multi-functional water and drainage features that contribution to the blue infrastructure network e.g. water channels for irrigation and surface water drainage, whilst illustrating the journey of water through the landscaping.



Key SRF diagram illustrating the Living landscape concept.

In the SRF, the concept of “city nature” was defined as illustrated here - a sustainable and regenerative approach to public spaces. Sister Square was set out to be one of the principal areas of public realm with city nature, but in Plot C, city nature is not only limited to Sister Square, but part of the whole site.

5.4.1 SRF DESIGN PRINCIPLES



Key N-S connection

This characterful route is to be configured to channel movement and become a focal point for social interaction, creating opportunities for the chance meetings and collaborations that can allow innovation to flourish.

+



Access for all

Creative, landscaped solutions to provide step-free accessible routes that address the large level changes across the Plot C site without the need to rely on lifts within the public realm.

+



Preserve existing trees

High value mature trees envisioned to be retained wherever practicable. Where trees are lost, they are to be replaced at a ratio of at least 3:1 to achieve a genuinely nature-led place.

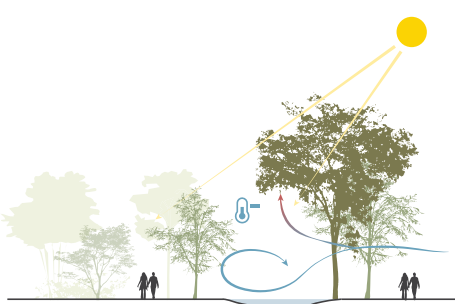
5.4.1 SRF DESIGN PRINCIPLES DESIGN RESPONSE

For Plot C, different variables have been considered depending on sunlight conditions. For the planting strategy, tree species are chosen to shade during summer months, or allow wind breezes through, mitigating hot weather, for instance by London Road. In some areas, such as Altrincham Street, the trees should let sunshine through, especially during winter months which can be done by planting deciduous species. Trees are placed in clusters to create windbreak to protect from cold breezes in the winter. Areas for social activities have been placed while responding to the needs of the future users and the activities these spaces are planned for.



Key N-S connection

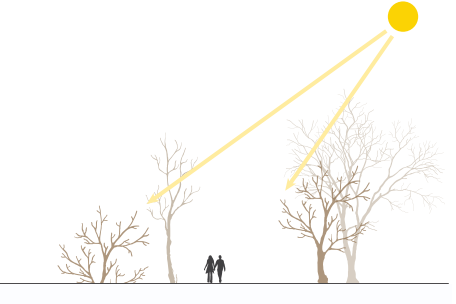
The north-south connection is key in the Plot C landscape design principles, following SRF principles to allow for all kinds of movement and become a focal point for social interaction, creating opportunities for the chance meetings and collaborations that can allow innovation to flourish.



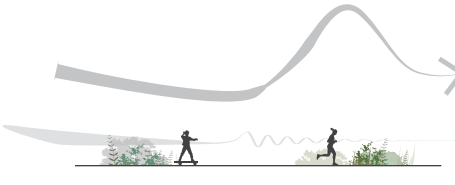
Shading and cooling - adding planting in layers



Controlling the breeze with a diverse approach to planting



Letting the sunshine through in strategic locations



Placing programme according to microclimate



Access for all

All across Plot C, accessible routes are provided as part of a creative, landscaped solution - without the need to rely on lifts within the public realm, as envisioned in the SRF.



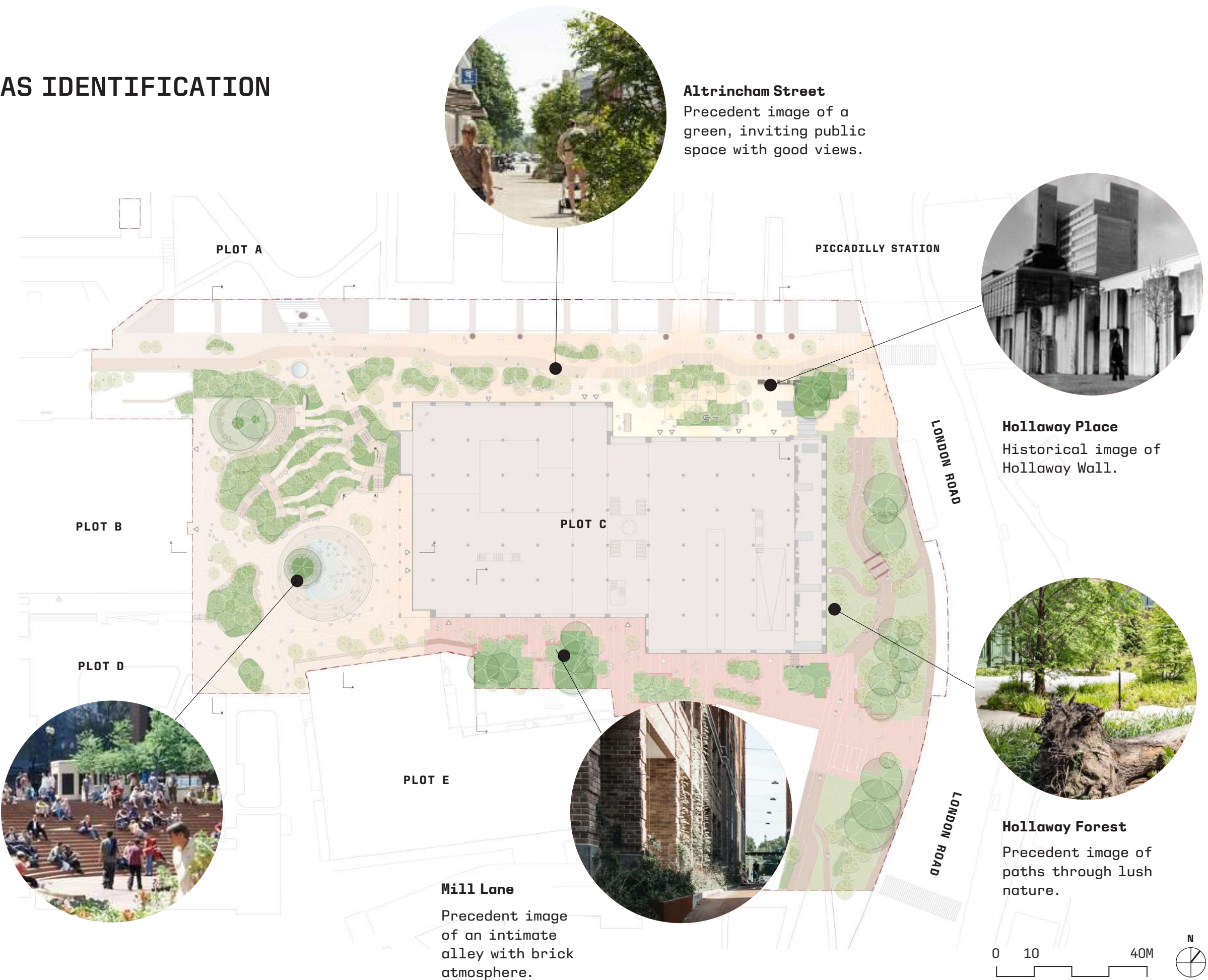
Preserve existing trees

Existing trees are to be retained wherever practicable in Plot C, including some important mature trees. Where trees are lost due to levels/new construction, they are replaced at a ratio of at least 3:1 to achieve a genuinely nature-led place across the plot.

5.4.2 CHARACTER AREAS IDENTIFICATION

On the Plot C site, five different character areas have been defined around the new building. The landscape is thus designed as a series of attractive public spaces, well connected and with their own specific identity and character.

- Altrincham Street: a lush green public space stretches along the arches.
- Hollaway Place: a welcoming square with distinctive features that tell the story of the site - the arches, Hollaway Wall, recycled materials - leading towards the building's main entrances.
- Sister Square: a central event space with space for both everyday life and special events, surrounded by green slopes and edges to sit on, plus an accessible route up to Altrincham Street.
- Mill Lane: a cosy walkway in red bricks, celebrating the Manchester brick identity, with SUDs and benches along the way.
- Hollaway Forest: a lush buffer zone towards London Road, providing good connections and nature experiences for people.



* pictures used as reference

5.4.2 CHARACTER AREAS IDENTIFICATION

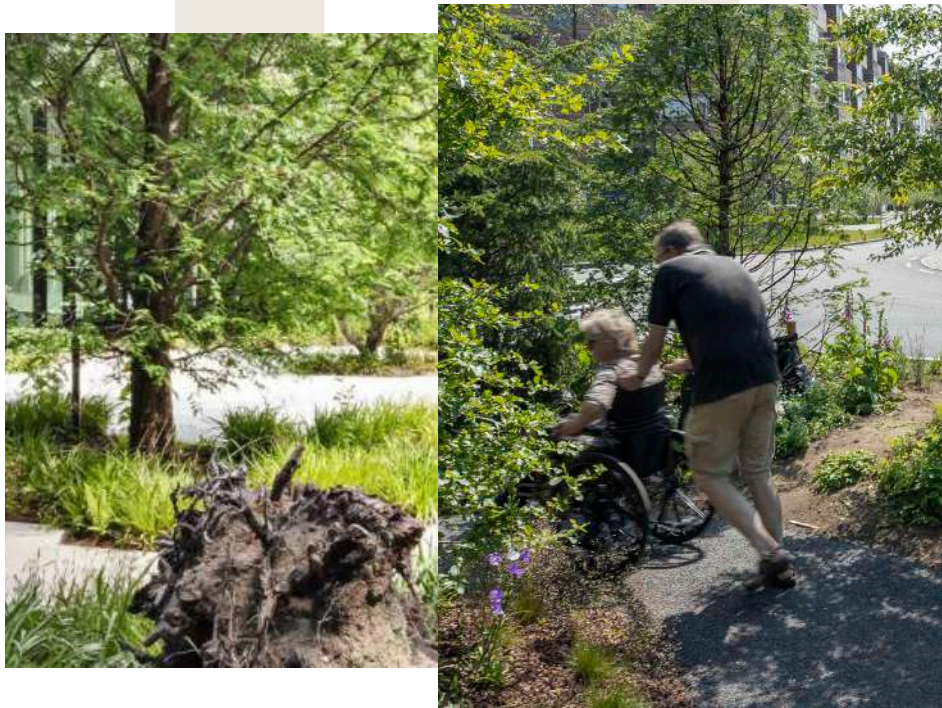
The Plot C character areas have been designed with the principles from the SRF as a base, as well as a response to the site analysis, opportunities and constraints.

- Altrincham Street: an attractive public street connecting east with west, providing access for all [pedestrians and cyclists] with good space for both flow and dwelling. City nature, spill out space along the arches, strategic viewlines kept open.
- Hollaway Place: a welcoming square providing arrival experience into the wider Sister site, celebrating the Hollaway Wall and blooming with nature, while keeping important views open to the main entrances and Altrincham Street arches.
- Sister Square: a central event space connecting the northern Sister site with the southern areas, with a fully accessible route 1:21 slope with landings, and accessible stairs along the green, biodiverse slope. The way of water as a part of the design.
- Mill Lane: a cosy promenade mitigating level changes for full accessibility, while also giving space to urban nature and rain gardens with seating.
- Hollaway Forest: a lush buffer zone towards London Road, providing accessible connections and optimized micro-climate with existing trees together with new planting, while providing strategic openings to the Hollaway Wall.



5.4.3 PLOT C CHARACTER AREAS

The five character areas of Plot C will be presented in the following sub-chapters, with introduction to the areas diverse design, look and feel of materials in hardscape and furnitures, possible special features, as well as planting and lighting character.



Hollaway Forest

A biodiverse urban nature trail adjacent to London Road. Links into the wider Manchester cycle and pedestrian network, and to the Hollaway Place pedestrian connection.

Function: Connecting paths in nature, with possibility to rest and dwell towards the north [Hollaway Place] and south [Mill Lane] connections.



Hollaway Place

A key link to Piccadilly Station and beyond. The identity is shaped by the language of Hollaway Wall and upcycled materials. Southern link to Hollaway Forest.

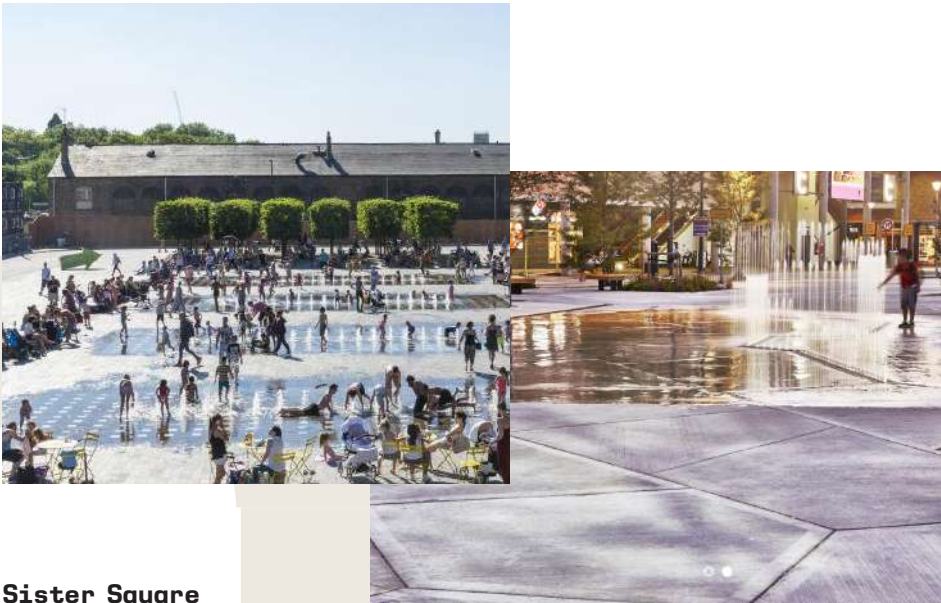
Function: entrance plaza, place to rest and meet by Hollaway Wall, smaller events between the building main entrance and the arches.



Mill Lane

Identity inspired by historic red bricks and lush rainbeds. Manchester Alley has an informal, incubator feel, is an active street throughout the day, and possibility to come alive at night as it is connected to the indoor spaces in the new buildings.

Function: A cosy pedestrian alley with benches to rest and meet, hang out around the rainbeds.



Sister Square

The heart of the Sister masterplan. Designed to be active both day and night and throughout the year. Adjacent buildings are commercial, cultural or offices and spill out to shape the identity of different areas of the square.

Function: Flexible use ranging between everyday situations with possibility to experience nature. rain water, play, meet, or pause on the stepped benches. Different areas adjacent to building entrances to host events of different sizes, e.g. an outdoor lecture by the amphi steps, or a farmer's market on the main square.



Altrincham Street

An urban nature link to Sister Square along the historic red brick viaduct arches. The planting is vibrant, colourful and dynamic and changes with the seasons. The arches links are activated with light and installations.

Function: Spill-out space by the arches function as flexible café areas. Cycle lane and pedestrian zone for flow. Benches and areas to rest by green islands. Connecting north-south and east-west.

5.4.4 LANDSCAPE DESIGN STRATEGIES

The landscaping approach for Plot C is rooted in nature-based, insight-driven design, placemaking and identity-building, achieved through a carefully integrated strategy that encompasses materials reuse, lighting, planting, and flexible public space programming. Across all five character areas: Sister Square, Altrincham Street, Hollaway Place, Mill Lane, and Hollaway Forest, the aim is to balance a coherent identity with distinctive local atmospheres.

Overarching themes & strategies:

1. Materials & Placemaking

Reuse as identity: Existing on-site materials [such as paving, furniture, and lighting fixtures] are repurposed to preserve site history and reduce environmental impact.

Distinct zones, shared language: New and reused materials are blended to define the five character areas while maintaining a cohesive design language across Plot C.

2. Lighting strategy

Wayfinding & human scale: Lighting is designed to enhance orientation, safety, and atmosphere by highlighting key routes and features at a pedestrian scale.

Placemaking through illumination: A unified family of lighting fixtures fosters visual continuity, while subtle differences support local character.

Balanced visibility & safety: Avoiding overly bright or dark zones improves comfort and fosters connection between spaces, supporting both ambiance and visibility.

3. Planting & Ecology

Ecology-led design: Planting enhances biodiversity and urban nature by responding directly to existing environmental conditions.

Climate responsiveness: Vegetation is used to improve microclimate conditions, reduce urban heat, and address wind and pollution.

4. Events & activation

Flexible use of space: Plot C supports a wide variety of public uses throughout the day and year. Spaces are designed to accommodate both planned and spontaneous activity.

Examples of diverse programming by character area:

- Sister Square: Large-scale public gatherings
- Altrincham Street: Spill-out and mobile events like parades
- Hollaway Place: Community and building-based events
- Hollaway Forest: Nature, sports, and public art
- Mill Lane: Intimate, small-scale gatherings

5. Public Art

Public Art includes the preservation of existing key heritage structures. Existing art pieces on site proposed to be placed to locations where they are enhanced and contribute to spacial identity of the different character areas.

On the following pages, the design principles for materials look and feel, lighting, planting, and events is presented.



Precedent image from Bjørvika, SLA



Precedent image from SEB City Dune, SLA

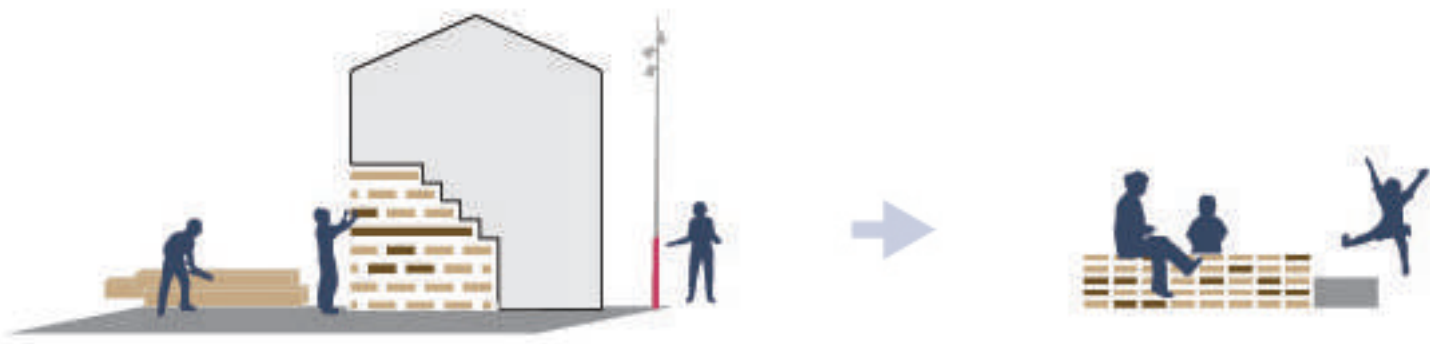
5.4.5 LOOK AND FEEL / MATERIAL APPROACH

Pavement, furniture, and lighting structures

The new identity of Sister will be defined by materials. Their visual and sensory characteristics define the feeling of the space as well as its distinctive identity. Reusing some of the materials currently found on site would contribute to placemaking as well as creating a link between the site history and its future. The material reuse will range from furnitures to pavement to equipment such as lighting structures. The reused materials will, together with new materials, form an important part of the separate character areas’ identities and atmospheres across Plot C.



The look and feel of the five different character zones are specific for each area and explained in the area proposal sub-chapters: Sister Square, Altrincham Street, Hollaway Place, Mill Lane, and Hollaway Forest.



Reuse and refurbishment

Furniture



Pavement



Equipment

5.4.6 LIGHTING STRATEGY

The light strategy for Sister is developed to fulfill requirements of wayfinding, placemaking and safety; while also responding to input from the community panel / public consultation.

Wayfinding & scale

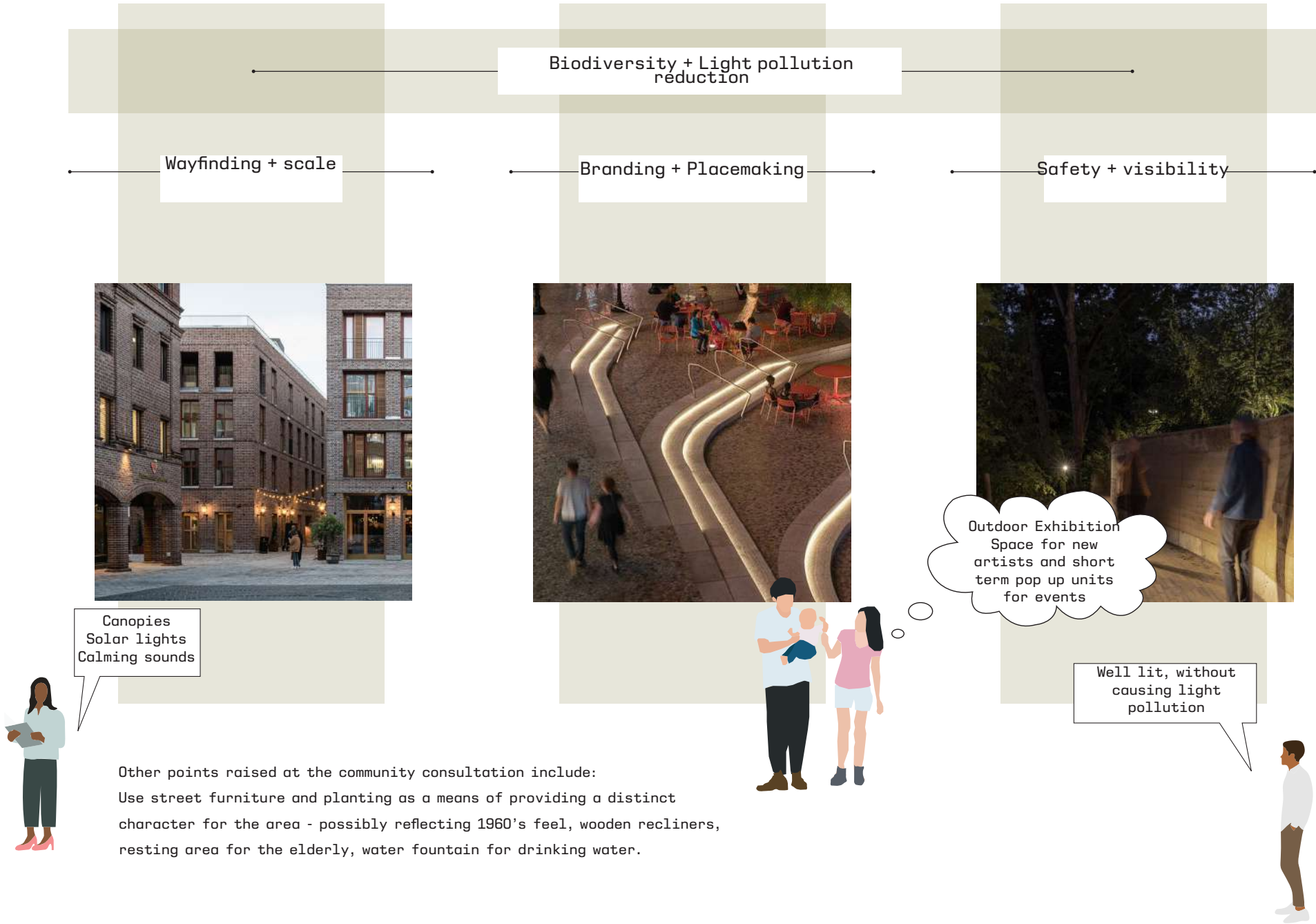
- Strategic illumination of key landmarks, pathways, and vertical surfaces across the Sister masterplan improves visibility and orientation. Bringing lighting down to a human scale creates a more intimate atmosphere, enhancing perceived safety and improving navigation.

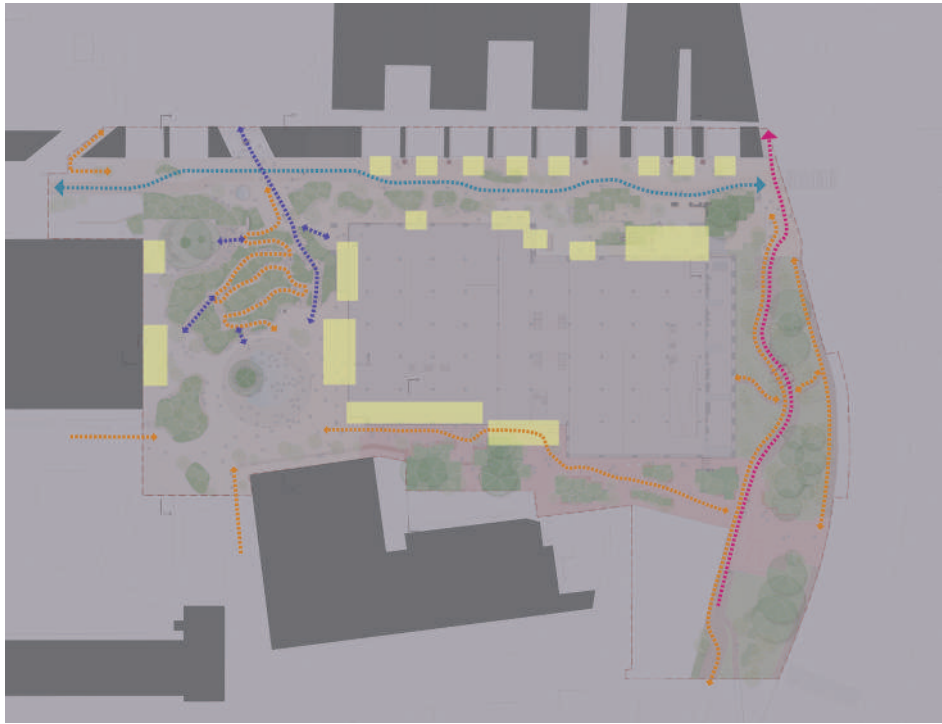
Branding & placemaking

- Lighting is designed to create distinctive visual identities across the different character areas on the Sister site, while having an overall coherence and shared identity. A family of lighting fixtures with a shared look and feel will enhance that feeling of shared identity across the area.

Safety & visibility

- By reducing overly bright areas and eliminating stark contrasts between lit and unlit zones, this approach improves overall visibility and allows people's eyes to adjust better to nighttime conditions. Strategic use of darkness increases visual contact between people in different areas, fostering a sense of connection and improving perceived safety. Additionally, a well-balanced lighting scheme that incorporates both light and darkness can highlight important features and pathways while preserving the natural ambiance of the space.





- Entrance transition zones
- Cycle routes
- Accessible pedestrian routes
- Mixed cycle and pedestrian
- Pedestrian routes

Lighting strategy summary

- Overall lighting strategy to tie the area together.
- Focus on key circulation routes and building entrances.
- Coherent lighting identity for added brand identity.
- Balance between light and darkness, while ensuring the perceived safety of visitors.
- Lighting approach supports placemaking for character areas.

The lighting in Sister is designed to reduce light pollution, reduce energy consumption and negative effects on biodiversity. The strategy is to work with the following all over the site:

- Dimmable LED drivers e.g. DALI
- CCT: 2700K (Warm light)
- Glare control: Shielded and aimed downwards
- Reuse on site materials and upcycle old fixtures

Event lighting

The lighting in Sister square should be programmed to support selected scenes for various events through the year:

- Lighting is a powerful tool for creating variations in the “vibe of the square” and programmable lighting allows for wireless changes between predefined lighting scenes.
- It is important to prepare for installation of special event lighting with electric supply cabinets with sufficient power allowance e.g. Christmas lighting or a concert.

Light transition zones

Surrounding buildings and light sources will be taken into close consideration when designing the lighting for public realm spaces in Sister.

Spill lighting adds a significant layer of lighting, and it is important to design for a smooth transition, in order to create a comprehensive lighting plan.

The character lighting from areas and building openings in close proximity to public spaces will count in as spill lighting in the overall plan, supporting the transitions from urban space to indoor.

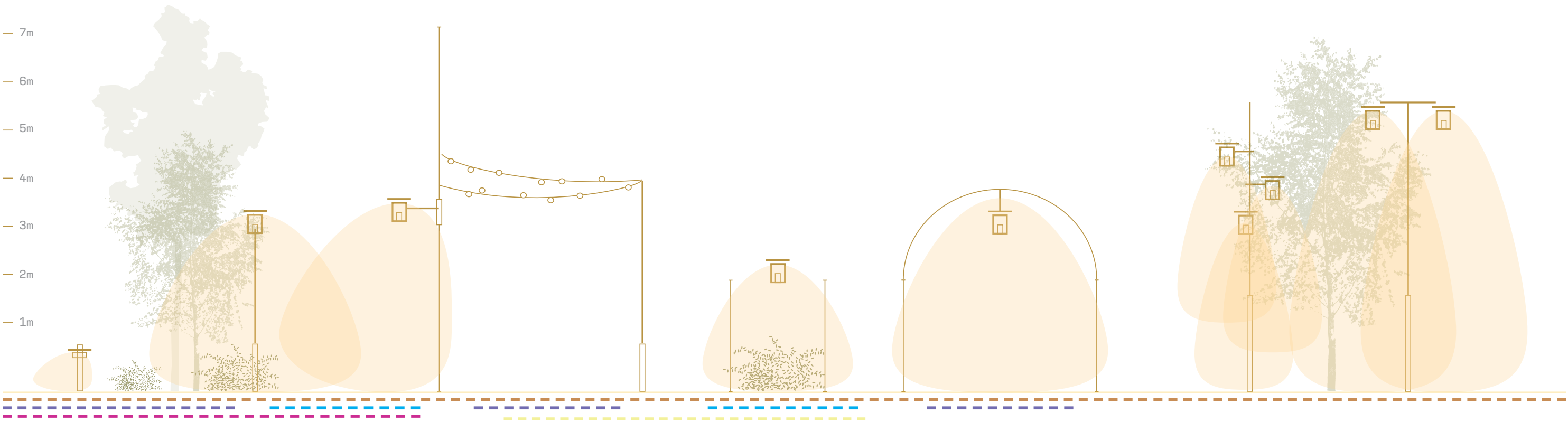
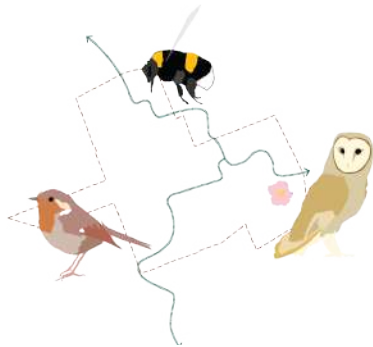


Diagram showing how a shared luminaire family can create a shared identity across various zones

5.4.7 PLANTING STRATEGY

The planting strategy for Plot C is the direct result of the analysis of existing environmental and ecological conditions on site. It is developed in order to strengthen existing urban nature, connections and habitats, but also to enhance spacial qualities and local identities across the Plot C site and its character areas. The planting is also carefully designed to create improved microclimatic conditions based on wind and sun analysis, while mitigating urban heat island and local pollution.



Strengthen habitat connectivity



Respond to local growing conditions



Retain high value existing mature trees



Predominant use of native species



Develop local nature identity and character



Enhance microclimate to encourage stay



3:1 tree replacement ratio



Bng >10%

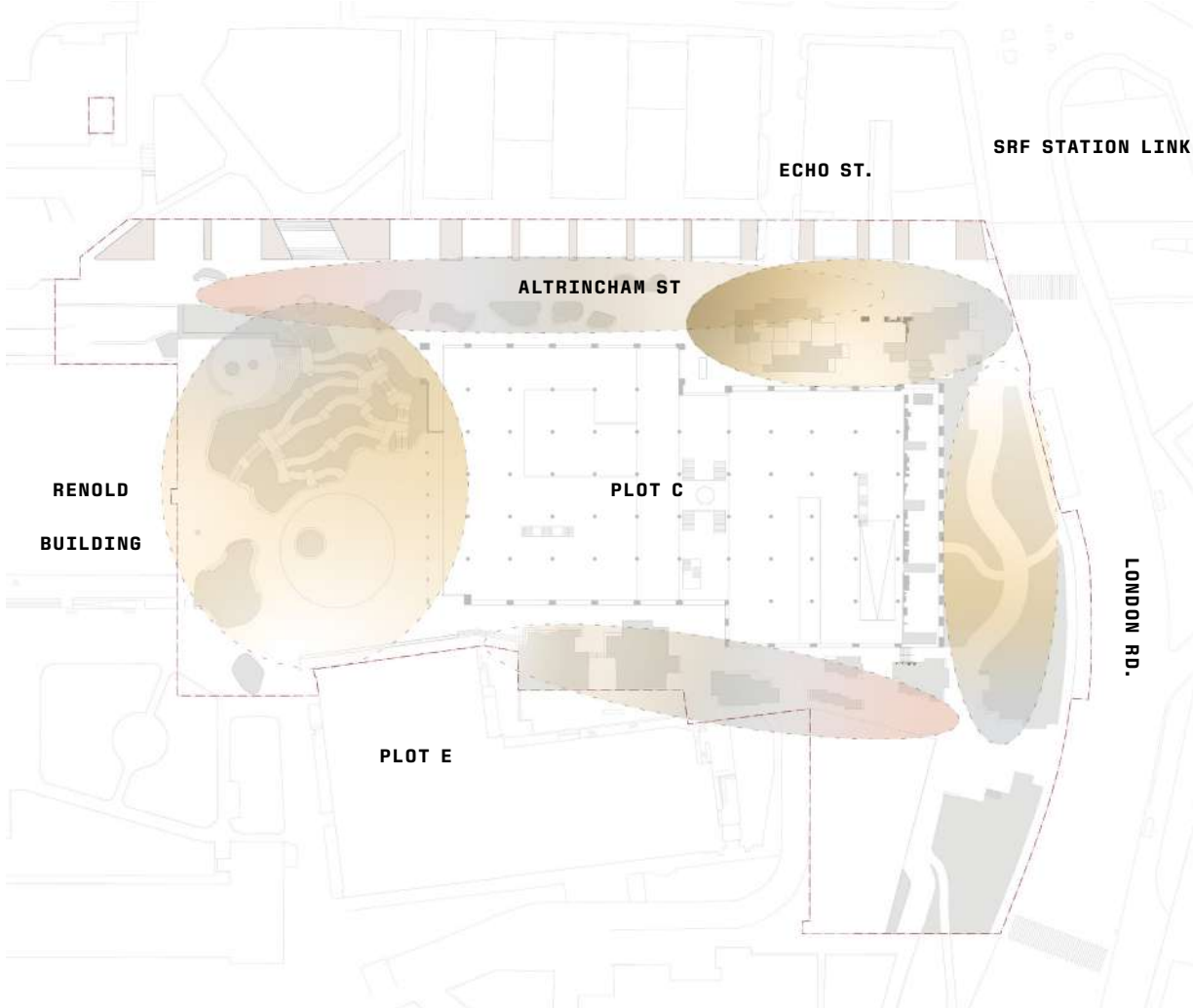
5.4.8 EVENTS STRATEGY

Event zones and possibilities on Plot C are diverse and not only confined to Sister Square, the biggest civic open space in the Plot C public realm. Various smaller areas within the development zones are open and flexible for different types of events, including:

- Community and building-related events at Hollaway Place
- Nature-related, sports and fitness, or public art events along Hollaway Forest
- Smaller community and alley-events on Mill Lane
- Spill-out events by the arches on Altrincham Street
- Mobile events such as parades along Altrincham Street

The diversity of the character areas of Plot C make a good base for a flexible range of events throughout the year and time of day. The five character areas offer a variety of opportunities for engaging and dynamic outdoor activities.

The design intends to refer back to the Human collider-principle developed in the SRF, delivering a range of community spaces and Sister Square, creating external settings for collaboration and community activity, a range of events as well as informal places to meet, eat and spend time. It also builds upon the Connected, Open and Accessible-principle, designing and scaling Sister Square to be capable of hosting a variety of public functions and activities.



Events of various sizes and shapes can take place in the different character areas of Plot C, with their own specific identities and forms.



Outdoor Fitness Assembly Row, Boston



Fleamarket on the Red Square, Copenhagen



Community festival on Hertug Johans Torg, Skövde



In the following section the proposals for the five Plot C character zones will be explained in terms of design principles, look and feel, lighting and planting characters.

5.5 SISTER SQUARE PROPOSAL

5.5.1 SISTER SQUARE DESIGN PRINCIPLES: A NEW CIVIC SQUARE

Sister Square serves as the heart of urban life at Sister Manchester and a unique events venue. It has a key role in connecting different character areas across Plot C to the wider masterplan.

The design of the square showcases diversity of uses and types of spaces, transitioning from paved areas that accommodate large gatherings to lush, planted areas that offer a refreshing place to hang out in a lunch break. Surrounding Sister Square is an array of workspaces, cafes and cultural offerings which presents an opportunity to blur the boundary between the built and the grown environments and direct urban life onto Sister Square and surrounding streets. This mix of functions will help to attract a flow of people and a variety of activities, making the square the focal point of urban life across Manchester and beyond.

How do we do it?

- Diversity of spaces within the square + flexibility
- Accessible for all, with different views and approaches
- Integrate nature to create favourable microclimate
- Local, intimate feel for spill out spaces
- Civic square with flexibility for large events
- Inclusive events program appealing to all ages and backgrounds

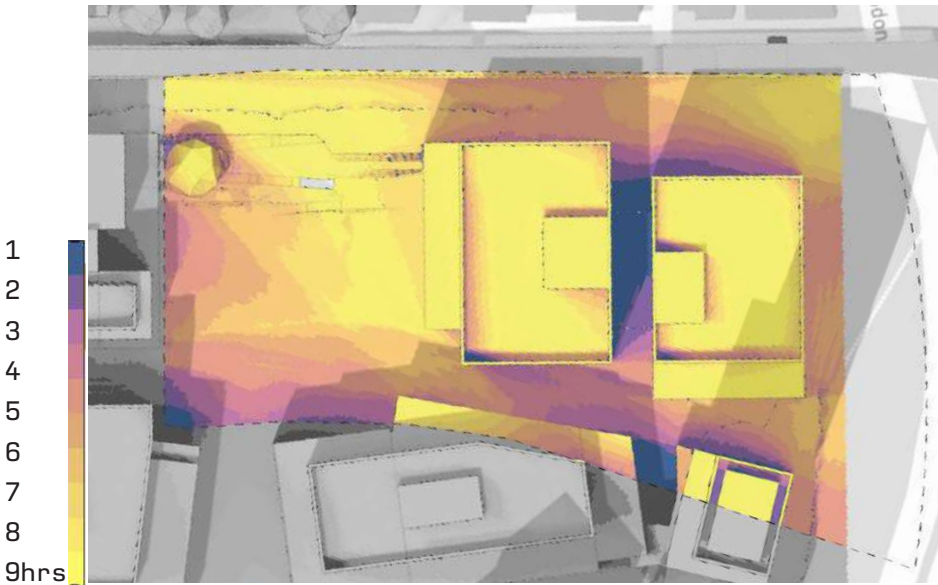


Gellerup Naturepark, SLA

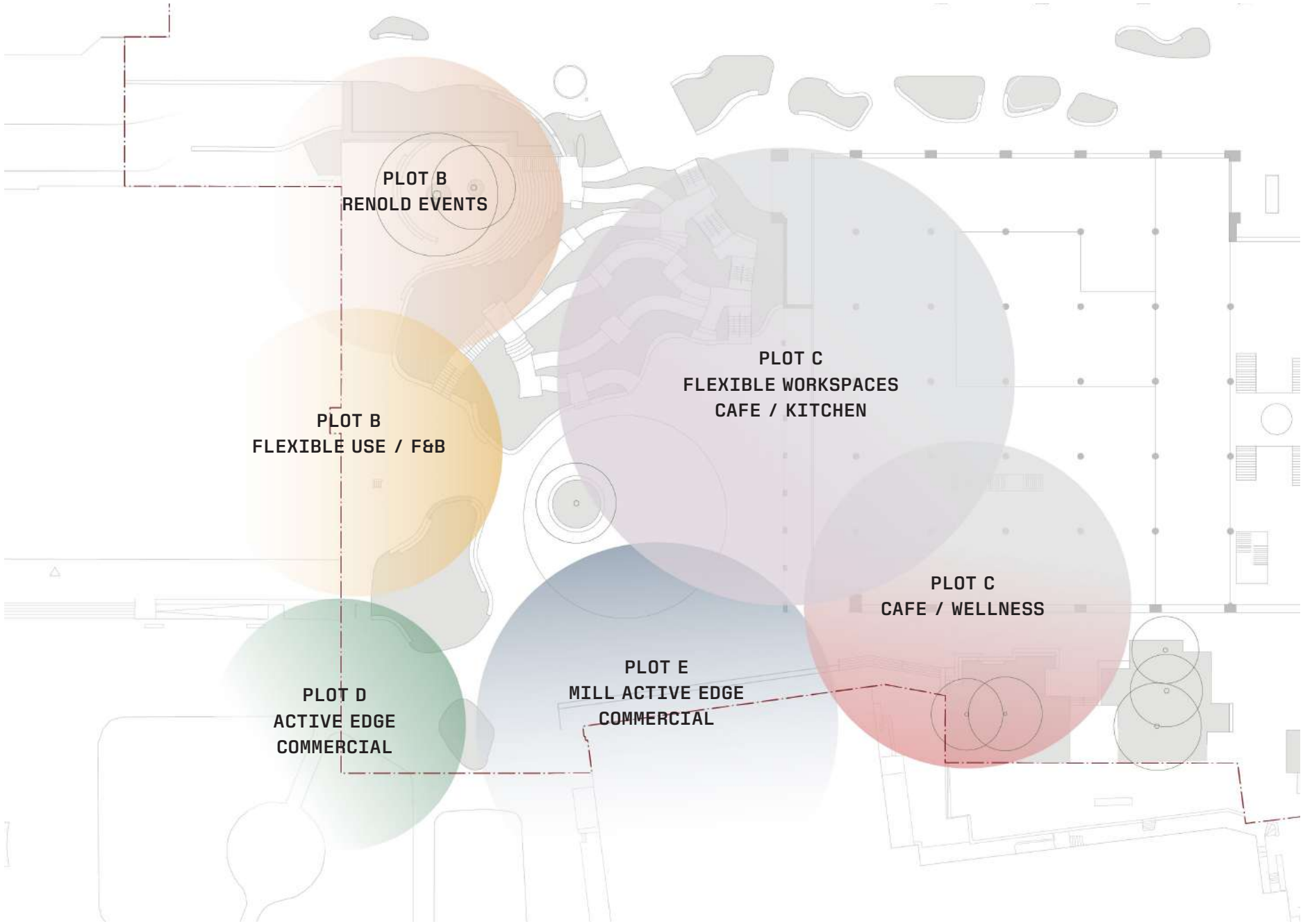
5.5.1 SISTER SQUARE DESIGN PRINCIPLES

WELCOMING AND CONNECTED OUTDOOR SPACES

Sister Square is designed to fulfill several key functions simultaneously. It serves as a major masterplan link and North-South axis, bridging a new service tunnel that enables the Sister masterplan to remain car-free. Sister Square also provides an accessible route from Altrincham Street down to the main civic space, which requires a ramp of approximately 95 meters long. A crucial design driver is the preservation of existing high-quality and valuable trees within Sister Square. Additional approaches influencing the design include adapting to the local microclimate and surrounding functions, celebrating the square’s heritage elements, and accommodating a series of events. These multifaceted considerations ensure that Sister Square becomes a versatile and integrated space within the broader urban context.



Designing with microclimate. Example of a sun study from June simulated at concept stage.

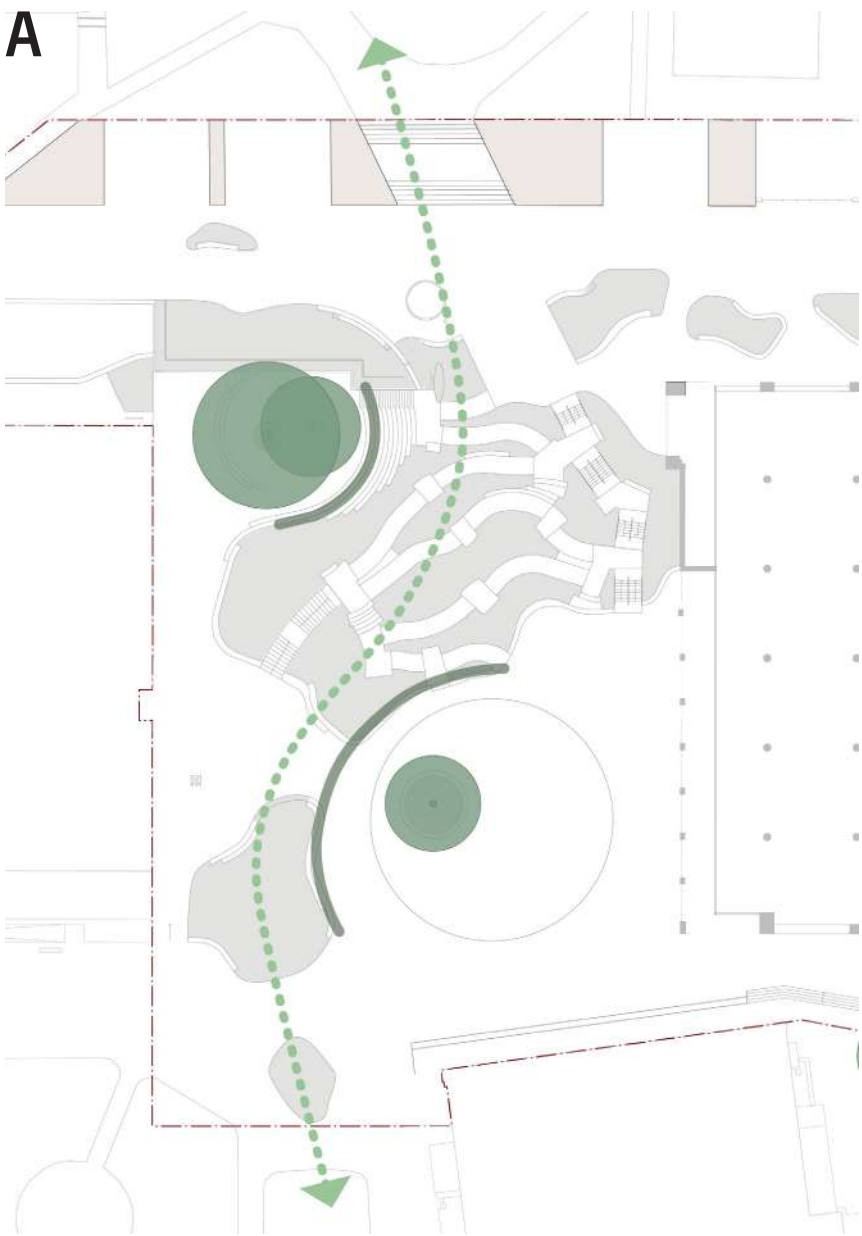


The heart of the masterplan. The design of Sister Square is influenced by perimeter functions to encourage dynamic activity throughout the day and into the evening.

5.5.1 SISTER SQUARE DESIGN PRINCIPLES NATURE AND PEDESTRIAN CONNECTIONS

The design of Sister Square is a result of the following:

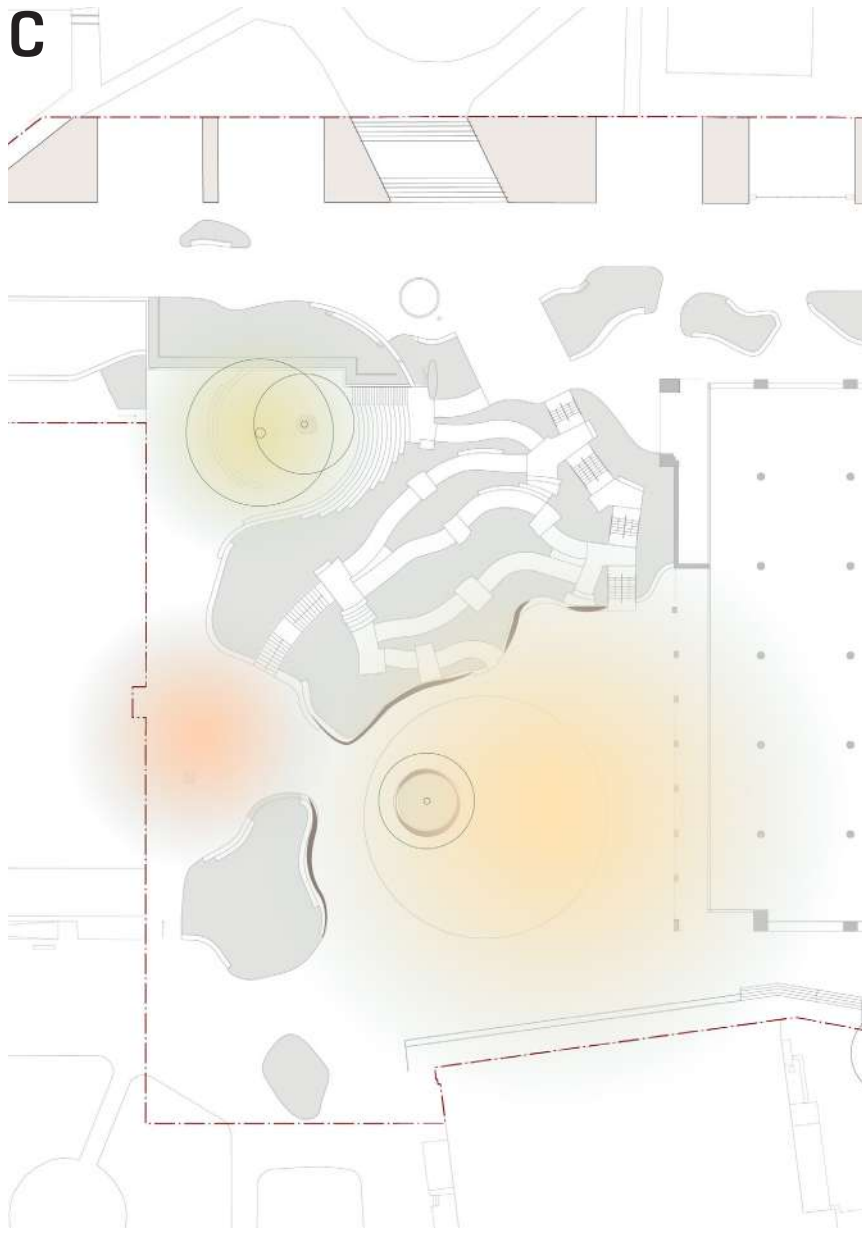
- A) preserving characteristic trees on site and enhancing nature connections
- B) establishing an accessible route from Altrincham St. down to the Square and building entrances
- C) creating an open and flexible main space, surrounded by nature and seating, as well as two smaller event areas by the entrance to Renold building and the existing maple trees.



+



+



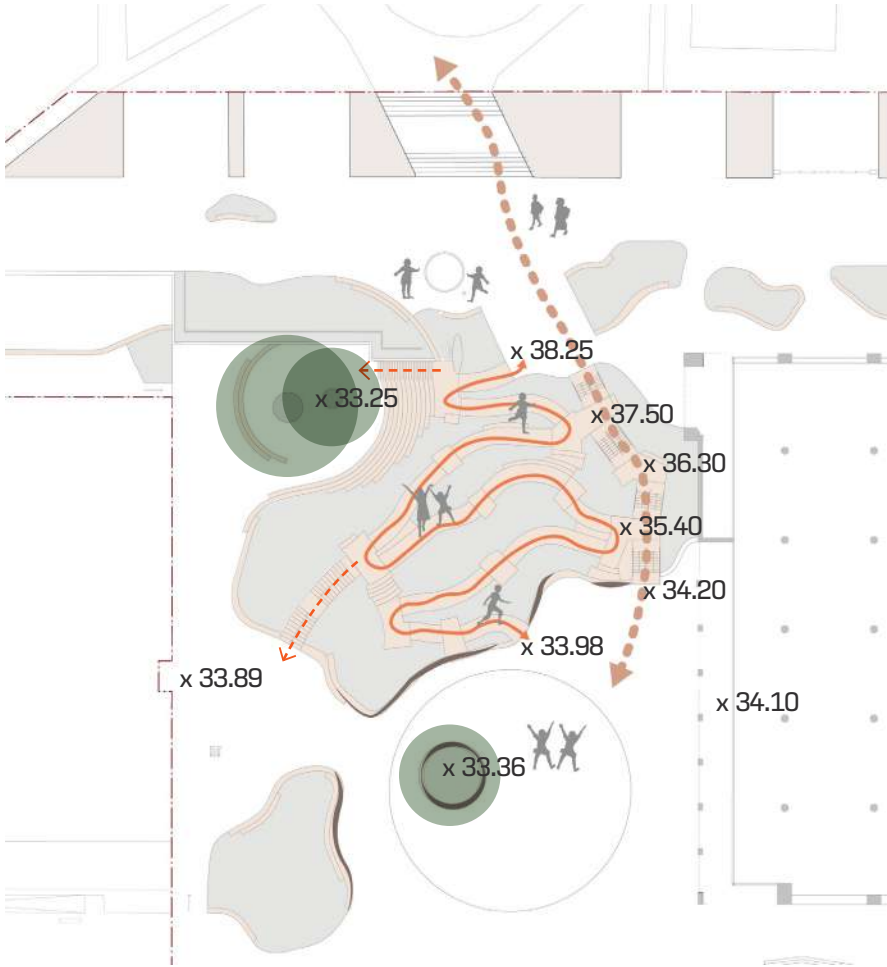
5.5.1 SISTER SQUARE DESIGN PRINCIPLES

ACCESSIBILITY FOR ALL

The current situation at Sister Square is no longer up to date in terms of inclusive public realm design, thus creating an opportunity to redesign the square for full accessibility. The Plot C proposal aims to create an inclusive, safe, and green public space.

The new Sister Square is provided with a fully accessible landscape to connect the upper part on Altrincham Street at level 38,25 to the lower part at roughly level 34, with the lowest points by the existing cedar tree in the center of the event plaza [level 33,36] and the existing maple trees in the corner by Renold Building [level 33,25].

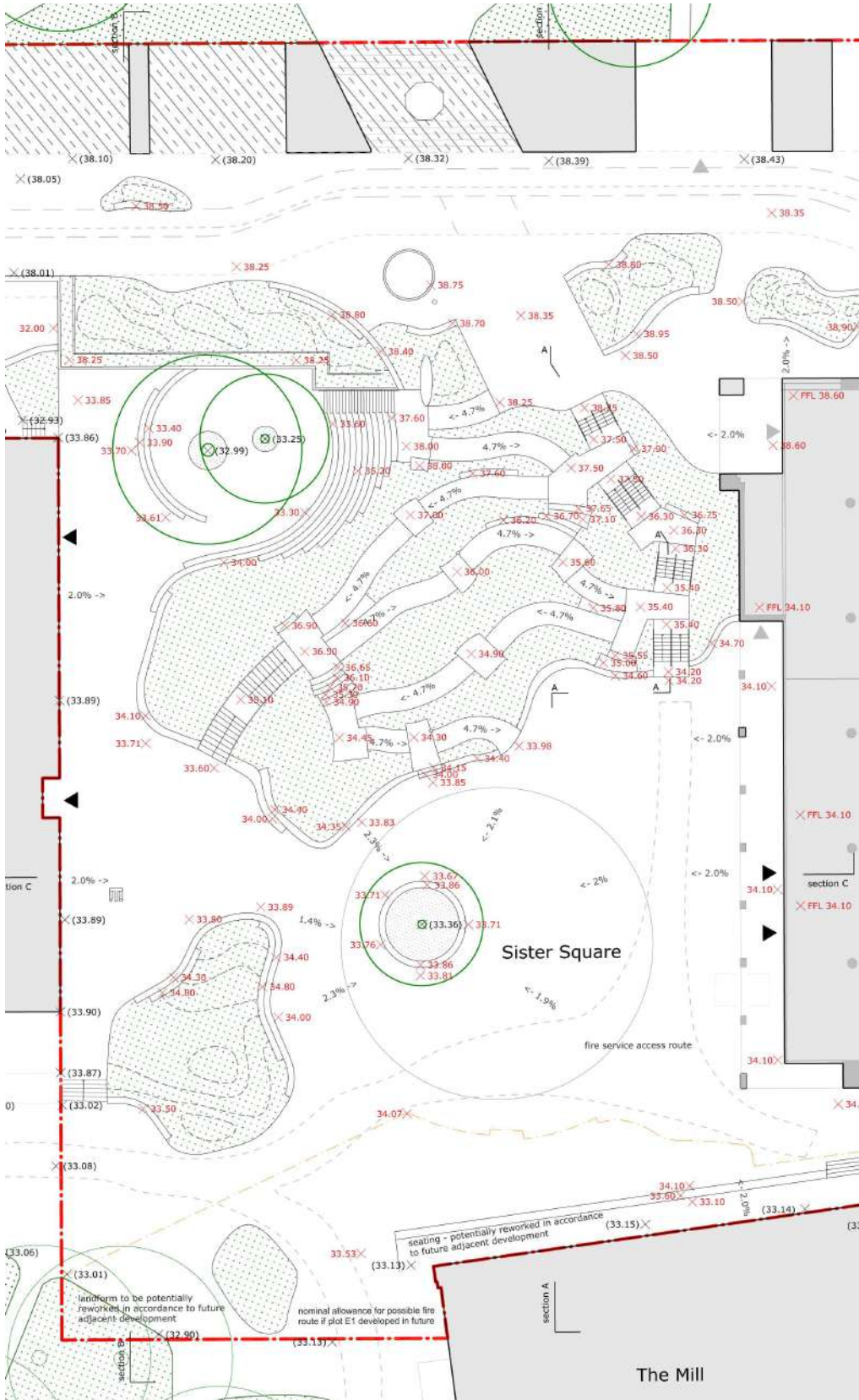
- Current Situation: There is a 5m level change from north to south, with stairs providing direct access from Altrincham Street. Those needing sloped access must take a 400m detour.
- New Proposal: Introduces a sloped route with a 1:21 gradient, landings, and seating. It also includes a direct stepped route.
- Accessibility: The design aims to make the route usable for everyone, including wheelchair users, parents with buggies, and those who find stairs challenging. The slope ensures structure, clarity, and predictability.
- Safety and security: The design includes open sightlines for predictability and safety. Here, the placement of planting is carefully considered.
- Nature Access: Additional planting to improve mental health and year-round green space.
- Stairs Design: Consistent rise and tread depths, tactile paving, and handrails on both sides for safety.
- Amphitheatre: Accessible seating at both top and bottom, with stairs and handrail for easier access.
- Future Phases: Existing stepped access to Vimto Park and ramped route opposite the Renold building will be maintained for now, and improved in future phases together with the development of Plot A.



Diagrammatic sketch with dimensions for the central staircase design.

The route on the slope between upper and lower level on Sister Square also include a central stepped access.

- Stairs are following recommended regulations [DFA2/BS8300].
- Stairs on the slope can be considered as individual flights.
- Handrails on both sides.
- Corduroy hazard warning surface on both sides 1200 mm.
- Unobstructed level landing of a min. 1800mm x 1800mm [can be part of the sloped pathway landings].



5.5.1 SISTER SQUARE DESIGN PRINCIPLES

WATER - A PURPOSEFUL ELEMENT

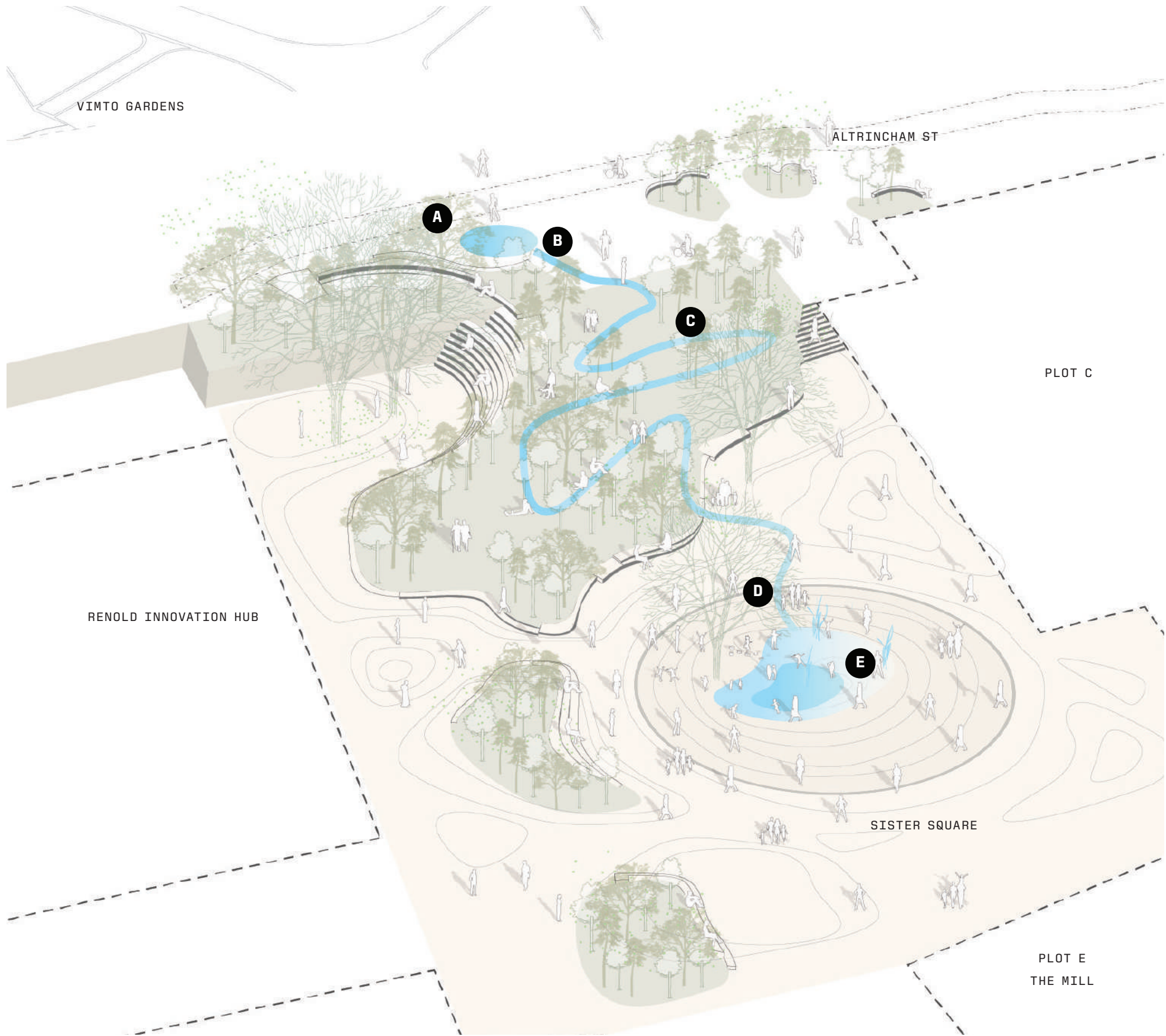
Water, a visual and playful element, is central to the design of Sister Square. It serves a vital purpose, connecting the upper level with the lower level and guiding visitors through the space. At the heart of the square, water gathers in the low-lying center, creating a focal point that draws people in.

Sister Square offers a rich tapestry of nature experiences, with mist and water jets adding a dynamic and refreshing touch. A water pump invites children to engage and set the water in motion, fostering a sense of play and interaction. Water channels gracefully traverse the slope, illustrating the journey of water through the landscape. A water mirror in the pavement reflects the surroundings, enhancing the aesthetic appeal and providing moments of quiet reflection.

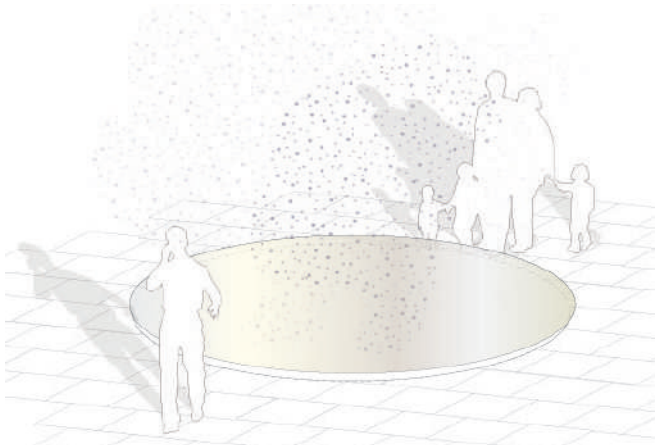
This square is designed to be more than just a passage; it's a destination where water brings life and movement, encouraging connection with nature and offering a serene escape from the urban hustle. Sister Square stands as a testament to the harmonious integration of water in urban design, promoting biodiversity, sustainability, and a deeper appreciation for the natural world.

Story of the water

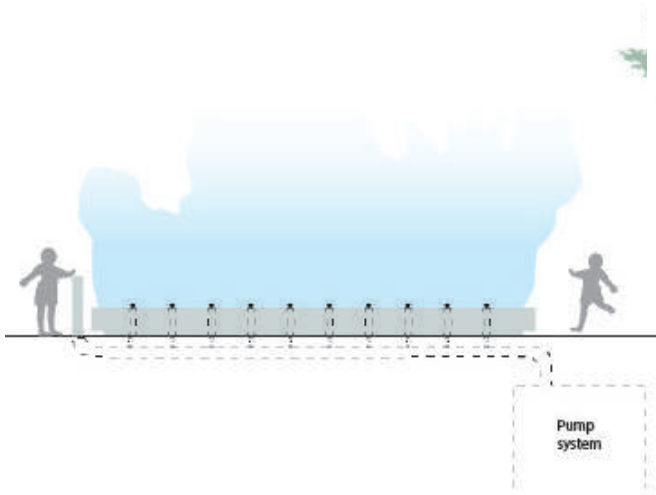
- A** • Surface-level water feature on Altrincham St could incorporate light and mist, and be seen from the arches
- B** • A manual pump teaches children the way of water, from the top by the water mirror down to the square
- C** • Drainage is channeled through the landscape and performs a dual function of helping to irrigate the plants and trees. There could be moments where the water flows beneath the path, making the water flow visible
- D** • The drainage channel could be visible on the square, defined by a channel in the paving.
- E** • On the square, with a topography such as a gentle bowl, water is gathered in the center after rainfall or if water is pumped from above. Water jets can be turned on - for play or for special events



5.5.1 SISTER SQUARE DESIGN PRINCIPLES
WATER - A PURPOSEFUL ELEMENT



The water mirror on Altrincham Street, with a pump and mist.



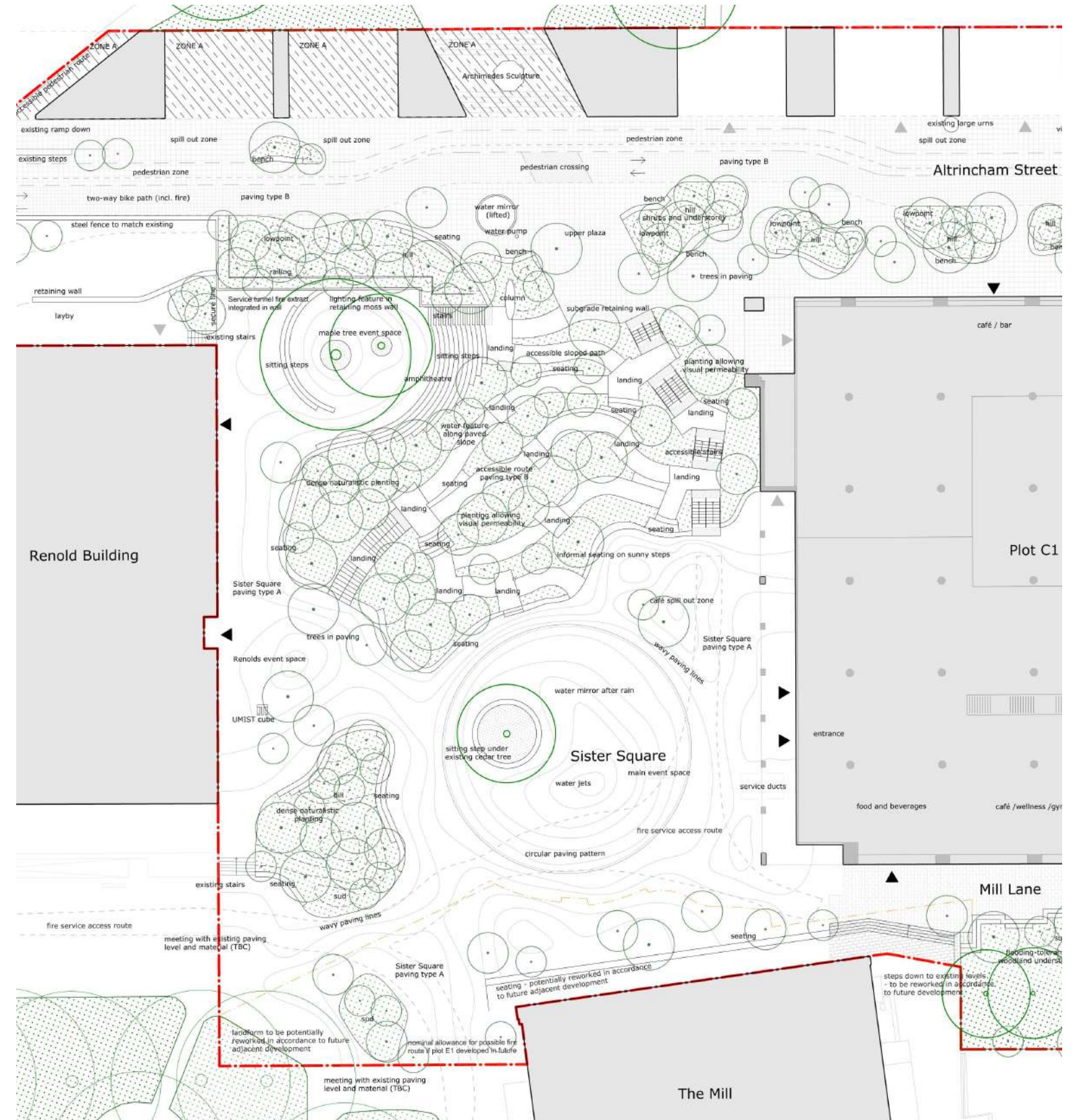
The story of the water: water is a visual and playful element, with a purpose on Sister Square to connect the upper level with the lower level, thus showing the way of water, with water gathering in the low-lying center of the square.

Water on Sister Square forms an important part of nature experiences with mist and water jets, a water pump for children to set the water in motion, water channels on the slope, as well as water mirror in the pavement.

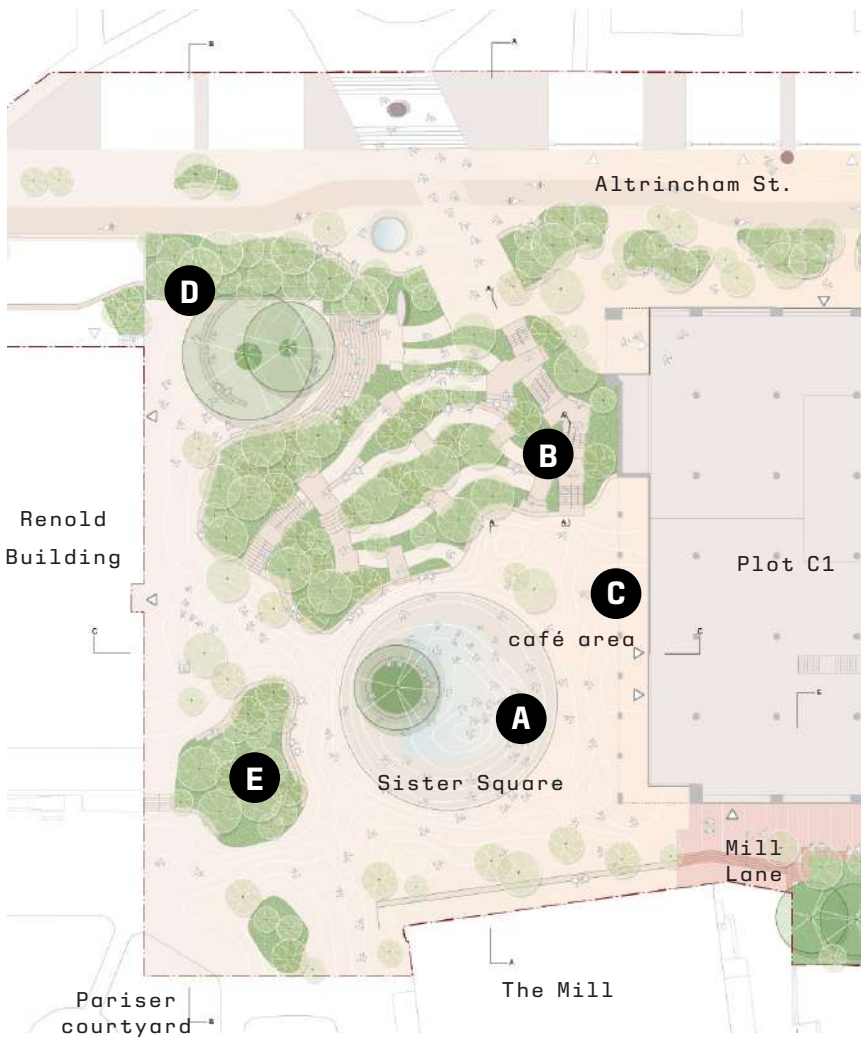
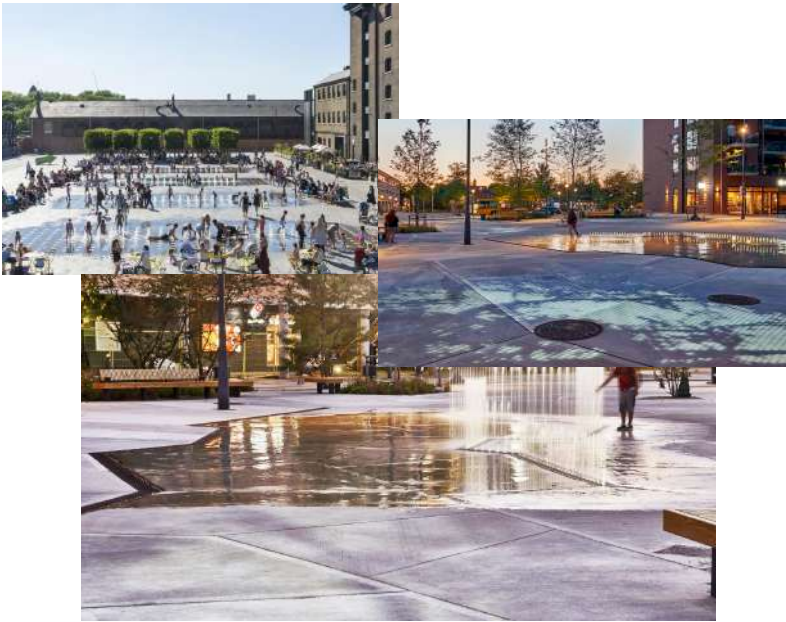


Precedent images of water in public space.

5.5.2 SISTER SQUARE LANDSCAPE DESIGN



5.5.3 SISTER SQUARE SUB-CHARACTER ZONES



A Sister Square events area

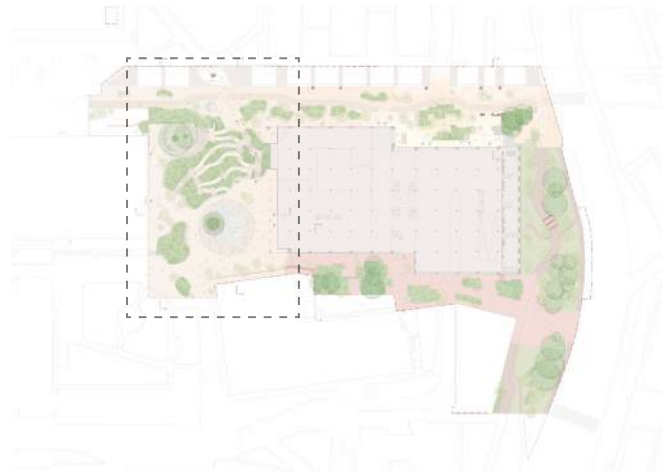
The circular plaza is designed to be a dynamic and flexible events space. This versatile area serves as a premier destination, from hosting large-scale music concerts to intimate community gatherings, drawing people from all corners of Manchester and beyond. At its centre a dynamic water feature creates focal point and offers a refreshing atmosphere during warm days. The events area is designed to be activated throughout the day, seamlessly transitioning from a bustling daytime hub for leisure and socializing to an nighttime venue for entertainment and cultural experiences.



B Sister Square sunny steps

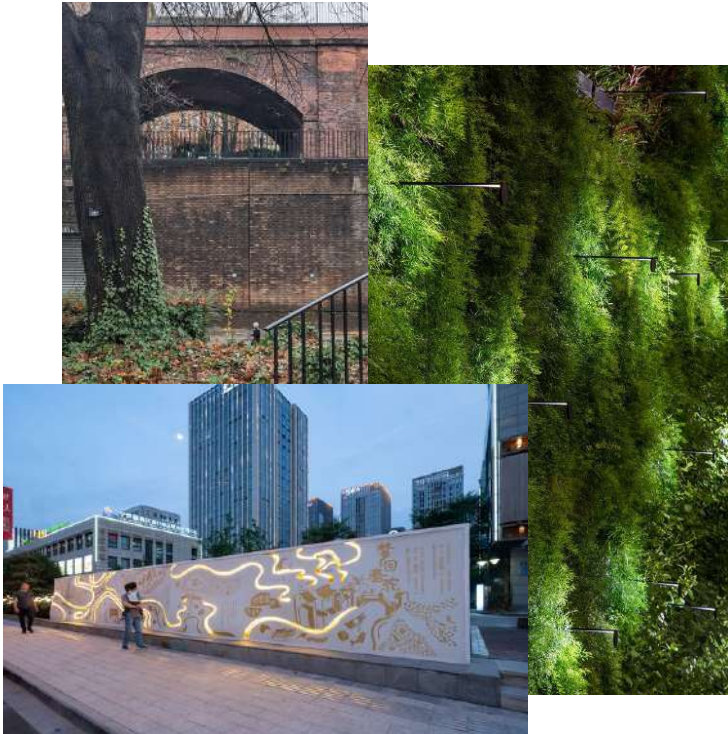
The urban connection from Altrincham St forms an activated terrain, providing an accessible route into Sister Square. The amphitheatre shape becomes a natural spill-out zone for large events, accommodating overflow crowds, or providing a day-to-day sunny area connected to the active cafe areas and events spaces in Plot C. Cascading down the sloped terrain, a series of stepped plantings add a lush, green element to the Square. The terrain includes an accessible route, offering an access experience which frames the square.

5.5.3 SISTER SQUARE SUB-CHARACTER ZONES



C Plot C interface

The spill out zone and activated edge of C1 are designed to connect the built and the grown and work across levels. The restaurant areas on the first floor include a balcony which can also be accessed from the public realm with views over Sister Square. A cafe on the ground floor also spills out onto the Square, making use of a favourable microclimate during the day, and potential for events in the evening. This sunny, sheltered area can become a favorite lunch hangout for locals and visitors alike, and remain active into the evening for after work drinks.



D Under the trees

The area adjacent to the Renold building serves as a versatile spill-out space. The high-value mature trees are retained and the hardscaping around them is designed around the long term health of the trees. The retaining wall of the service tunnel is planted and lush and activated through the evening by a dynamic light installation.



E Ecological link

The green link through Sister Square allows wildlife to move freely, helping to strengthen and enhance biodiversity. This helps to mitigate the effects of habitat fragmentation, and create a more resilient urban ecosystem across the Sister masterplan. There is also an opportunity for a water feature flowing down the topography and into the Square, which comes alive during rain events.

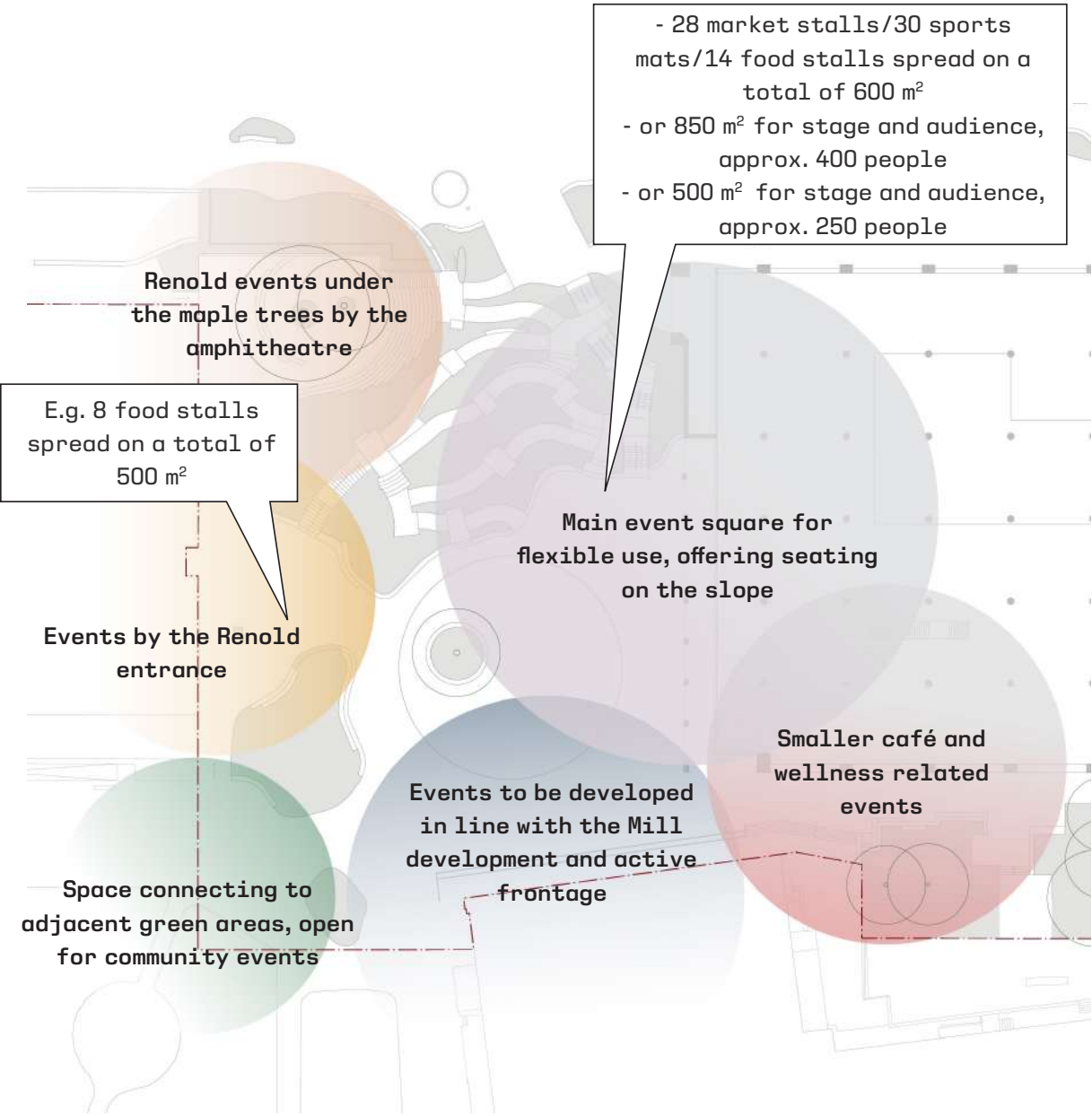
5.5.3 SISTER SQUARE SUB-CHARACTER ZONES

FLEXIBLE EVENTS SPACE

Sister Square is designed to be a hub for community events, in line with the masterplan ambition to stitch the city back together. As a civic square, the outdoor events program aims to be welcoming and inclusive and strengthen social bonds for communities both within Manchester and beyond. Examples of these types of events could include a pop-up market, flea market and fitness classes for local community to get together.

Sister Square can also host public screenings for films and sports events in a unique cinematic experience. There is an opportunity through the film screenings to attract a diverse crowd and potentially collaborate with local filmmakers or film festivals. This move would not only diversify their entertainment portfolio but also provide a platform for independent and avant-garde films in Manchester.

Festivals and food events could also be part of the Sister Events programme, from science gatherings to summer sports festivals and showcasing local bands. It offers a versatile and attractive venue for various musical performances, with separate space for stages, audience areas, and supporting facilities, making it suitable for both intimate concerts and larger festival-style events.



Various spaces for events within Sister Square, where the design is influenced by perimeter functions to encourage dynamic activity throughout seasons and time of day.



Platz der Deutschen Einheit, Hamburg



Granary Square, London

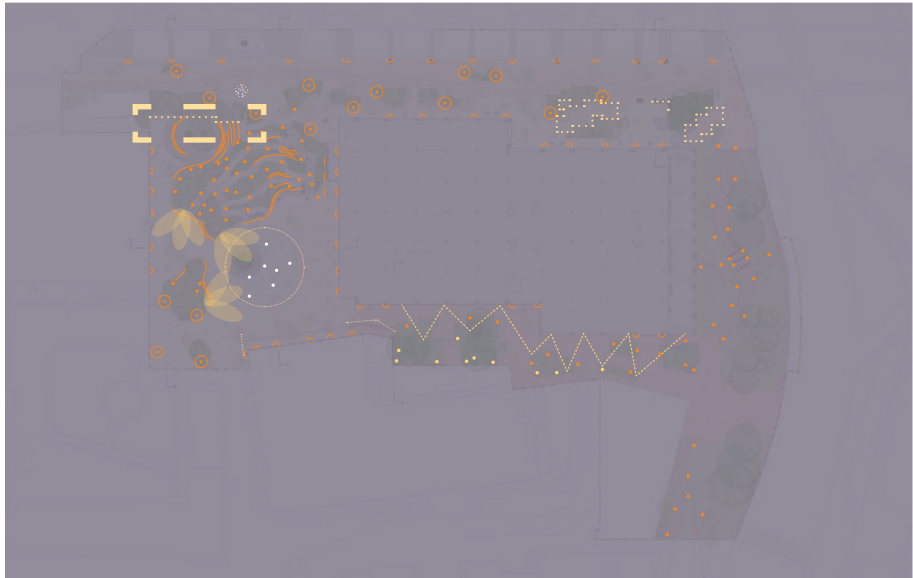
5.5.3 SISTER SQUARE SUB-CHARACTER ZONES

FEATURE WALL

The retaining wall of the service, to the North of Sister Square presents an exciting opportunity for a distinctive lighting / water feature. This strategic location could be transformed into an innovative and dynamic installation, serving as a focal point for the entire square. This intervention could respond to dynamic conditions on site, such as rainfall as a key educational opportunity to bring people closer to nature.

By incorporating cutting-edge lighting technologies, such as programmable LEDs or interactive elements, the wall could become a canvas for ever-changing light displays. This installation could respond to various factors like time of day, weather conditions, or even pedestrian movement, creating a constantly evolving visual experience.

Such a feature would not only enhance the aesthetic appeal of the space but also contribute to the area’s identity, potentially becoming a landmark in its own right. Moreover, this dynamic lighting installation could serve functional purposes, such as improving wayfinding or adding a sense of safety, while simultaneously offering an engaging and memorable element that draws people to the area and encourages them to linger and explore.



Lighting plan of Plot C with the feature wall highlighted



Precedent images of inspirational design for walls and edges in public space

5.5.4 SISTER SQUARE LOOK AND FEEL



Existing materials



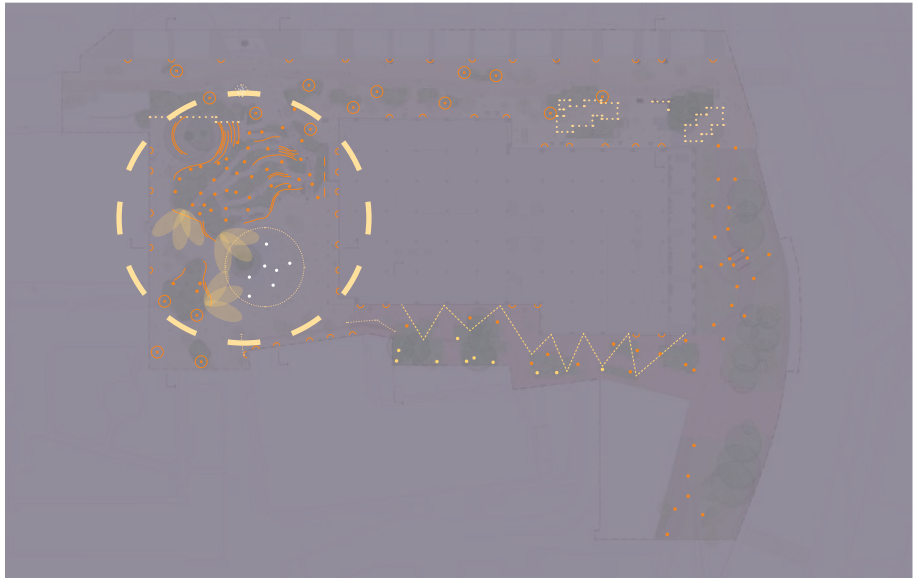
Sister Square hardscape approach

The hardscape approach for Sister Square prioritises local stone with a focus on longevity and weather resistance, due to it being a high-footfall area. Yorkstone is well adapted to this purpose due to its long-lasting finish and slip resistance. The temperature regulating properties could be of additional benefit during summer months. The aspiration is for the stone to be laid in concentric rings mirroring the curvature of the Sister Square events area and the sloping terrain.

5.5.5 SISTER SQUARE LIGHTING CHARACTER

In Sister Square, the key active areas are illuminated with taller lighting fixtures, emphasizing its significance, ensuring versatility and pedestrian flow as well as drawing attention to events. In contrast, the staired area features dimmed light levels and intimate lighting, creating a sense of privacy and encouraging more personal interactions or quiet reflection. The green areas are intentionally kept darker, preserving the natural darkness i smaller areas across the site is essential for healthy biodiversity zones, and maintaining the ecological balance of the urban environment.

Warm and inviting wall mounted lights will create social zones along the open facades framing the square. To add a scenographic layer and visual interest, there's potential to incorporate effect lighting for projecting dappled light effects over the active area, creating a theatrical ambiance that enhances the overall atmosphere and makes the space more engaging and memorable. This layered approach to lighting not only addresses functional needs but also creates a dynamic and multi-faceted nighttime environment that can accomodate different activities and user preferences throughout the year.



Lighting plan of Plot C with Sister Square highlighted



Precedent images of inspirational lighting in public space

5.5.6 SISTER SQUARE PLANTING CHARACTER

Sister Square planting approach

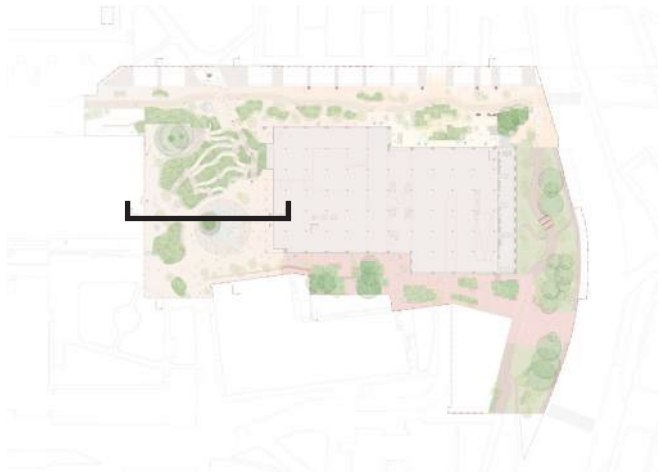
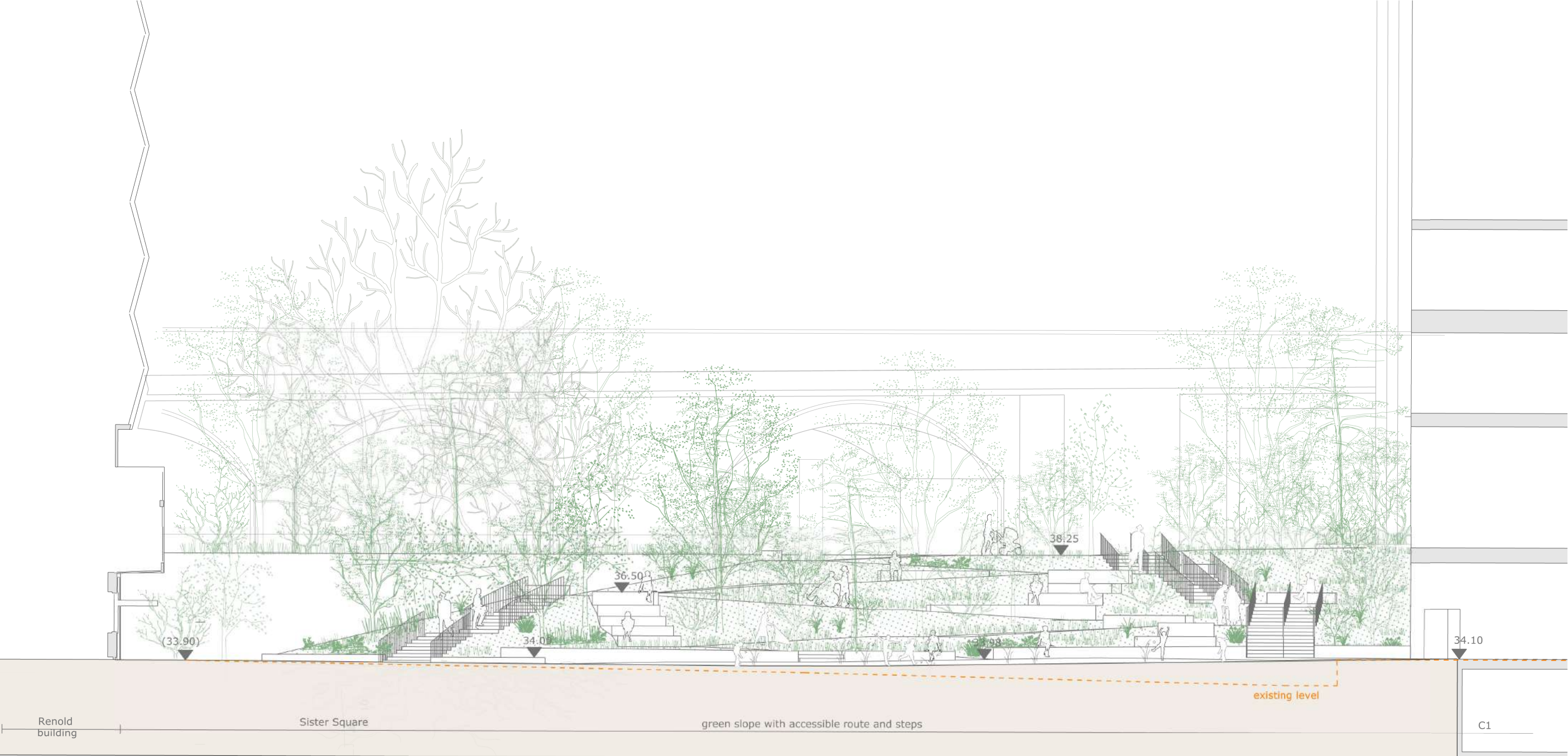
- On the square, trees enable views under canopy. Sculptural stems to animate and provide richness. Trees provide gentle shading and structure while emphasizing the urban character of the square
- On ramp, keep views open along the primary pedestrian route to provide long views allowing users to anticipate future encounters and provide a sense of control and safety at all time. Low yet lush understory vegetation to enhance visibility and soften the hardscape
- Denser planting with shrub layer in less prominent routes to provide a varied and rich spatial experience
- Planting communities tolerant of drier conditions, due to the placement on a slope and a south-facing exposure with good sun exposition
- Planting to preserve a mix of sun and shade to provide comfort in for different weather and temperature conditions



Precedent image of trees as intended on Sister Square

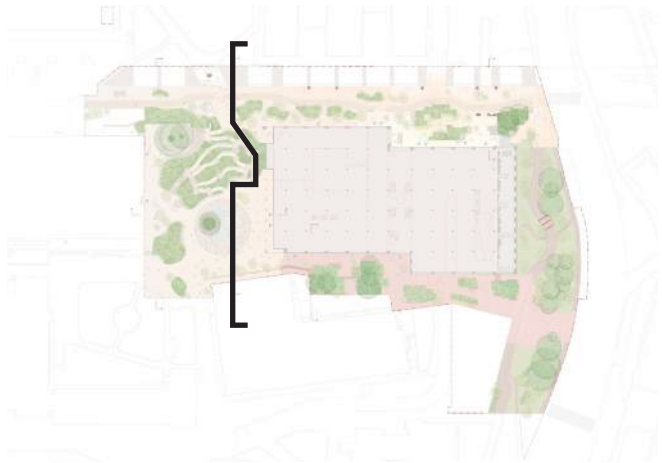
Drought tolerant planting allowing long sight lines along the main lines of the ramp, giving users a sense of safety

5.5.7 SISTER SQUARE VIEWS



Section through Sister Square main event space towards Altrincham Street and the arches on the upper level

5.5.7 SISTER SQUARE VIEWS



Section through Altrincham Street connecting with the green, accessible slope and the lowest part of Sister Square

5.5.7 SISTER SQUARE VIEWS



VIBRANT COMMERCIAL STREET



PLANTED WALL



EVENTS PLAZA



Section through the maple tree event space, looking towards the amphi-style seating and green slope



5.6 ALTRINCHAM STREET

5.6.1 ALTRINCHAM STREET DESIGN PRINCIPLE: A GREEN CONNECTION

The public realm vision for Altrincham St builds on the approach outlined in the SRF, a key East - West pedestrian connection linking Hollaway Place to Sister Square at the heart of the masterplan. The width of Altrincham St is increased through the construction of the service tunnel below, which improves pedestrian flow and maintains essential services to Plot C without disrupting the street-level experience. There is a key opportunity for mature tree planting on deck to create a green link of connected habitats along the street. These planted areas form a series of diverse seating and spill-out spaces activating both the railway arches and the northern edge of Plot C. This transformation helps to create a vibrant, unique atmosphere beside the historic viaduct arches.

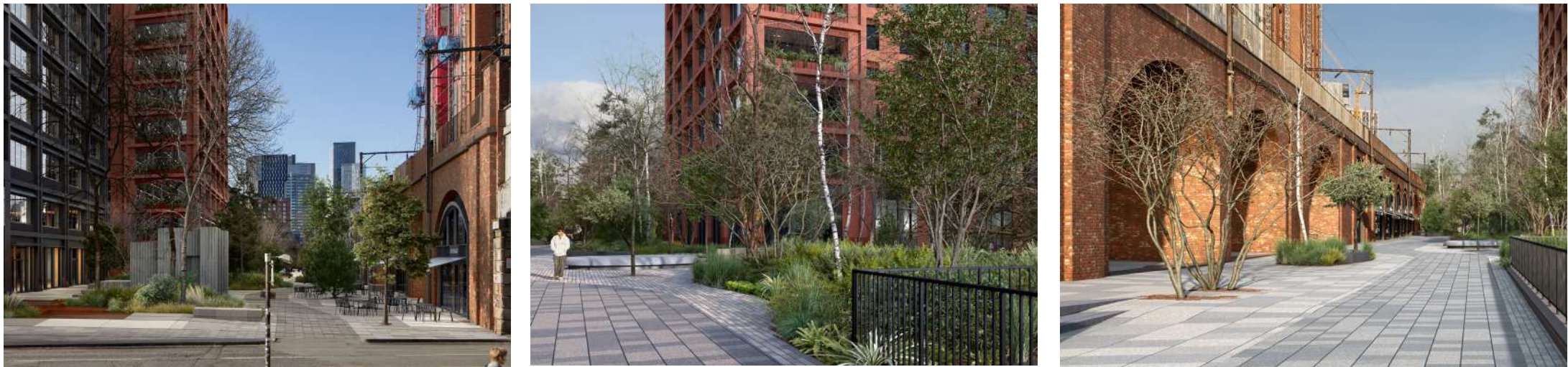
How do we do it?

- Accessible route along the length of the street
- Spill out zones linked to areas of high pedestrian traffic
- Tree planting throughout the street to ensure a nature link
- Local, intimate feel for spill out spaces
- Nature-based lighting approach

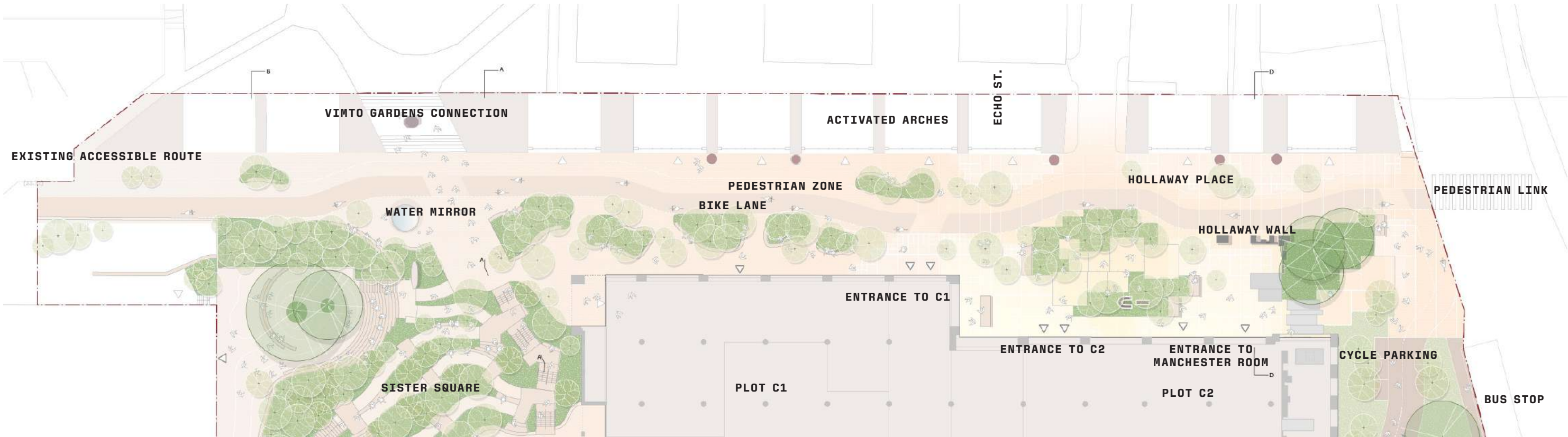


Silkeborg Gågade, SLA

5.6.2 ALTRINCHAM STREET LANDSCAPE DESIGN



TVIA townscape views illustrating Altrincham Street design.

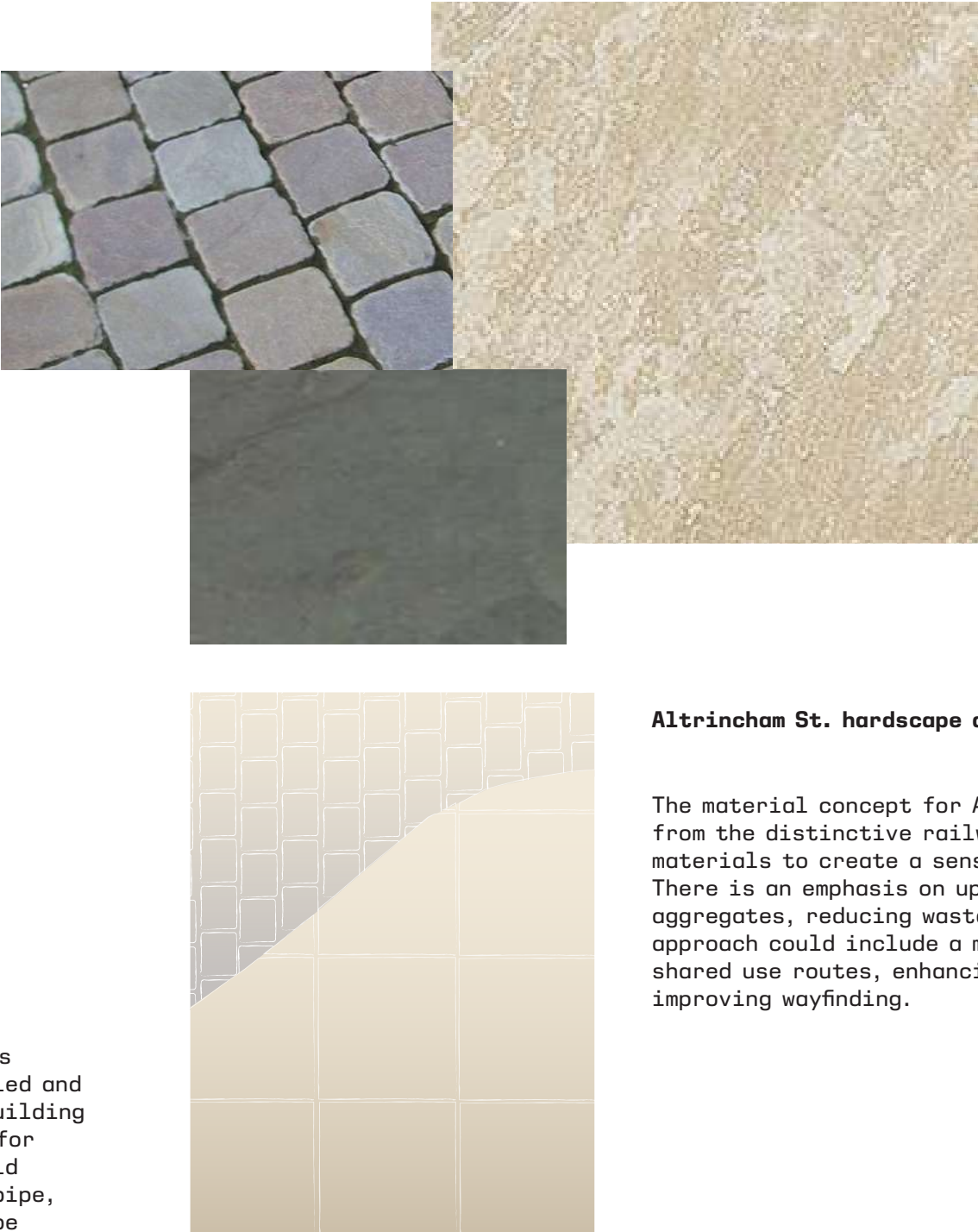


5.6.3 ALTRINCHAM STREET LOOK AND FEEL



Street furniture approach

The strategy for street furniture explores elements from the site which can be upcycled and reused. This requires the elements from building demolition to be catalogued and reviewed for suitability. For example, bike stands could be constructed from bent pieces of metal pipe, and steps from the butterfly stairs could be upcycled as seating elements. These elements will be joined with newly specified elements to create a ‘family’ of street furniture. For more information, see pages on lighting.



Existing materials

Altrincham St. hardscape approach

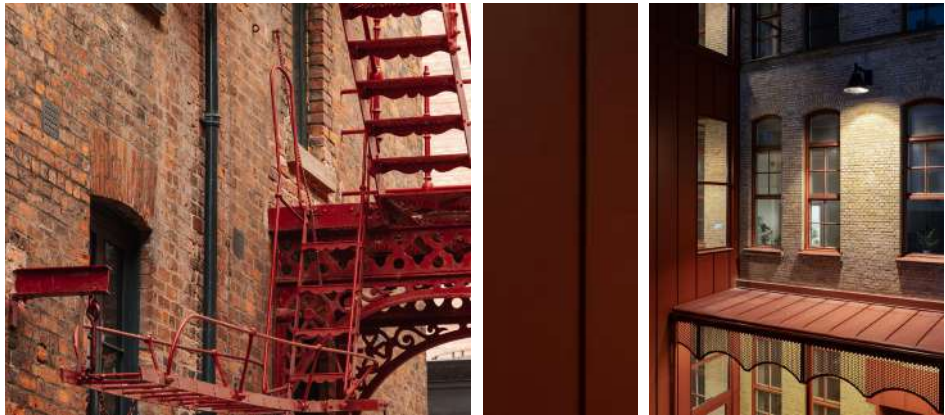
The material concept for Altrincham St. draws inspiration from the distinctive railway arches, incorporating local materials to create a sense of place and authenticity. There is an emphasis on upcycling materials within aggregates, reducing waste and environmental impact. The approach could include a mix of textures to delineate shared use routes, enhancing the user experience and improving wayfinding.

5.6.4 ALTRINCHAM STREET LIGHTING CHARACTER

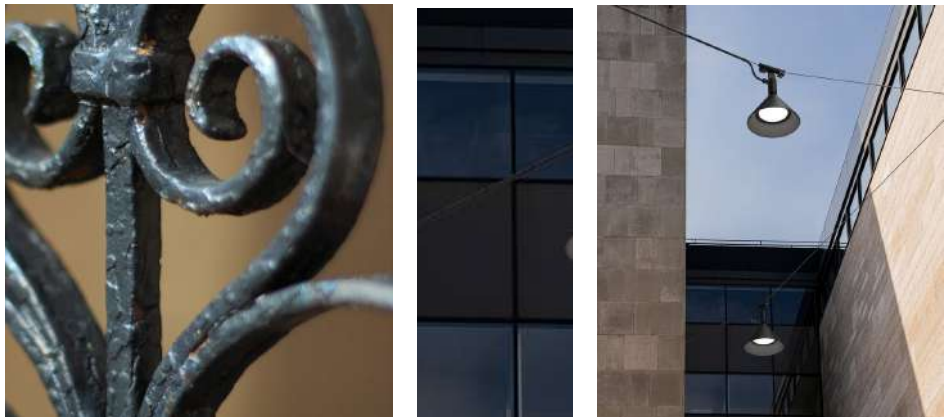
Upcycled heritage lighting fixtures

Reuse of old lighting fixtures are encouraged. To be upcycled with new warm light sources and repainted with a new signature RAL colour to align the look and feel of heritage fixtures with new additions.

A family of lighting fixtures with a shared look and feel will enhance that feeling of Sister identity across the area. The unified lighting finish is designed to create a distinctive visual identity for Sister across the different character areas, while having an overall coherence and shared identity.



Red heritage - precedent images



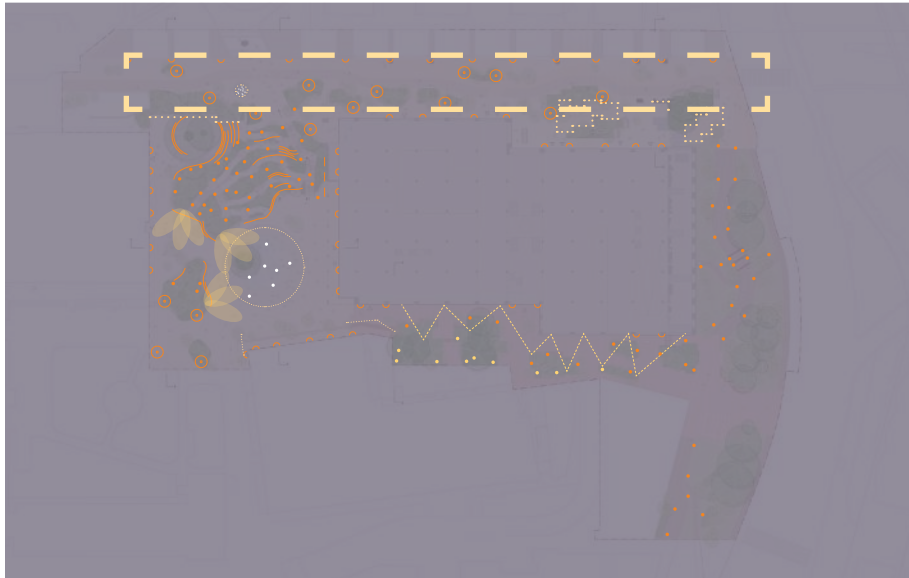
Black contemporary - precedent images



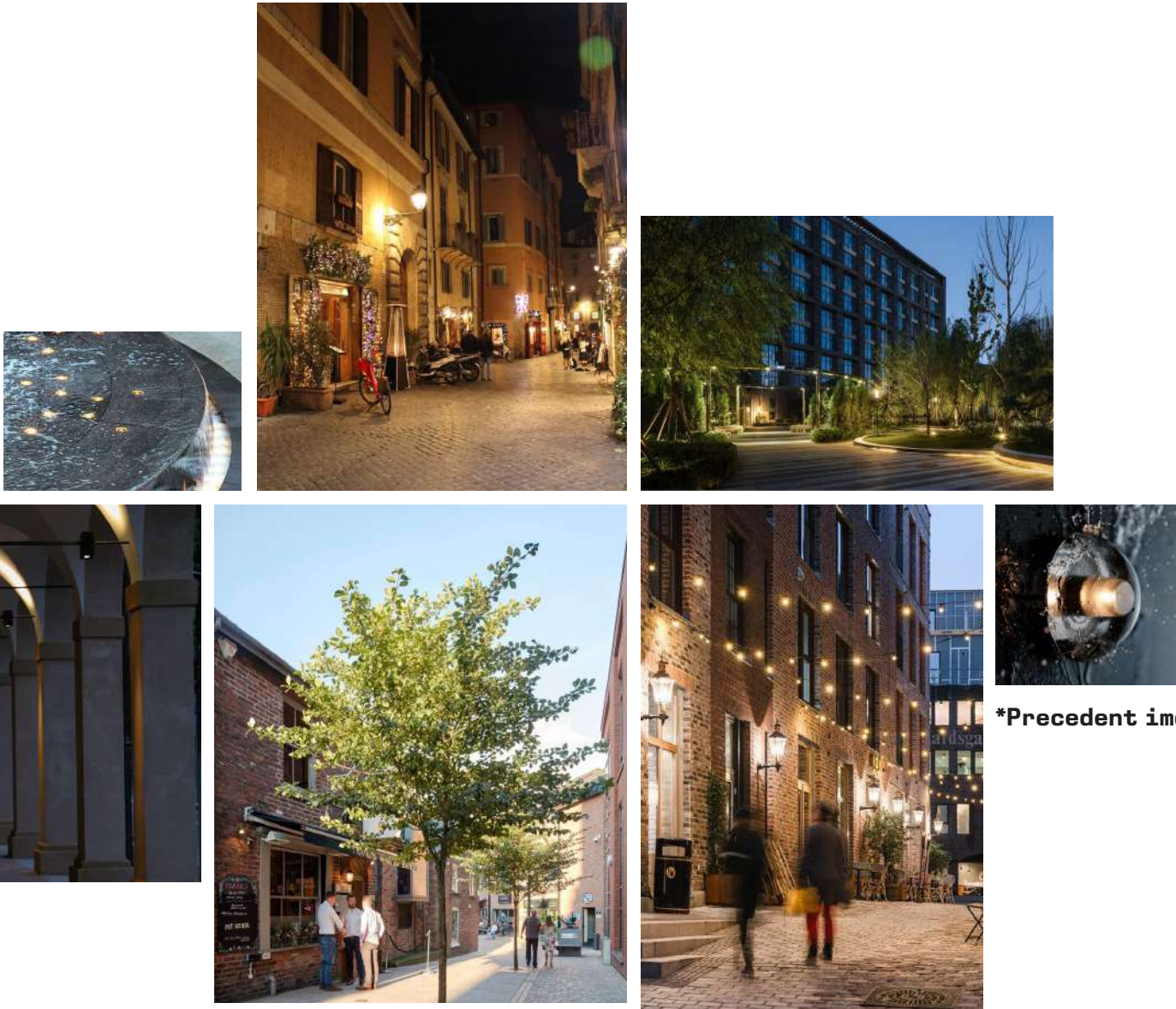
5.6.4 ALTRINCHAM STREET LIGHTING CHARACTER

The lighting strategy for Altrincham St. is designed to enhance its unique identity and improve the overall experience of this key green connection. The illumination of the arches serves as a key element in reinforcing the area’s distinctive character, creating a memorable visual landmark. Along the key pedestrian route, wall mounted historical luminaires evoke a promenade-like atmosphere, encouraging leisurely strolls and exploration. The combination of illuminated arches and vertical lighting will insure an interesting spatial feeling, when visiting the area at night.

In addition, interspersed throughout the space, carefully positioned pools of light create inviting areas for people to pause, gather, and linger, fostering social interaction and a sense of place. At the top of the steps down to Sister square, a combined light and water feature serves as an eye-catching wayfinding element, not only guiding visitors but also adding a dynamic and engaging focal point to the landscape. Together, these lighting elements creates a cohesive, attractive, and functional nighttime environment that supports the area’s identity and enhances its appeal to visitors.



Lighting plan of Plot C with Altrincham Street highlighted

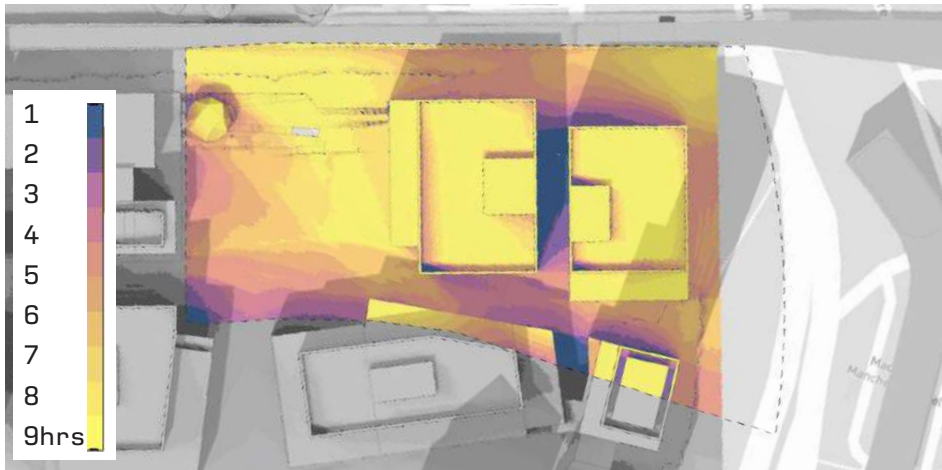


*Precedent images

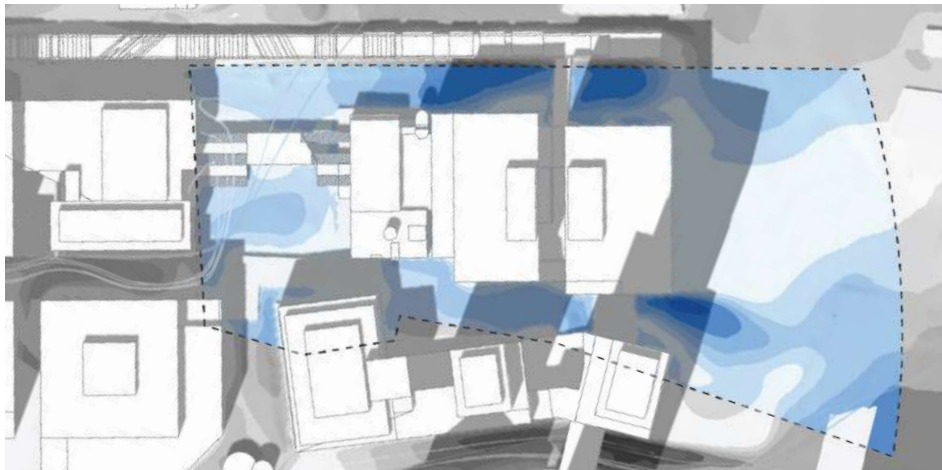
5.6.5 ALTRINCHAM STREET PLANTING CHARACTER

Altrincham street planting approach

- The microclimate analysis shows strong winds on Altrincham street which would be alleviated by planting a dense tree canopy, providing a more comfortable microclimate encouraging stay and lingering
- Multilayered planting including shrubs and perennials below trees to create more intimate scale and a rich sensorial experience of the space
- Planting thriving in shady spaces



Sun analysis (hours)



Analysis shows unpleasant wind on Altrincham St



Large trees so that canopy break wind



Rich structure with ground covers, herbaceous, shrub and tree layers



Hollaway Wall as it stands today.

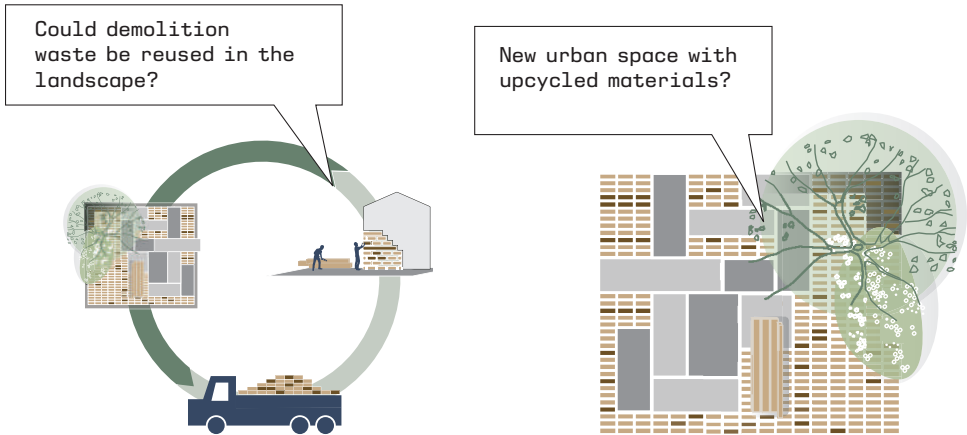
5.7 HOLLAWAY PLACE

5.7.1 HOLLAWAY PLACE DESIGN PRINCIPLE CELEBRATING HERITAGE

Welcome to Holloway Place, the iconic gateway to Sister Manchester steeped in history, just a short walk from Piccadilly Station. This dynamic public space is designed to draw visitors and residents from throughout Manchester and beyond. The area’s distinctive identity is shaped by the architectural language of the iconic Holloway Wall, a listed heritage asset. A standout feature of the Holloway Place is the preservation of existing mature trees, which not only provide natural beauty and shade but also an established habitat for urban wildlife. The blend of integrating historical elements, contemporary public space design, and natural features creates a welcoming and memorable entrance to Sister, setting the tone for the innovation and creativity throughout the masterplan.

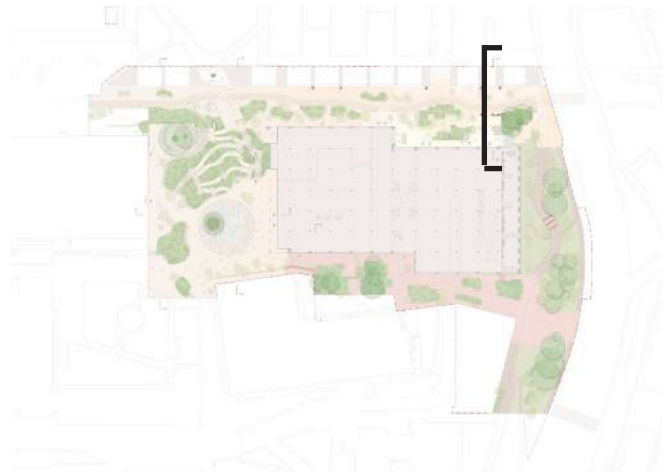
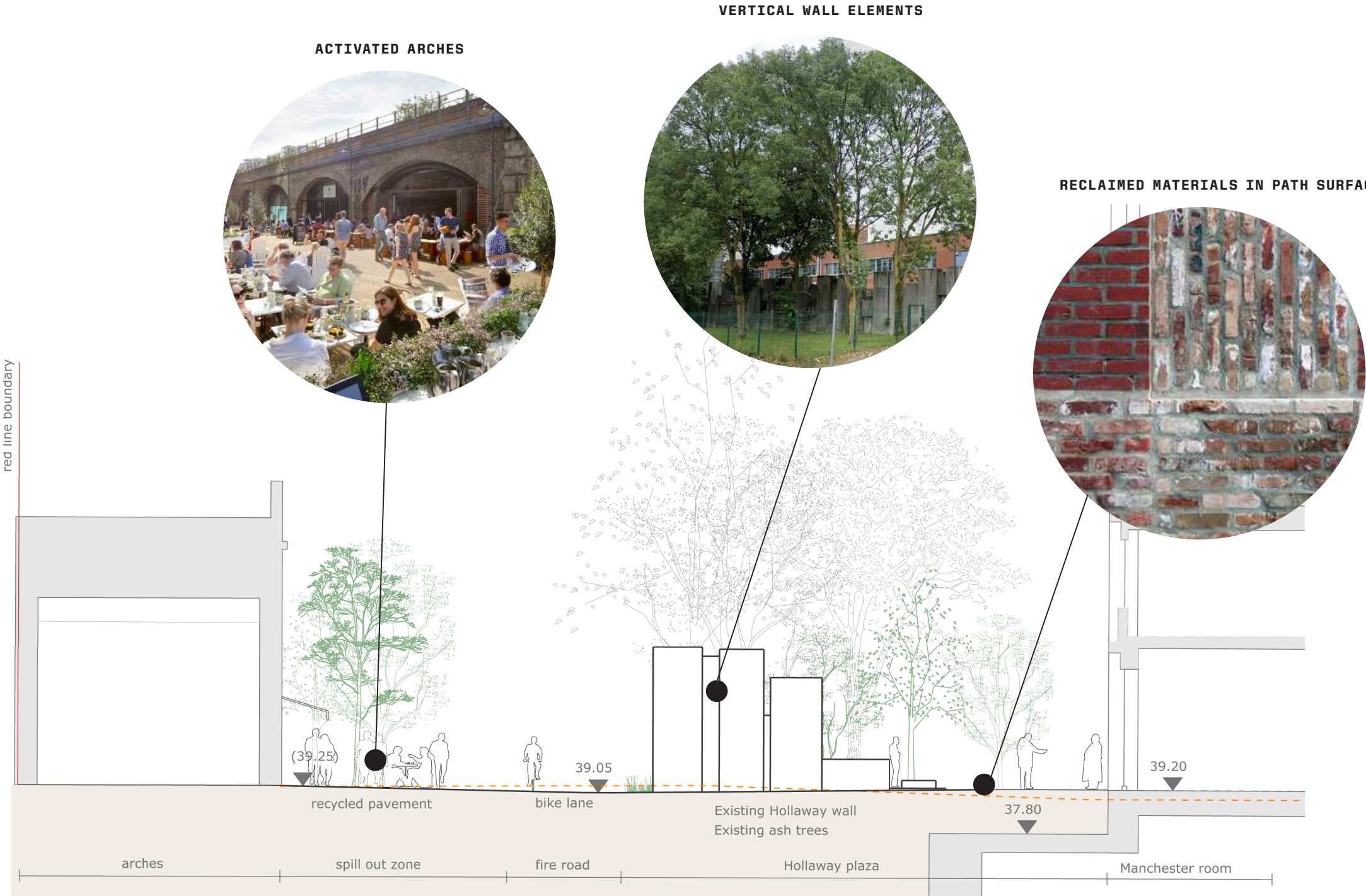
How do we do it?

- Preserve parts of the Holloway Wall in situ, adapt others
- Design high-quality public spaces around, highlighting the Holloway Wall and celebrating it
- Integrate upcycled materials into the hardscape palette
- Create a series of opportunities public interaction through creating connections and link through Holloway Place and along Altrincham Street
- Lighting enhances the safety and usability of the space



The Holloway Wall, a listed heritage structure on the Sister Manchester site.

5.7.1 HOLLAWAY PLACE DESIGN PRINCIPLE CELEBRATING HOLLAWAY WALL



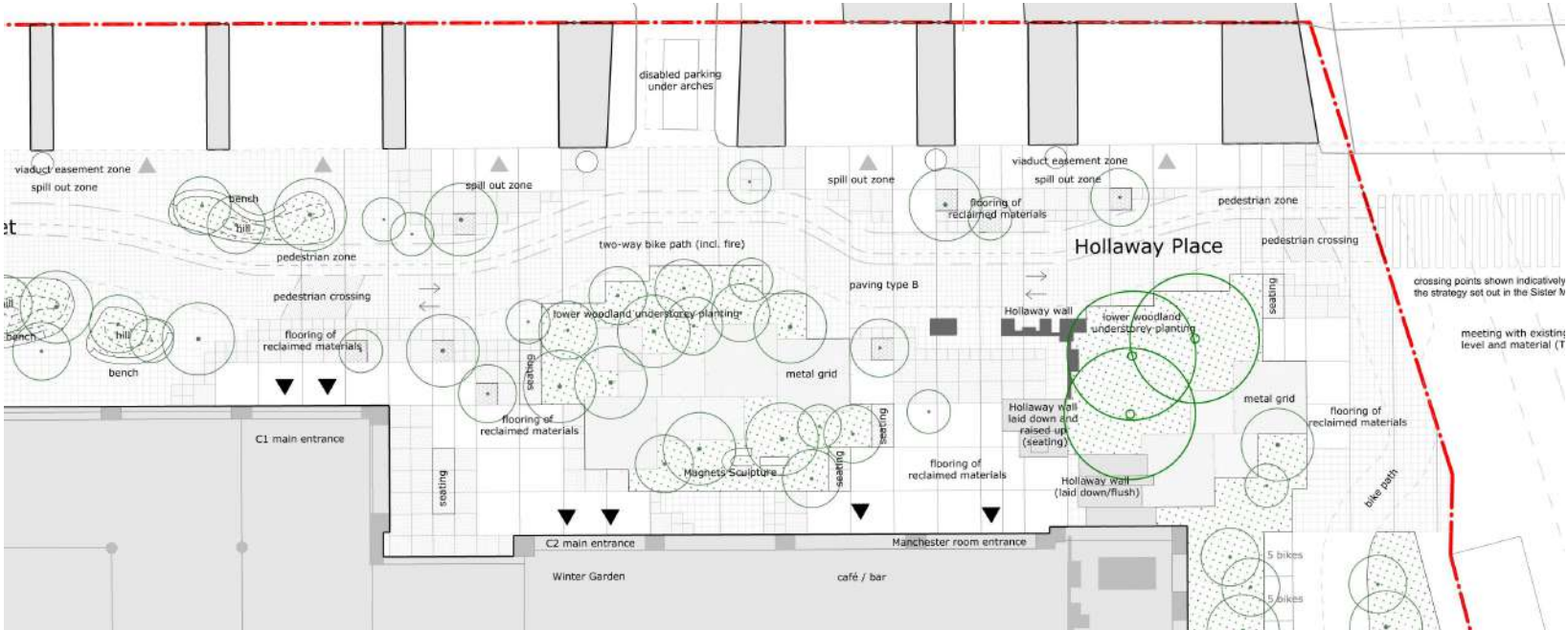
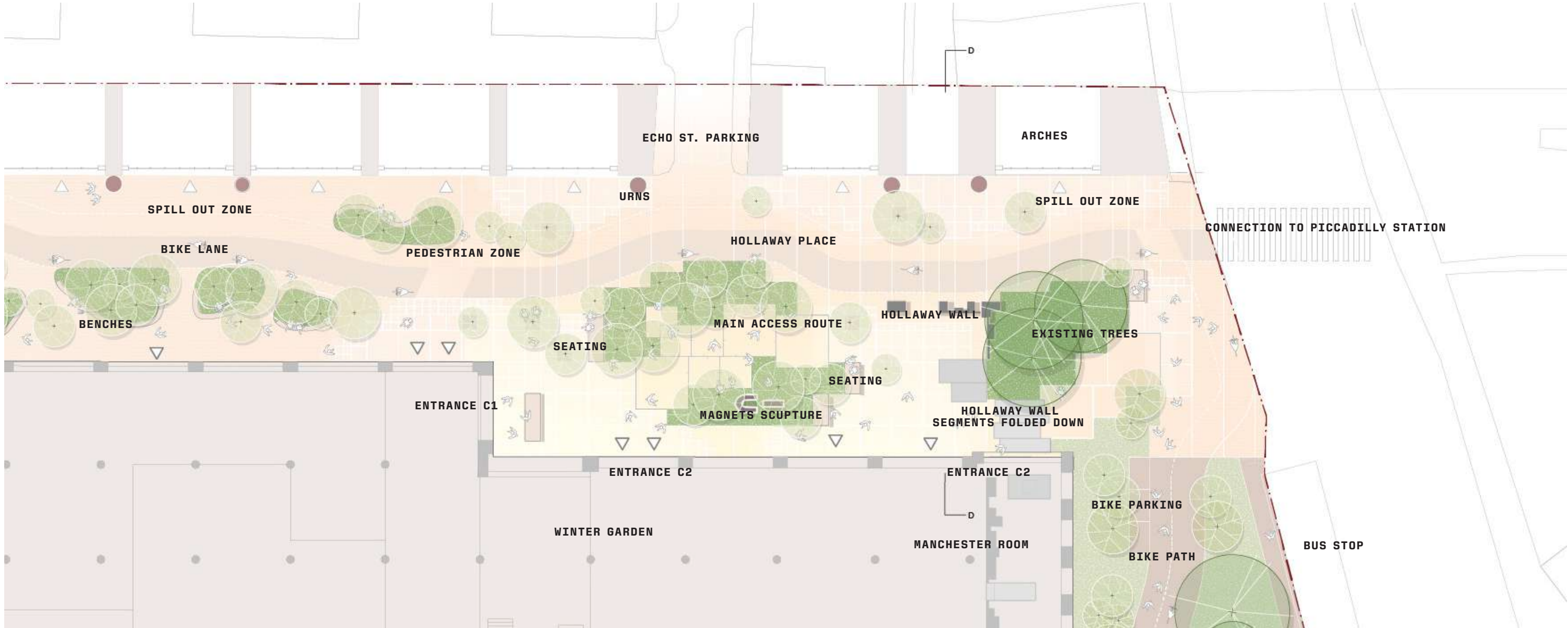
Hollaway Wall as a sculptural element

Keeping some parts of the Hollaway Wall in situ and using others as horizontal elements creates a sculptural experience at the Sister site. In this way, the wall becomes a connector, linking different areas of the site.

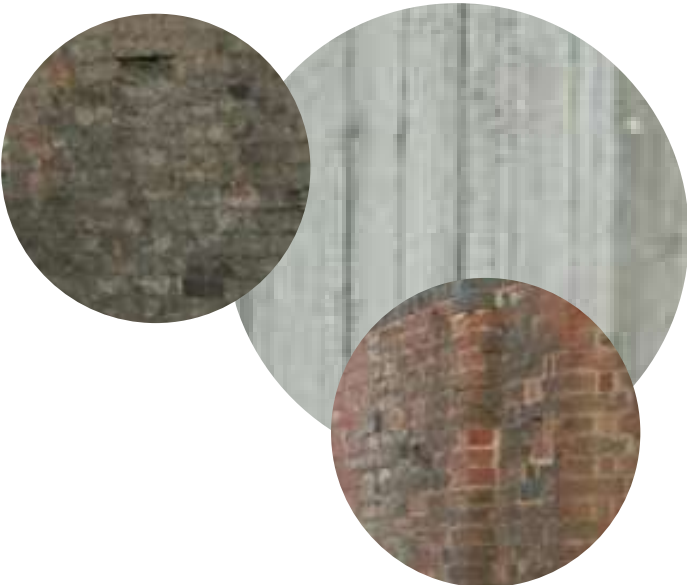
Section through the arches and new building entrance towards London Road

5.7.2 HOLLOWAY PLACE LANDSCAPE DESIGN PRINCIPLES CELEBRATING HERITAGE

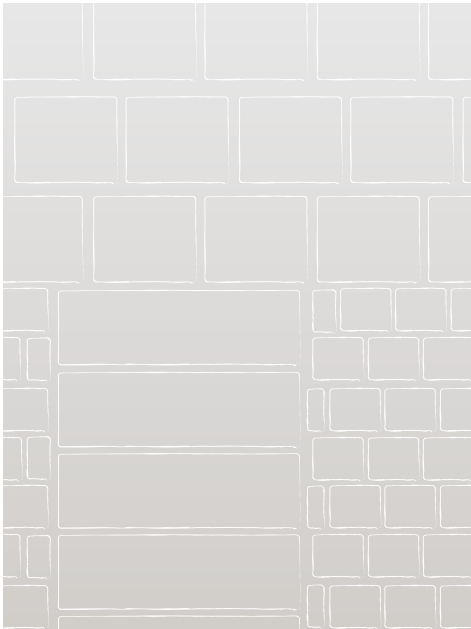
Holloway Place is designed to provide a key nature buffer from London Road, while enhancing the area by providing ecosystem services.



5.7.3 HOLLAWAY PLACE LOOK AND FEEL



Existing materials



Hollaway Place hardscape approach

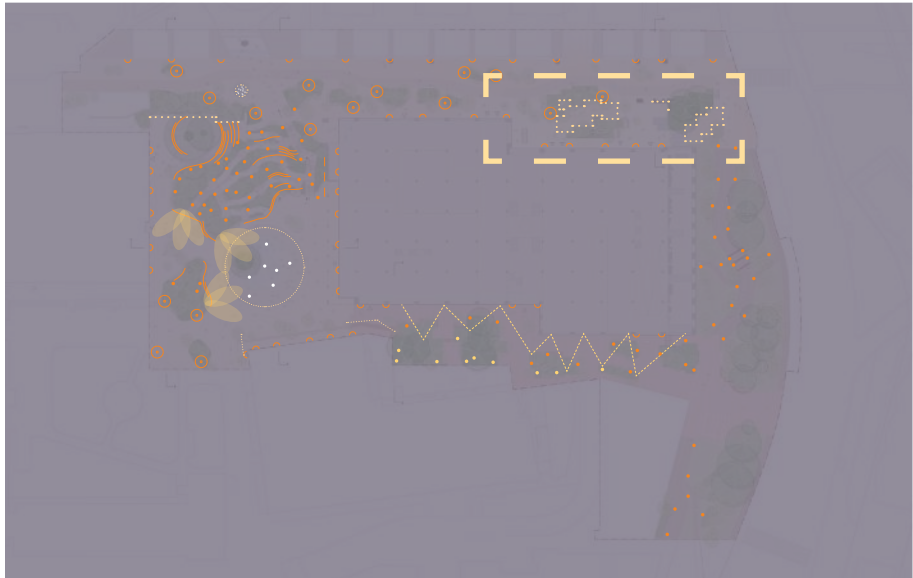
The material concept for Hollaway Place makes use of existing materials through creative upcycling. Demolition materials are repurposed throughout the plaza, creating a visual and tactile connection to Sister's past. Sections of the Hollaway wall are creatively reimagined as seating elements and playful installations, adding both functionality and character to the space.

5.7.4 HOLLOWAY PLACE LIGHTING CHARACTER

The Holloway Wall is brought to life after sunset, by using light to highlight its presence and adding depth to the nighttime landscape. The strong geometrical shapes will be highlighted by grazing light and built in details, bringing the history and tactile story to the attention of visitors after dark.

Throughout the space, strategically placed illuminated stones or pools of light create inviting spots for people to pause and take a seat, encouraging longer stays and social interaction. This lighting approach not only improves the area’s functionality and safety but also transforms it into a destination, emphasizing its distinctive character.

The lighting design for Holloway Place serves as a powerful tool for attracting visitors and enhancing the unique character of the wall, a listed heritage feature. A distinctive lighting arrangement at the entrance creates a visual gateway to the site, acting as an inviting passers-by to explore further.



Lighting plan of Plot C with Holloway Place highlighted

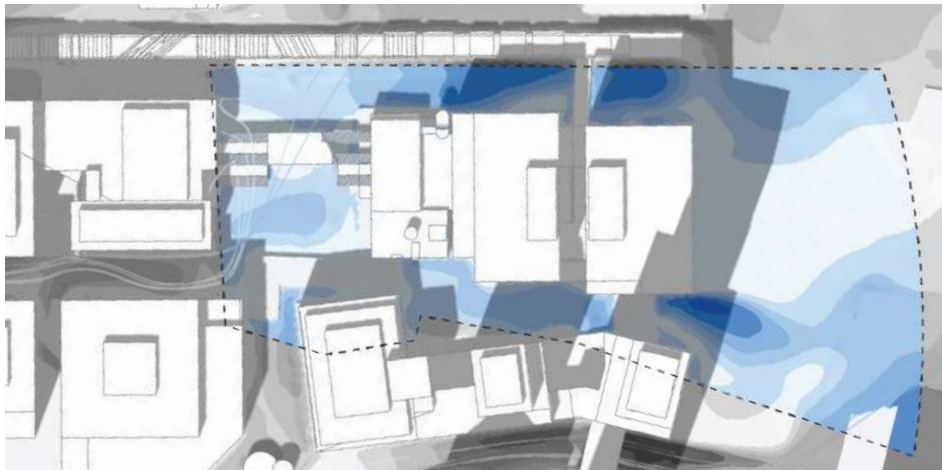
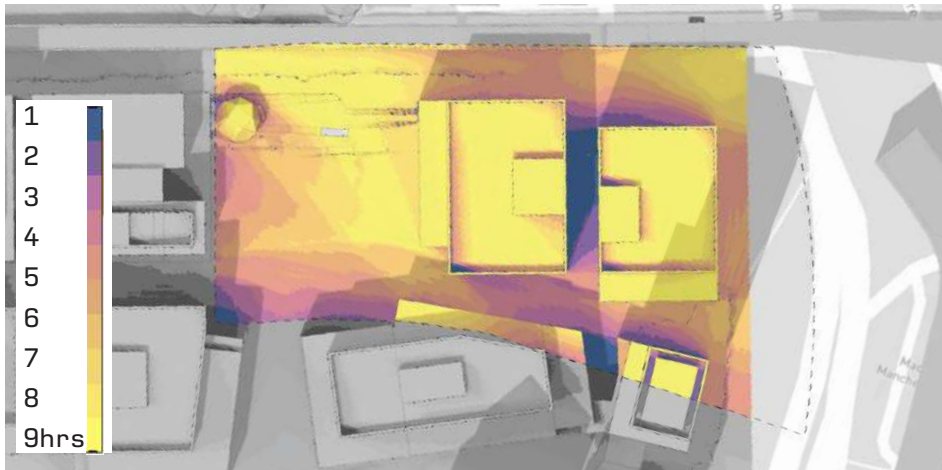


*Precedent images

5.7.5 HOLLOWAY PLACE PLANTING CHARACTER

Holloway Place planting approach

- The microclimate shows strong winds on Altrincham Street which would be alleviated by planting a dense tree canopy, encouraging stay and lingering
- Two vegetation layers only - trees and herbaceous planting - keep views to building entrances unobstructed. Tree stems will give depth to the space whilst their dense canopies break down uncomfortable wind.
- Shade-tolerant planting



Wind and sun analysis



Shade-tolerant herbaceous layer giving richness of textures



Two vegetation layers, trees and herbaceous planting to keep sightlines to building entrances



Tomsgårsvej courtyard, SLA

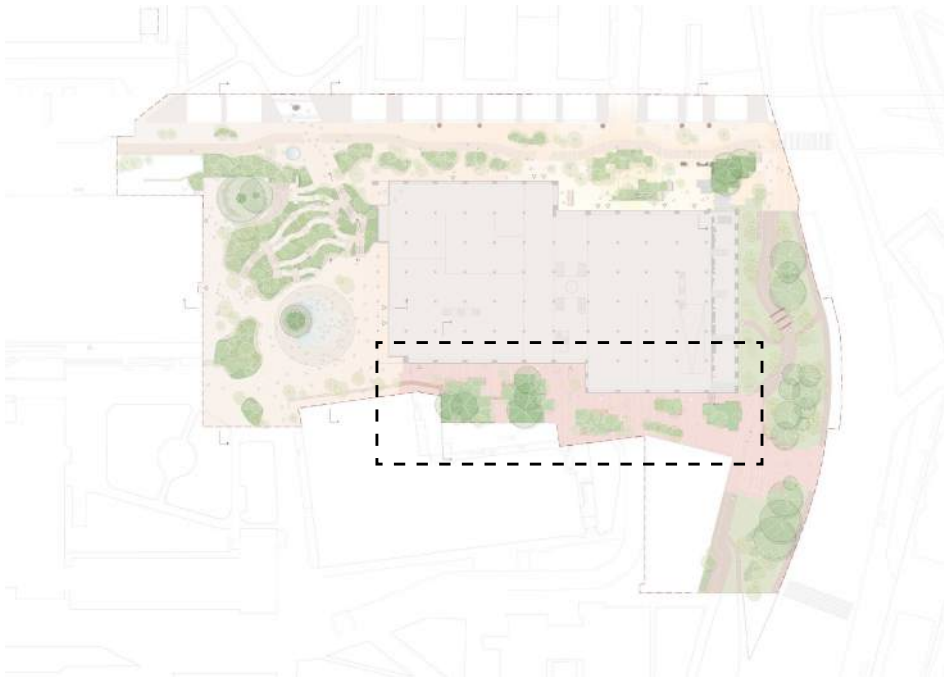
5.8 MILL LANE

5.8.1 MILL LANE DESIGN PRINCIPLE BRICKS AND RAIN BEDS

Mill Lane exudes a vibrant, incubator-like atmosphere that caters to the Sister Manchester’s creative and start-up community. This dynamic space transitions from a bustling street during the day to a lively after-hours destination. There is a strong connection between the buildings and the public realm, which creates an inviting ambiance and encourages interaction and collaboration. The design of Mill Lane incorporates elements such as rain gardens and lush planting which also contribute to urban biodiversity and stormwater management. The overall atmosphere of Mill Lane reflects Sister’s entrepreneurial spirit, fostering a sense of community and inspiration among its diverse mix of visitors and regulars.

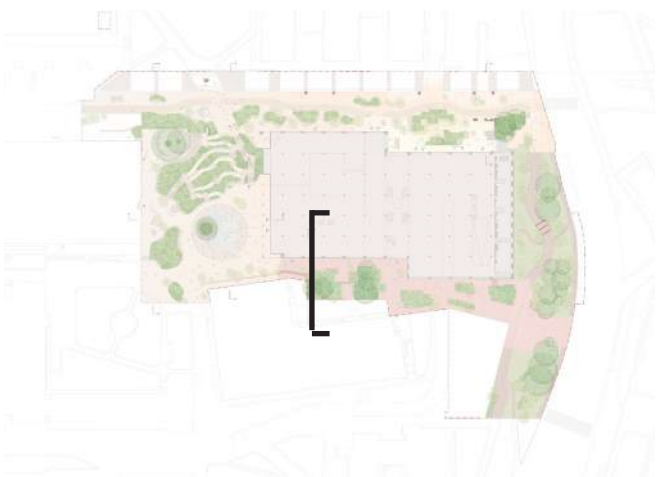
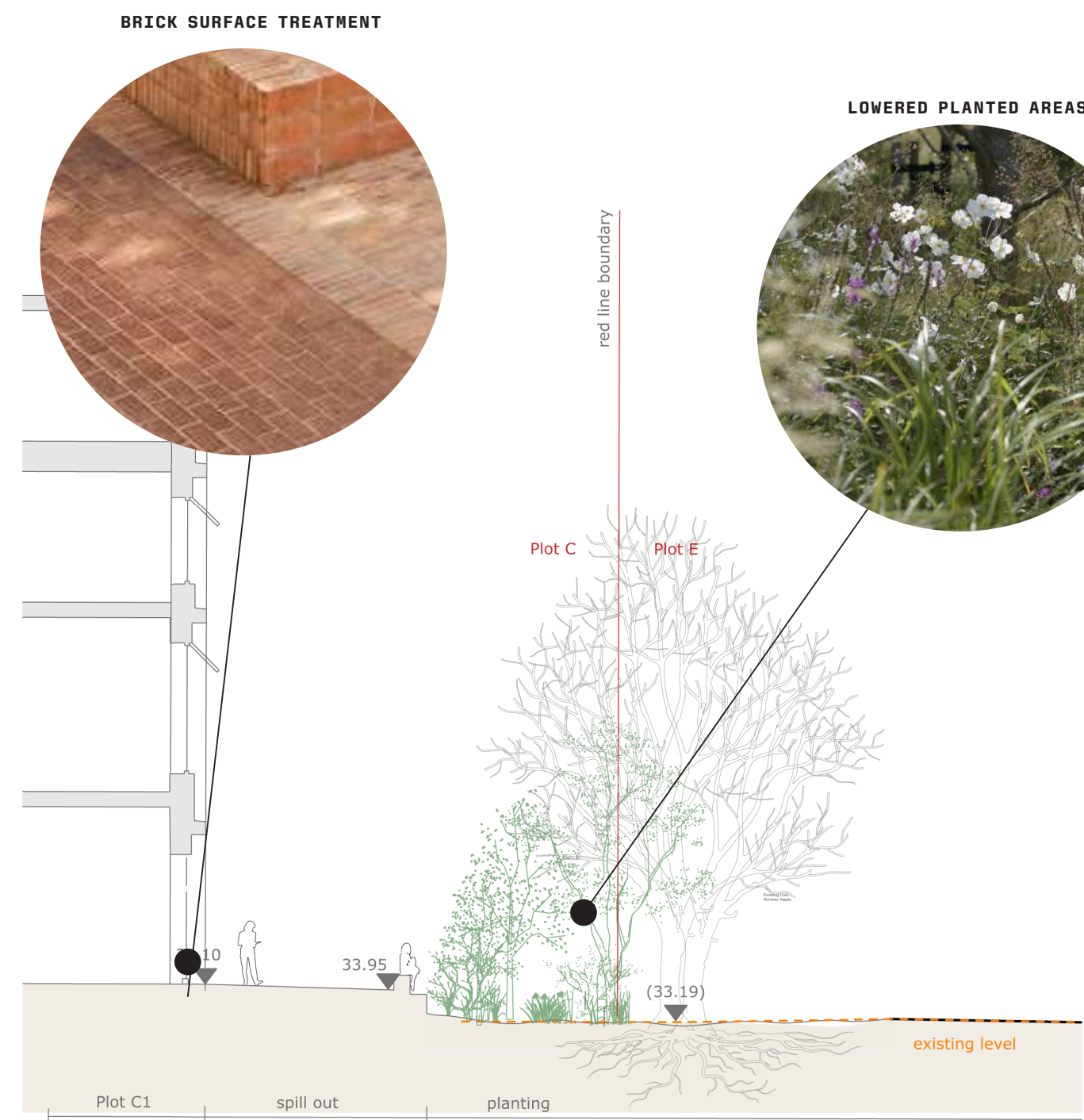
How do we do it?

- Hardscape inspired by Manchester brick alleys, reclaimed materials
- Activated edges, spill out spaces onto the street
- Strategic placement of rainbeds supporting drainage strategy
- Layered planting approach
- Lighting strategy reflecting character of the area



Tomsgårdsvej, SLA

5.8.1 MILL LANE DESIGN PRINCIPLE
MANCHESTER’S NEW PROMENADE



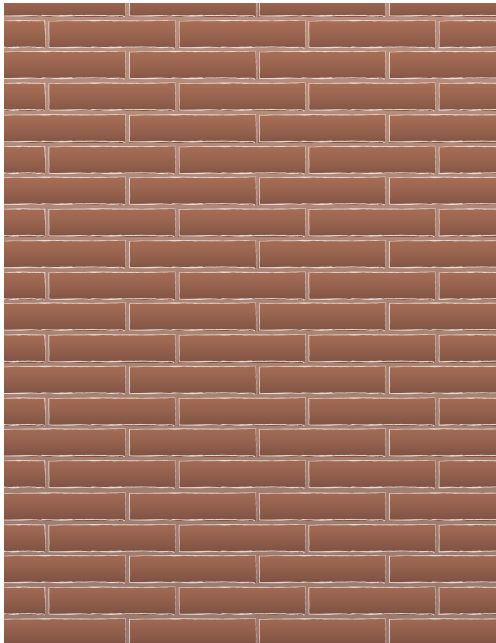
Section through the C1 building and Mill Lane to existing tree



5.8.2 MILL LANE LOOK AND FEEL



Existing materials



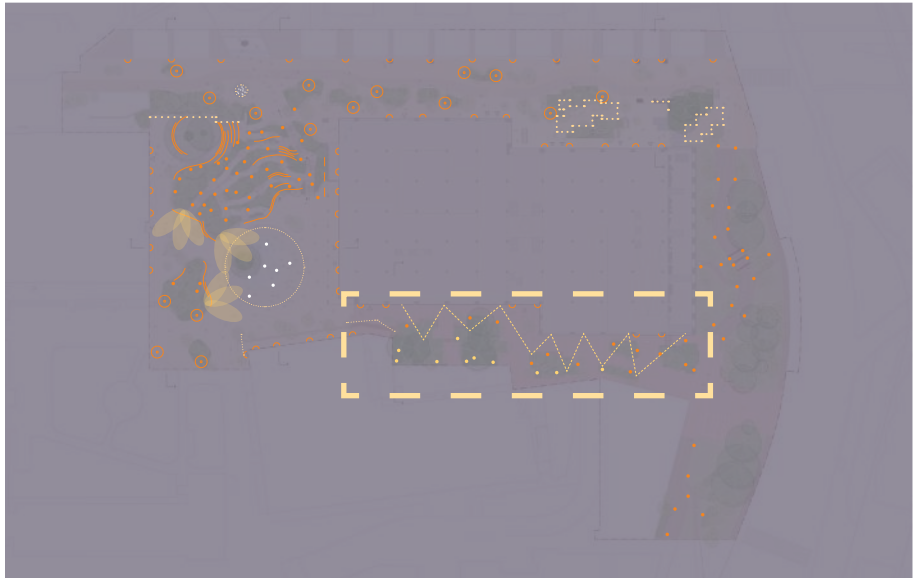
Mill Lane hardscape approach

The material concept for Mill Lane blends both historical character and contemporary design. The alley's primary aesthetic is defined by red brick, a nod to Manchester's industrial heritage and architectural vernacular. The transition to Sister Square is playful and pixellated. This paving treatment will wrap around the Mill and continue to Mill Arcade.

5.8.3 MILL LANE LIGHTING CHARACTER

The lighting design for Mill Lane focuses on creating a warm and inviting atmosphere. To enhance the overall visitor experience the lighting will be suspended across the alley, to create a feeling of human scale between the buildings. By utilizing hanging lights with a warm lighting temperatures, the space exudes a cozy and welcoming ambiance, encouraging people to relax and linger. The plints will feature lower bollards, inviting for smaller and more intimate zones, with a lower uniformity in the lighting, to create interesting lighting experiences at night.

The strategic placement of low-height light sources in the green zones further supports this intimate atmosphere, providing gentle illumination without overwhelming the natural beauty of the surroundings. Between the greenery, dimmed lighting is employed to create a subtle interplay of light and shadow, with tree silhouettes on the ground. This approach to lighting not only ensures functionality but also adds a certain identity to this alley, that transforms the area into a charming and atmospheric destination after dark.



Lighting plan of Plot C with Mill Lane highlighted



*Precedent images

5.8.4 MILL LANE PLANTING CHARACTER

Mill Lane planting approach

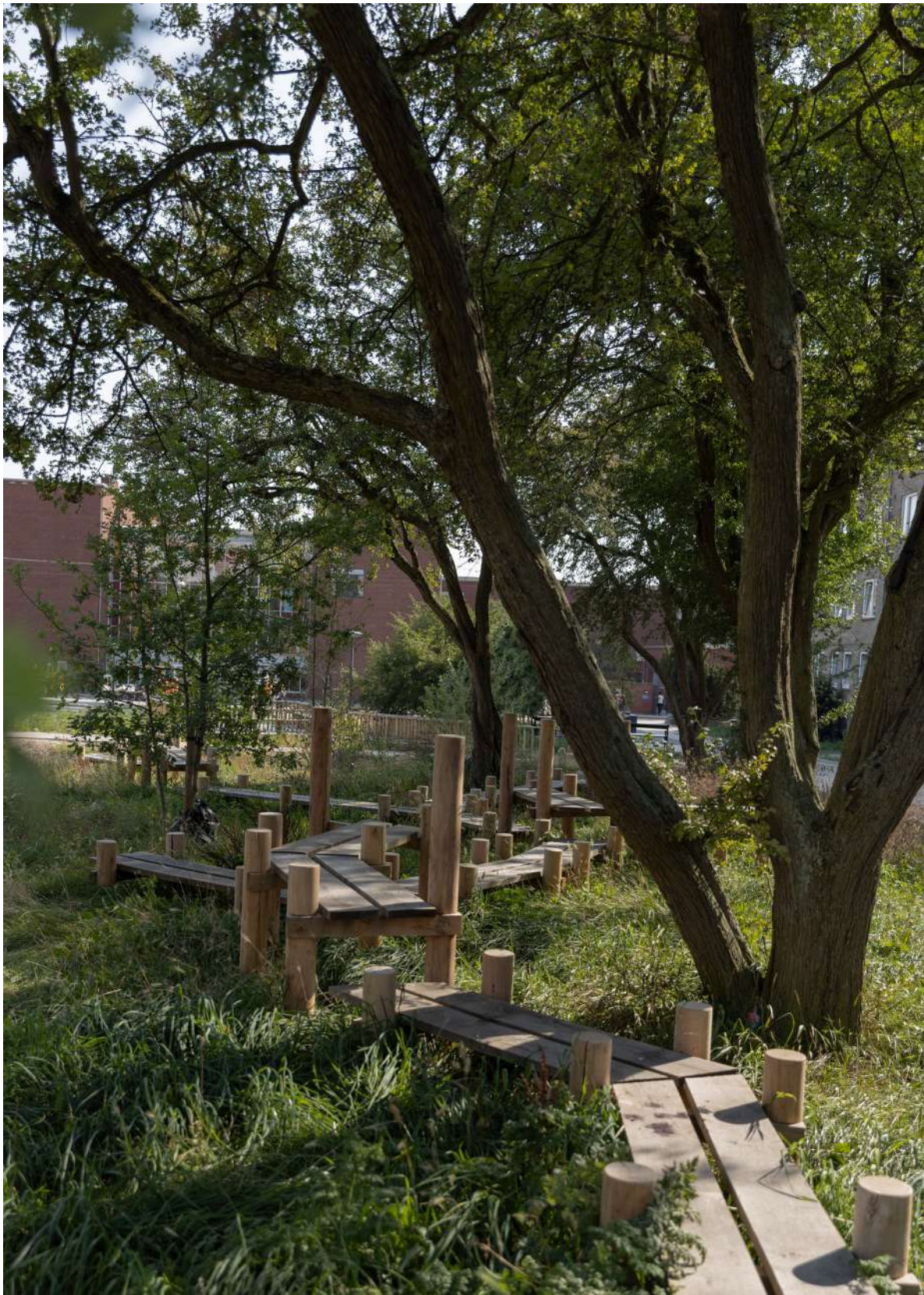
- Planting scheme under preserved existing trees (Acer platanoides), complementing this vegetation layer with rich herbaceous flora and shrubs
- Rainwater is to run into planted areas, leading to a fluctuating moisture level with potentially very wet conditions at times. Tolerance to water is therefore a key aspect of new planting, which Acer platanoides are also tolerant of
- Maximise ecological diversity, structural and sensory richness by planting all vegetation layers (herbaceous, shrub, tree...)



Rich vegetation layers



Planting to handle rainwater



Preservation of existing trees



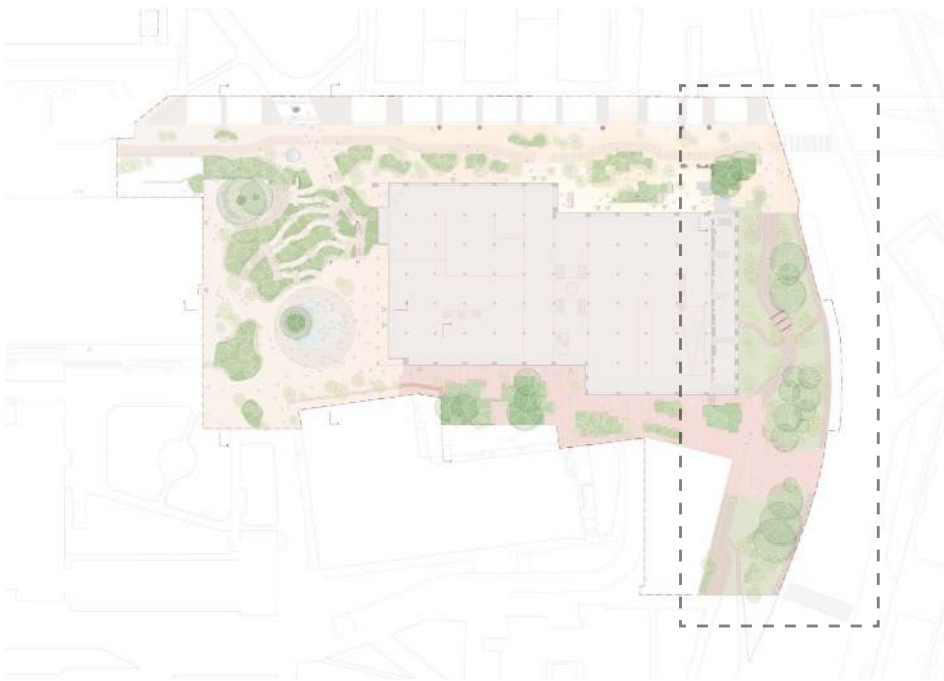
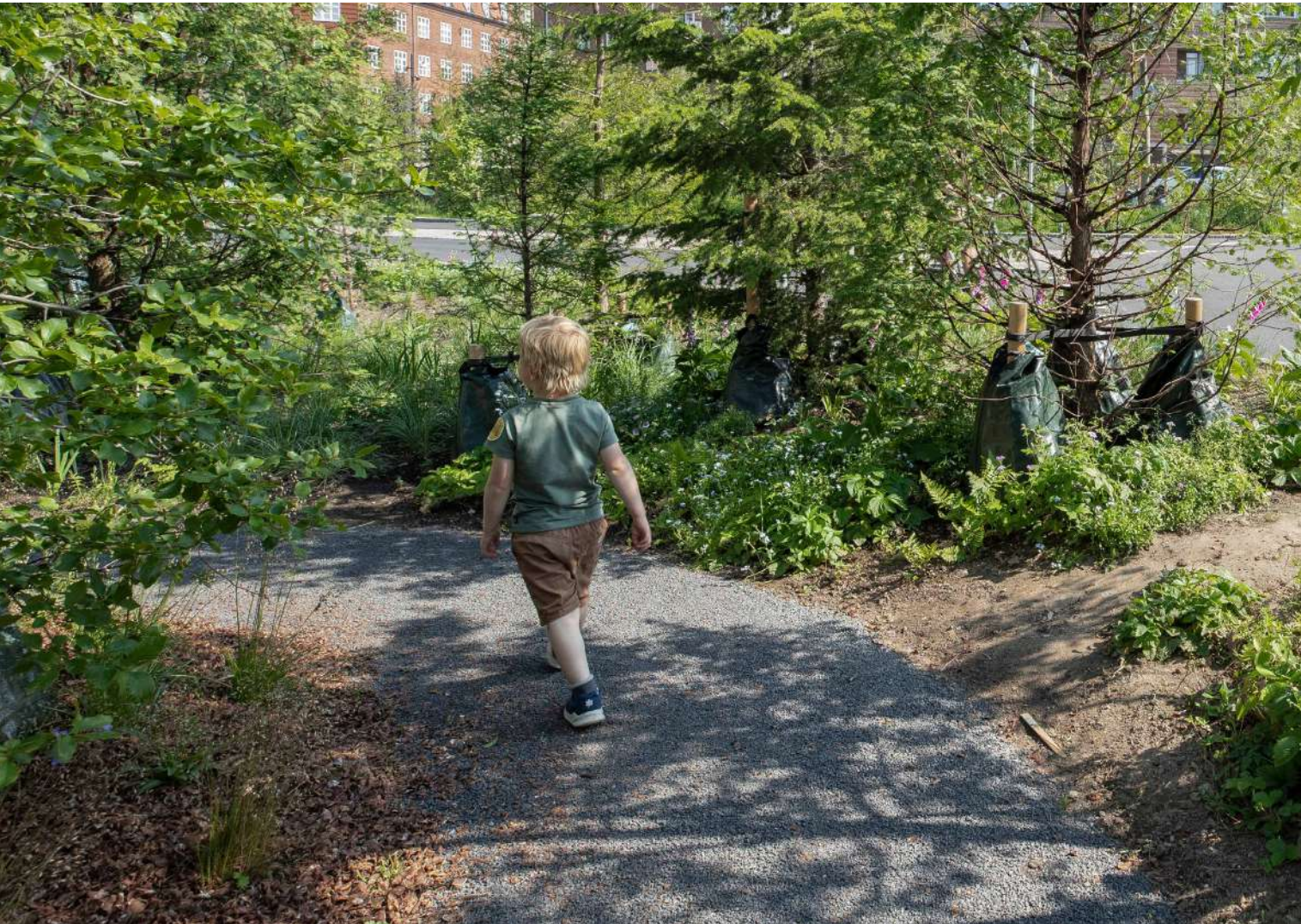
5.9 HOLLAWAY FOREST

5.9.1 HOLLAWAY FOREST DESIGN PRINCIPLE: NATURE BUFFER

Hollaway Forest is a lush ecological connection running North-South along London Road, the design and character of which being driven by the enhanced Hollaway Wall. The forest habitat is designed to be as continuous as possible, preserving existing trees while enhancing the understory with additional native plantings to create a rich, layered habitat for local flora and fauna, all of which contribute to BNG. Winding through this urban woodland is an engaging art walk that leads visitors on a journey of discovery, culminating at the transformed Hollaway Place. By prioritising the preservation and expansion of this green space, Hollaway Forest demonstrates a commitment to urban biodiversity, sustainable design, and the creation of multifunctional landscapes that benefit both the environment and the community whilst promoting heritage.

How do we do it?

- Making Hollaway place more attractive and welcoming
- Preserve existing mature trees
- Enhance and reinforce existing planting
- Highlight Hollaway Wall by setting it in an attractive and accessible environment, encouraging experience and celebrating this heritage artifact
- Upgrade cycle and pedestrian links
- Provide additional parking [DDA & taxis]
- Tie into future urban connections, upgrading of London Road



Sankt Kjelds Plads, SLA

5.9.2 HOLLAWAY FOREST LANDSCAPE DESIGN

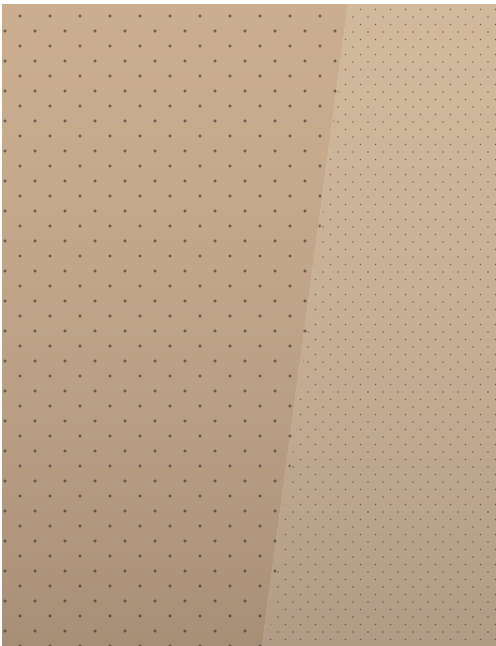


Hollaway Forest is designed to provide a key nature buffer from London Road, while enhancing the area by providing ecosystem services.

5.9.3 HOLLAWAY FOREST LOOK AND FEEL



Existing materials



Hollaway Forest hardscape approach

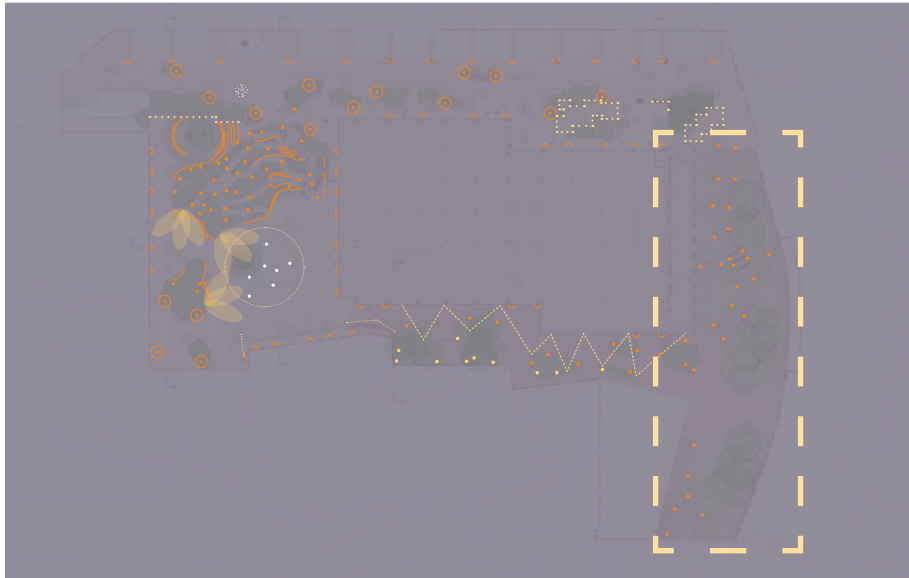
The key hardscaped element is the shared-use route that winds through the forest, carefully differentiated to accommodate various users such as pedestrians and cyclists. This path is designed with subtle material changes or markings to delineate spaces and is complemented by the lighting approach.

5.9.4 HOLLAWAY FOREST LIGHTING CHARACTER

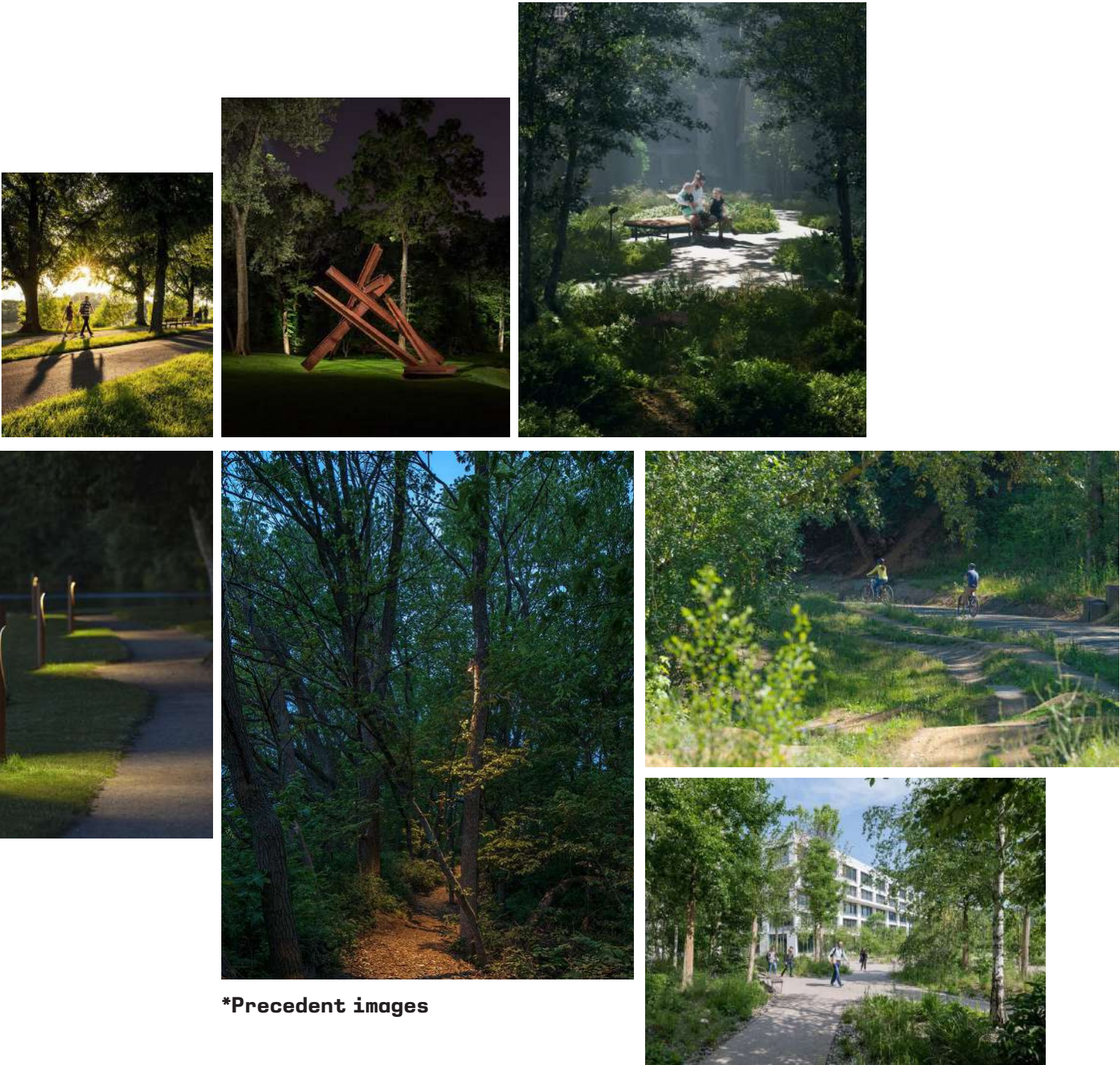
The lighting strategy for Hollaway Forest is carefully designed to balance the needs of both visitors and the local ecosystem. Well shielded, down facing warm lights are employed to support the welfare of fauna and flora, minimizing disruption to nocturnal wildlife while still providing adequate illumination for human activity. Low-level lighting bollards, illuminating only 180 degrees, are strategically placed to improve the experience of natural darkness within the greenery, preserving natural habitats and allowing for a more authentic nighttime experience.

To enhance the area’s cultural appeal, art installations will be highlighted after sunset. Using adjustable spotlights, glare reducing honeycomb filters to ensure that the artworks remain visible and impactful throughout the evening, while maintaining control over the balance of light spill and intensity.

This thoughtful approach creates a harmonious balance between human needs and light pollution reduction, resulting in a nighttime landscape that is both functional and respectful of its natural surroundings.



Lighting plan of Plot C with Hollaway Forest highlighted

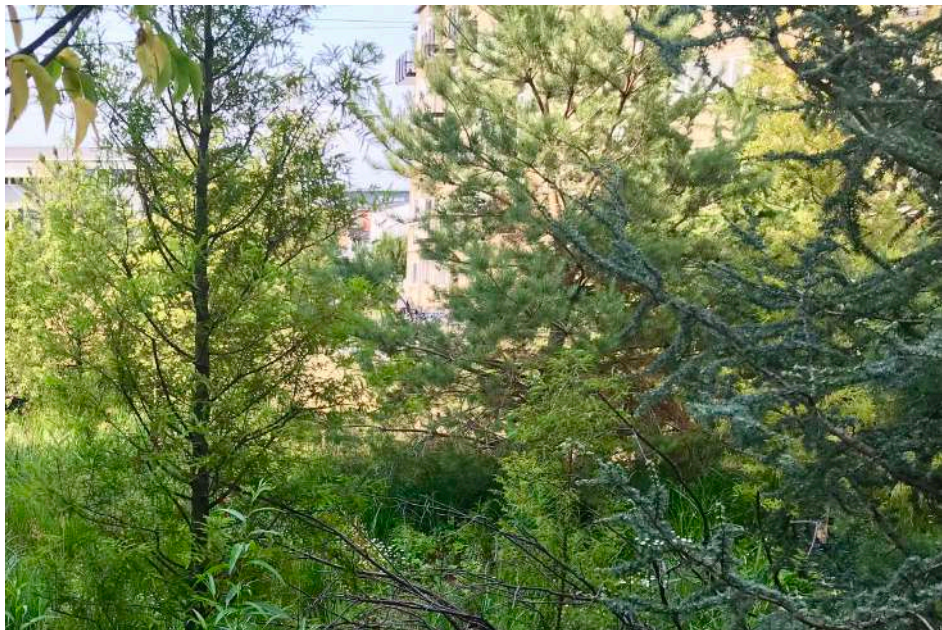


*Precedent images

5.9.5 HOLLOWAY FOREST PLANTING CHARACTER

Holloway forest planting approach

- Planting scheme under preserved existing trees complementing this vegetation layer with rich herbaceous flora and shrub layers
- Plant to a high density level to give the feeling of forest whilst still providing long views along the primary path, allowing users to anticipate future encounters and provide a sense of control and safety at all time. Low yet lush understory vegetation to enhance visibility and soften the hardscape, and denser vegetation further from primary path



Supplement existing with new dense vegetation



Preserving large existing trees



5.10 PUBLIC ART STRATEGY

5.10.1 PUBLIC ART SITE IDENTITY



The revitalisation of public art in Sister embraces a multifaceted approach that celebrates the site’s unique identity while fostering a deep connection with nature. By incorporating living plants, trees, water features, and upcycled materials, the art installations not only beautify the space but also provide educational opportunities about the natural world. A carefully crafted lighting strategy complements the public art, enhancing its visual impact and creating captivating nighttime experiences.

The focus on interactive and sensory elements encourages public engagement, allowing visitors to physically connect with nature through art that stimulates multiple senses. An inclusive design ensures that everyone feels welcome to explore and enjoy these installations.

By showcasing and celebrating the unique flora, fauna, and natural landscapes specific to Sister, the art raises awareness about local biodiversity. This initiative also presents an opportunity to commission new pieces that align with Sister’s values and vision, further strengthening the community’s bond with nature and its surroundings.



Existing (right) and proposed (left) locations of the public art found across Plot C.

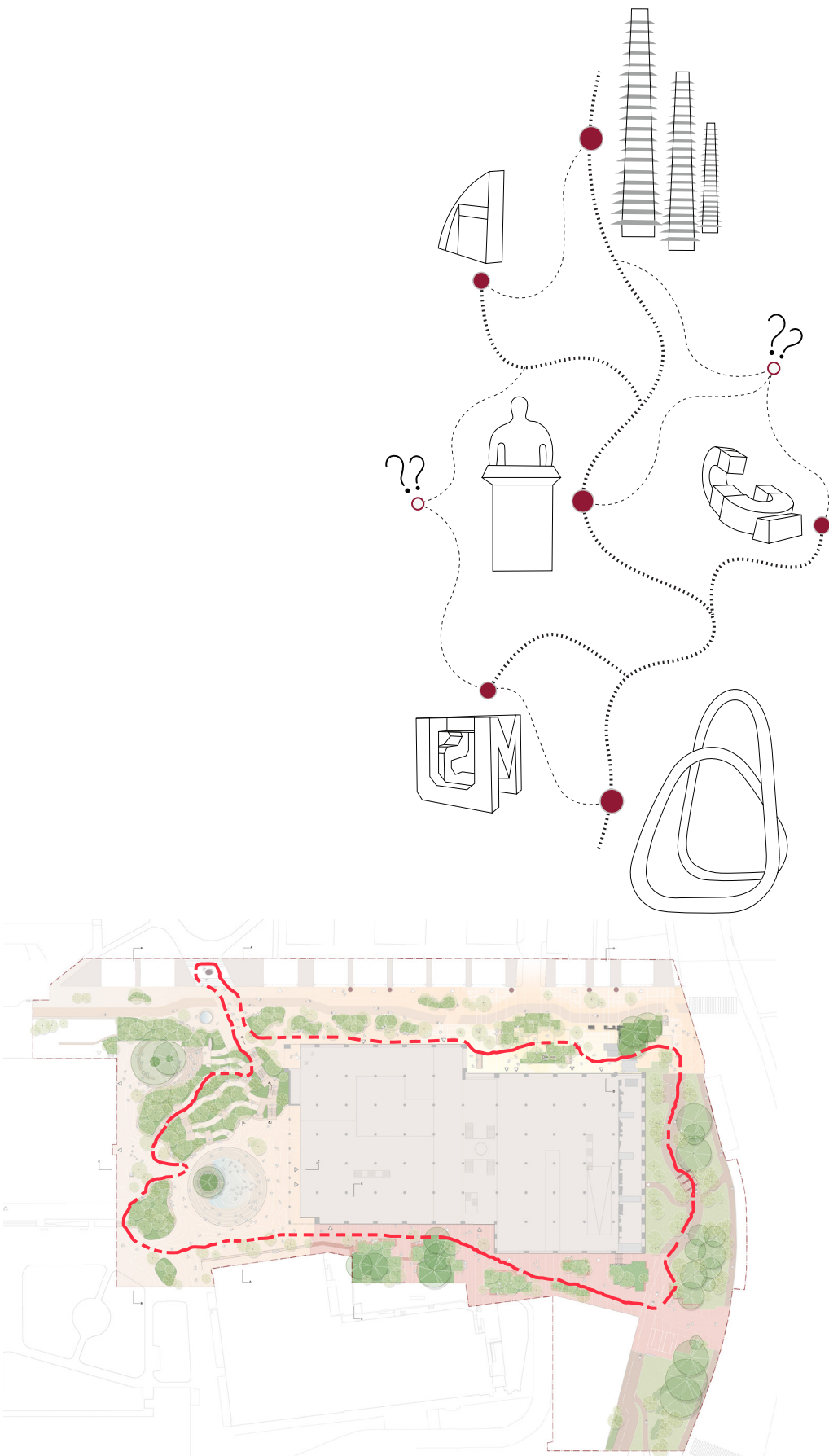
There are a number of pieces of public art located across Plot C originating from different time periods, including a statue of Archimedes [A], Planted Urns [B], a Havelock Mill Structure [C], a Stone Monument [D], the Magnets Sculpture [E] Hollaway Wall [F] and the UMIST cube [G]. These artworks fall under the ownership of the University of Manchester.

5.10.2 THE SISTER ARTWALK

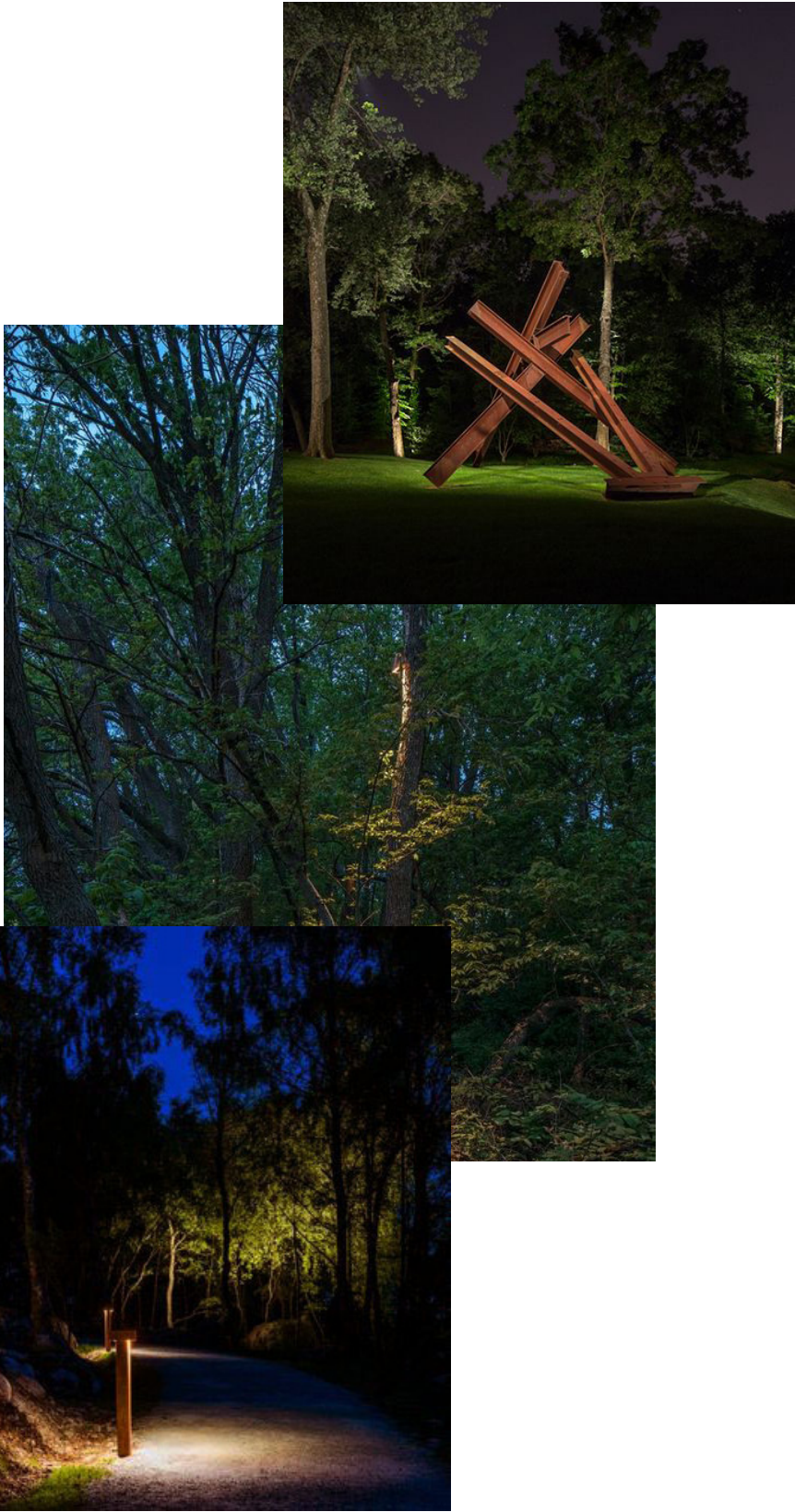
The public art strategy for Plot C integrates both existing and potential new artworks, revitalising the area with a multifaceted approach that highlights the site's unique identity and fosters a deep connection with nature. Key elements include:

- **Integration of Nature:** Incorporating living plants, trees, water features, and upcycled materials to beautify the space and provide educational opportunities about the natural world.
- **Lighting Strategy:** Carefully crafted lighting enhances the visual impact of the art installations, creating captivating nighttime experiences.
- **Interactive and Sensory Elements:** Encouraging public engagement through art that stimulates multiple senses, allowing visitors to physically connect with nature.
- **Inclusive Design:** Ensuring that everyone feels welcome to explore and enjoy the installations.
- **Celebration of Local Biodiversity:** Showcasing the unique flora, fauna, and natural landscapes specific to Sister, raising awareness about local biodiversity.
- **Commissioning New Pieces as an option:** Aligning possible new art pieces with Sister's values and vision to strengthen the community's bond with nature.

Existing artworks in Plot C include the statue of Archimedes, Planted Urns, a Havelock Mill Structure, a Stone Monument, the Magnets Sculpture, Hollaway Wall and the UMIST cube. These pieces, owned by the University of Manchester, span different time periods. An art walk could unify these historic pieces with new ideas, embracing the synergy of nature, art, and light.



An art walk could bring together both historic pieces and new ideas, and embrace the opportunity of nature, art and light.



Precedent images

5.11 PLANTING AND MAINTENANCE APPROACH

5.11.1 INDICATIVE PLANTING LIST

The indicative planting list was developed with careful consideration of the character and ambitions of each landscaping public realm space. These typologies utilise native species and those that positively contribute to local biodiversity, supporting pollinators, birds, and other wildlife.

While indicative, the planting list enhances our understanding of the spaces, ensuring the selected species complement existing retained trees for example. The list also accounts for area-specific opportunities, such as water tolerance, shade tolerance, ecological diversity, and structural variation.

The list includes species that represent all vegetative layers, fostering a lush, vibrant feel and creating a seamless ecological connection across the site.

PLANT LIST - PRELIMINARY AND INDICATIVE - 01-04-2025

TREES		
	BOTANICAL NAME	ENGLISH NAME
	<i>Alnus glutinosa</i>	Common alder
	<i>Betula pendula</i>	Silver birch
	<i>Acer campestre</i>	Field maple
	<i>Carpinus betulus</i>	Hornbeam
	<i>Fagus sylvatica</i>	Common beech
	<i>Pinus sylvestris</i>	Scots pine
	<i>Prunus avium</i>	Wild cherry
	<i>Sorbus aucuparia</i>	Rowan
	<i>Quercus robur</i>	English (pendunculate) oak
	<i>Quercus petraea</i>	Sessile oak
	<i>Quercus ilex</i>	Holm oak
SHRUBS		
	BOTANICAL NAME	ENGLISH NAME
	<i>Amelanchier lamarckii</i>	Apple serviceberry
	<i>Cornus sanguinea</i>	Cornelian cherry
	<i>Corylus avellana</i>	Hazelnut
	<i>Crataegus monogyna</i>	Common hawthorn
	<i>Euonymus europaeus</i>	Spindle
	<i>Ilex aquifolium</i>	Holly
	<i>Rosa canina</i>	Dog Rose
	<i>Salix alba</i>	White willow
	<i>Salix caprea</i>	Goat willow
	<i>Taxus baccata</i>	Yew
	<i>Juniperus communis</i>	Common juniper
PERENNIALS AND GRASSES		
	BOTANICAL NAME	ENGLISH NAME
	<i>Ajuga reptans</i>	Bugle
	<i>Carex sp.</i>	Sedges
	<i>Hedera helix</i>	Ivy
	<i>Leucanthemum vulgare</i>	Oxeye daisy
	<i>Primula vulgaris</i>	Primrose
	<i>Silene dioica</i>	Red campion
	<i>Anemone nemorosa</i>	Wood anemone
	<i>Betonica officinalis</i>	Betony
	<i>Dryopteris carthusiana</i>	Narrow buckler fern
	<i>Deschampsia cespitosa</i>	Tufted hair grass
BULBS		
	BOTANICAL NAME	ENGLISH NAME
	<i>Galanthus nivalis</i>	Snow drop
	<i>Hyacinthoides non-scripta</i>	Bluebell
	<i>Narcissus pseudonarcissus</i>	Wild Daffodil
	<i>Ranunculus ficaria</i>	Lesser Celandine

Preliminary and indicative planting list for Plot C



Herlev Hospital landscape, SLA

5.11.2 ADAPTIVE LANDSCAPE MANAGEMENT APPROACH

An adaptive landscape management approach includes monitoring changes in plant growth, species interactions, and ecosystem health, then adjusting the maintenance strategies to better support biodiversity. Staggering maintenance tasks can help to support this approach. For instance, mowing a meadow at different times in various sections can create a mosaic of habitats. This approach provides a range of conditions supporting diverse species, extends resource availability for wildlife, and preserves refuges for insects and small animals. By varying maintenance timing, we can enhance biodiversity while maintaining the overall health and functionality of the landscape.

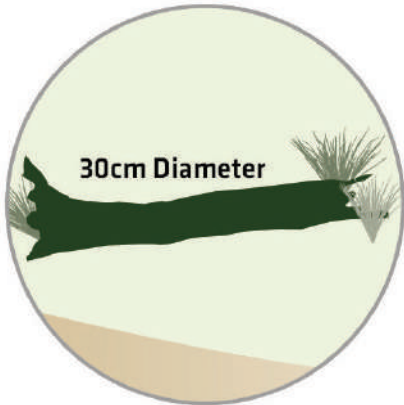
A specific management plan will be developed in following stages by the landscape architects in conjunction with the management and maintenance team. The landscape and public realm will be managed by the Bruntwood/Sister Estate Management Company.



Example of observing and adapting the maintenance strategy as the landscape evolves over time, Skt. Kjelds Plads, Copenhagen.

5.11.3 KEY MAINTENANCE TASKS

Example maintenance tasks which can form the maintenance strategy.



LARGE TREE TRUNKS ARE INCLUDED IN THE AREA AND FORM INSECT HABITATS



PLANT DESIGN FORMS THE BASIS OF SELF-REJUNINATION OF PLANTINGS



STORM DRAIN TO BE CLEANED OFTEN TO ENSURE ADEQUATE WATER FLOW



REMOVAL OF NON-ORGANIC GARBAGE



NEEDLE AND LEAF FALL TO BE INCLUDED IN THE BIOTOPES



THINNING OUT AND PRUNING OF DENSE VEGETATION



REPAIR OF PAVED AREAS SHOULD BE CONCIIOUS OF DEVELOPING NATURE



MAINTENANCE OF KEY TRAILS EG. HOLLAWAY FOREST



CHECK HEALTH OF SPECIES, MINIMISE RISK FOR DISEASES AND THREATS



REMOVAL OF INVASIVE AND DOMINANT SPECIES



ENSURE ACCESSIBILITY ACROSS THE DESIGN

5.11.4 MOWING APPROACH

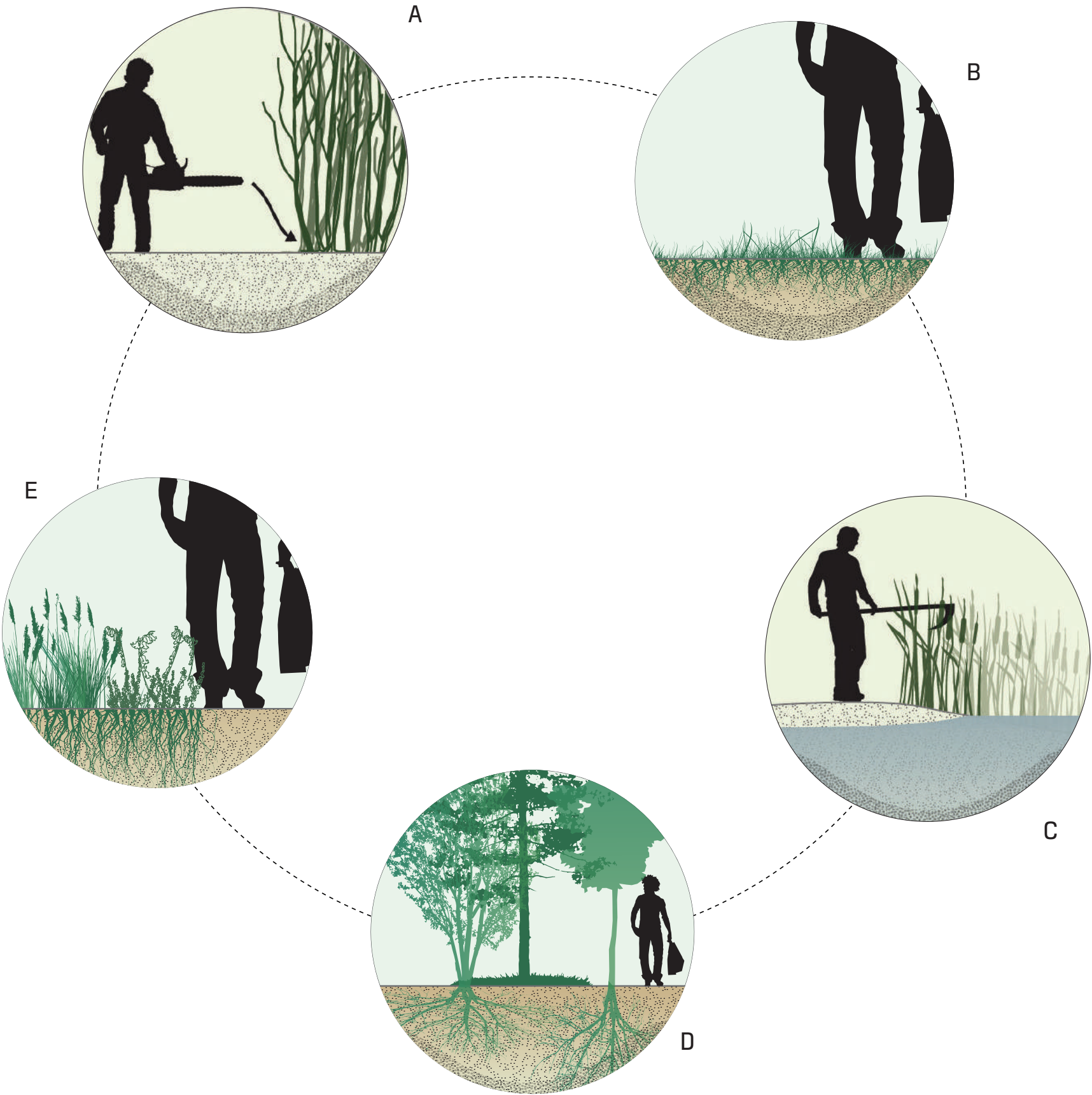
A) Never mow around the edges of the planted area towards the centre. This leaves wildlife no escape route and creates a 'killing zone'. Instead, mow gradually towards uncut grass strips, making high level cuts first before lower cut. Good for: frogs, toads, voles

B) Short grass areas are those which are mown once every four weeks or so. This regime allows smaller plants such as Daisies and Bird's-foot-trefoil to flower in profusion, providing a fabulous food source. Short grass areas will also attract many insects, such as mining bees that create their burrows in the ground

C) Some areas should be left completely uncut all year round. It's particularly important to leave grassy strips close to hedgerows and other habitat corridors wild. These long grasses provide valuable feeding material, shelter, and nesting sites for species such as hedgehogs and toads

D) The 'Bird Nesting Season' is officially from March until August (Natural England) and it is recommended that vegetation works (tree or hedge cutting) or site clearance should be done outside of the nesting season

E) Meadow or medium length areas are mown with cuttings collected just 2-3 times per year outside of April-August inclusive. These spaces can be the perennial herbaceous borders you never need to weed, feed or water. They allow taller growing summer flowers to flourish like Oxeye Daisy, Meadow Cranesbill, Musk Mallow, knapweeds and scabiouses but can incorporate spring flowering species as well such as Cowslip and violets



Key guidance steps for mowing

5.11.5 MEADOW AND GRASSLAND PLANTING

Maintain natural grass

- Natural grass consists of wild herbs and grasses. It is applied for a powerful and naturalised expression

Establishment care

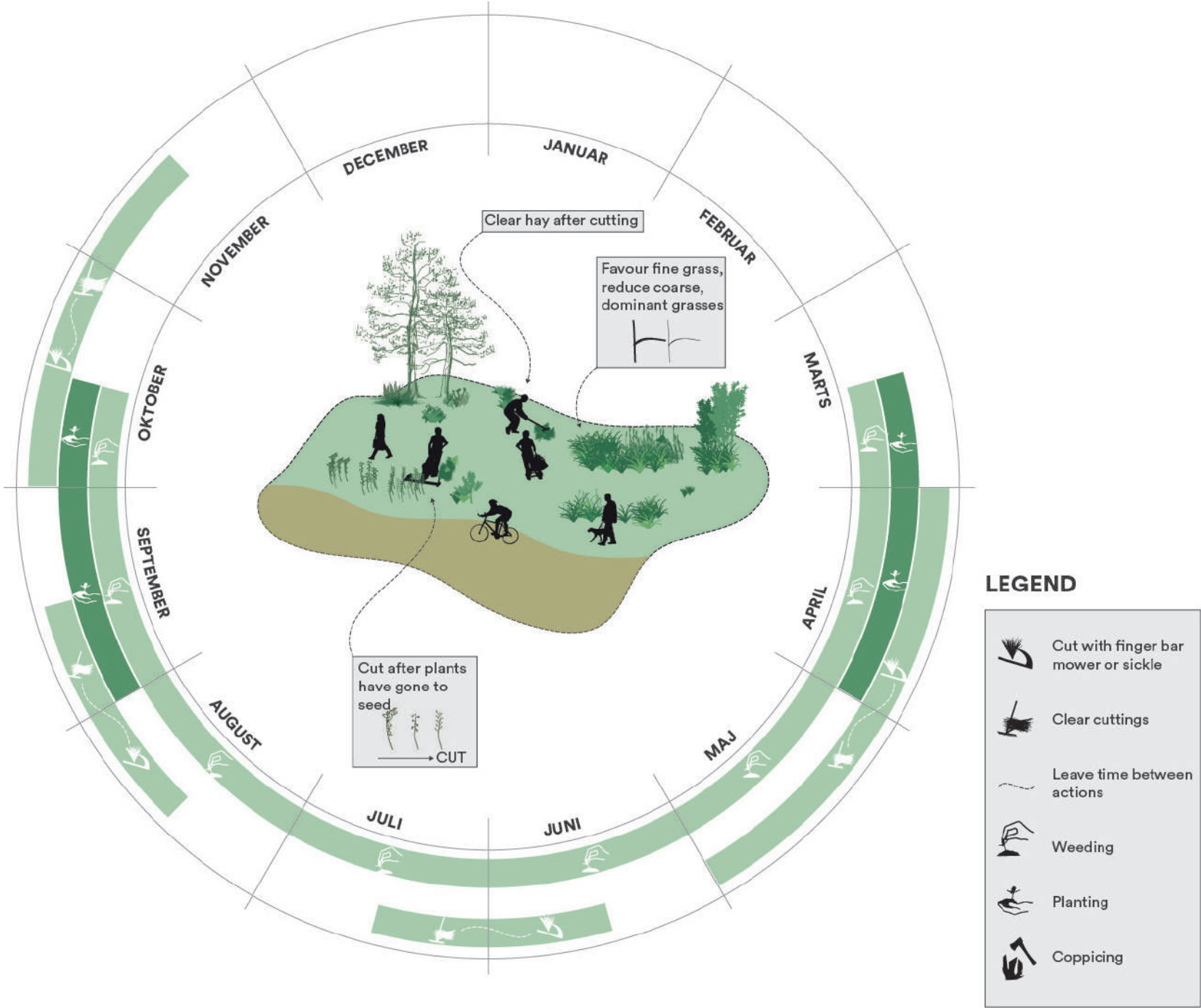
- Get the vegetation in good growth
- Prevent trees, woody plants and invasive plant species

Condition requirements

- Trees can only occur in small number.
- Aggressive and invasive herbs should not occur.
- The vegetation should not disturb terrain equipment or mobility

Minimum care

- Removal of woody plants once per year.
- Cut around paths etc. 3 times a year.
- Removal of aggressive and invasive herbs 3 times a year.
- Mowing or grass cutting once a year with removal of cut material



Precedent planting management strategy for a grassland / meadow habitat- Skt Kjelds Plads, Copenhagen, SLA

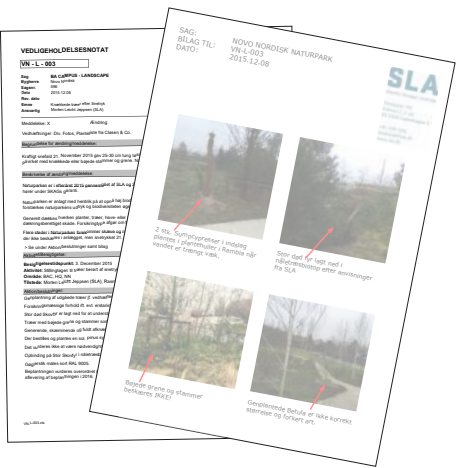
5.11.6 A LEARNING APPROACH TO MAINTENANCE

Maintenance knowledge transfer

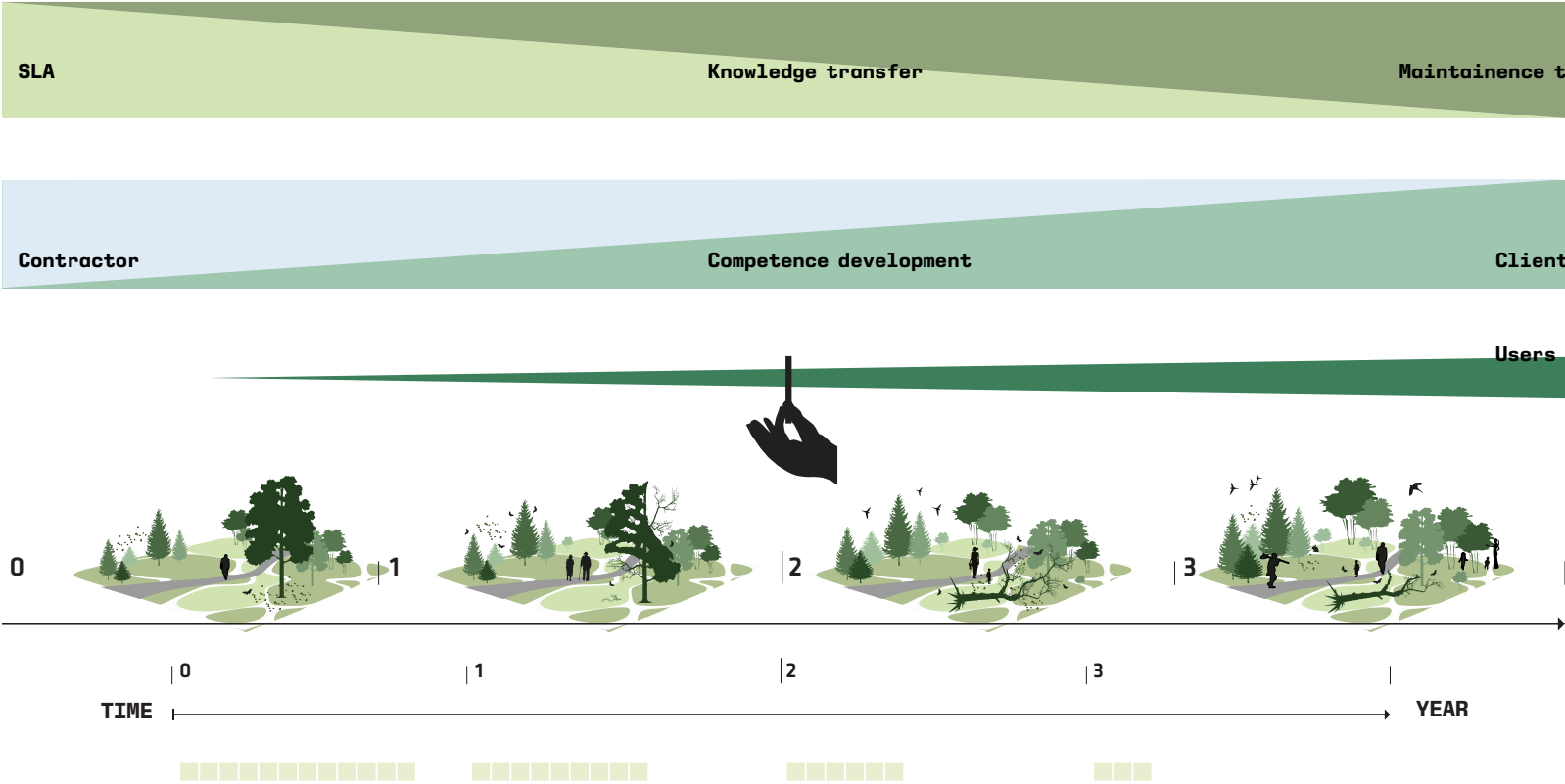
- During the first three years of maintenance there should be a transfer of knowledge from the design team to the maintenance organisation.
- For example, topics could include development of vegetation and nature qualities will be observed and the suitable maintenance agreed on.
- Site meetings can be followed by workshops if needed for education of maintenance staff.



A learning approach to maintenance - SLA and maintenance staff meetings on site to discuss and adjust practice

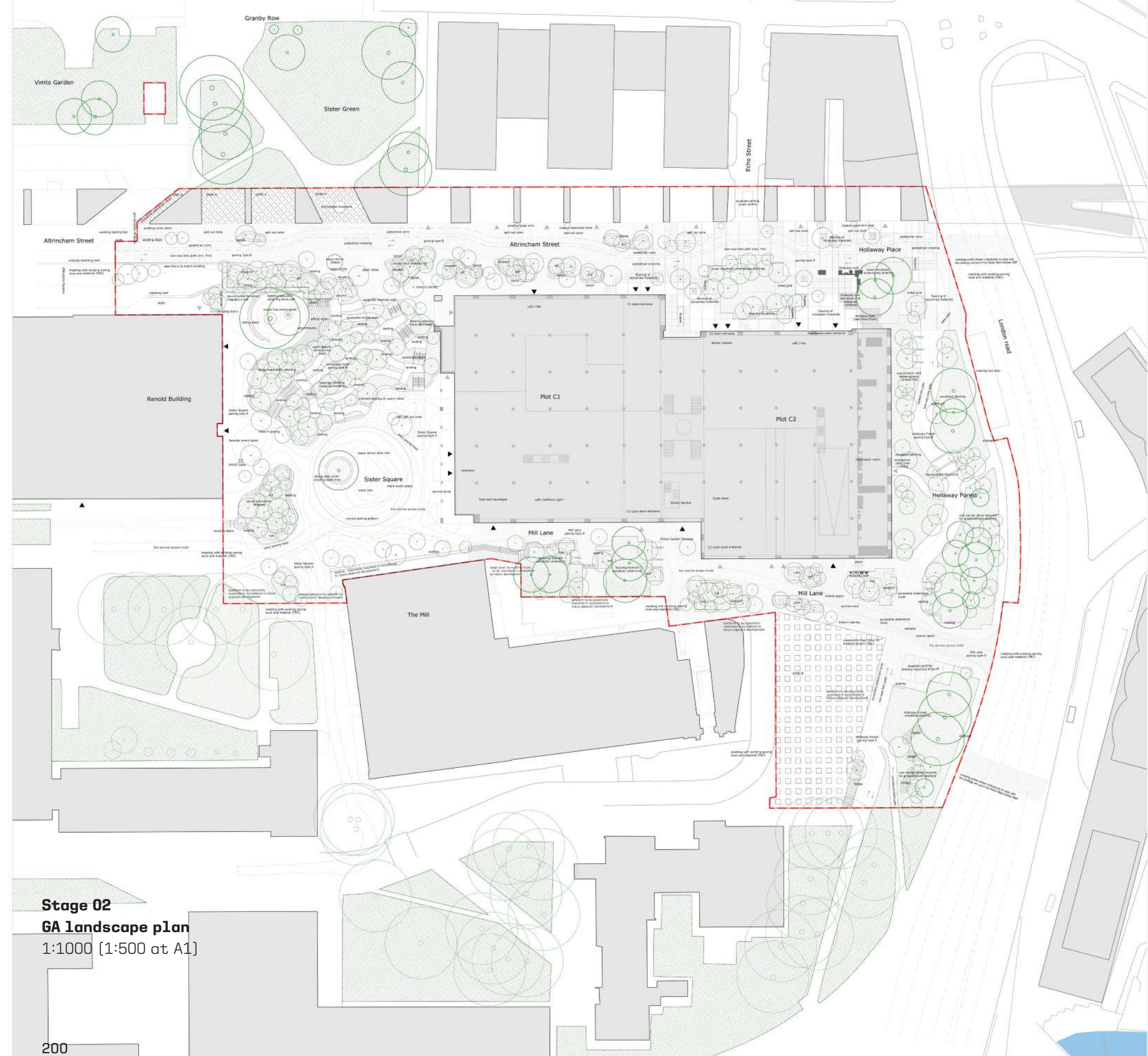


A learning approach to maintenance - example maintenance reports by SLA



A learning approach to maintenance..Maintenance approach and handover

5.12 LANDSCAPING GA DRAWINGS

[illegible]

Numbers

Tree Strategy:

No. of existing trees in Plot C today: 54 trees
No. of removed trees Plot C: 28 trees [26 kept]
No. of new trees Plot C: 270 trees

Cycle Parking:

35 spaces in the Plot C public realm

Note:
Tree placement and location of structures on Altrincham St. to
be coordinated (utility zone to be confirmed).

Revision no.	Date	Comments	Drawn	Checked
02	21.01.2025	Revision including new C1 and C2 building footprints, incorporation of Butterfly stairs in the landscape, level changes.	LAM/RSU	JLB/SIS
03	18.02.2025	Plot boundary update, temporary design zone boundary by plot E added, bike lane update	LAM	JLB
04	11.04.2025	Updates on: plot boundary, Sister George central steps and slope design update, Alfrincham St, bike lane and pedestrian zone, disabled parking, new trees number and location, Holloway Wall, entrances, smaller updates	LAM	JLB
05	23.04.2025	Plot boundary update, Holloway Wall update	LAM	JLB

This drawing is the copyright of SLA. It may not be reproduced or used without written permission. The drawing is for planning and design purposes only and should not be used for construction without further detailed drawings and specifications. The contractor shall verify all dimensions and conditions on site prior to commencing any work. Any discrepancies between this drawing and site conditions must be reported to the Architect immediately. This drawing does not constitute approval under any building regulations, planning permission, or other statutory requirements. The Contractor shall be responsible for obtaining all necessary permits and approvals. The Contractor shall be liable for any loss, damage, or injury caused by errors or omissions in this drawing or by use of this drawing for purposes other than those for which it was commissioned. Use of this drawing implies acceptance of these conditions. © 2024 [SLA]. All rights reserved.

Project:	SISTER MANCHESTER PLOT C	REV:	05
Project No:	1519	BRUNTWOOD REF. NO:	SISC0-SLA-LA-ZZ-DR-LA-00001
Title:	General Landscape Arrangement Plan	DRAWING NO.	1519-L-01-12-01
Scale:	1:500 (A1)	DRAWN:	LAM/RSU
Date:	27.09.2024	APPROVED:	JLB



SLA A/S
Njalsgade 17B
Postboks 2, 3. s.
København S

[illegible]

Note:
Tree placement and location of structures on Altrincham St. to
be coordinated (utility zone to be confirmed).

Revision no. :	Date	Comments	Drawn	Checked
02	31.01.2025	Revision including new C1 and C2 building footprints, incorporation of Butterfly stairs in the landscape, level changes.	LAM/RSU	JLB/SIS
03	18.02.2025	Plot boundary update, temporary design zone boundary by plot E added, bike lane update.	LAM	JLB
04	11.04.2025	Updates on: plot boundary, Slater Square central steps and slope design update, Alfrincham St. bike lane and pedestrian zone, disabled parking , new trees number and location, Holloway Wall, entrances, smaller updates	LAM	JLB
05	23.04.2025	Updates on: plot boundary, section lines, Holloway Wall update	LAM	JLB

This drawing is the copyright of SLA and may not be reproduced or used without written permission. The drawing is for planning and design purposes only and should not be used for construction without further detailed drawings and specifications. The contractor shall verify all dimensions and conditions on site prior to commencing any work. Any discrepancies between this drawing and site conditions must be reported to the Architect immediately. This drawing does not constitute approval under any building regulations, planning permissions, or other statutory requirements. The Contractor Administration is not liable for any delays or necessary approval before commencing work. SLA accepts no liability for any stress, damage, or injury caused by errors or omissions in this drawing or if the drawing is used for purposes other than those for which it was commissioned. Use of this drawing implies acceptance of these conditions. P 2024 [SLA]. All rights reserved.

Project:	SISTER MANCHESTER PLOT C	REV:	05
Project No:	1519	BRUNTWOOD REF. NO:	SISC8-SLA-LA-22-DR-LA-00002
Title:	Strategic Levels Drawing	DRAWING NO.	1519-L-61-36-01
Scale:	1:500 (A1)	DRAWN:	LAM/RS
Date:	27.09.2024	APPROVED:	JLB



6 ACCESS

6.1 INTRODUCTION

The Sister - Plot C development is made up of two office buildings connected at lower levels and the associated landscaping works. The proposals comprise the demolition of Barnes-Wallis, Wright Robinson, Manchester Meeting Place, Morton, Moffat Buildings and the construction of two office buildings [Use Class E]. At the base of the building the buildings will be connected via an open shared lobby space, which shall comprise a variety of uses including social amenity spaces, as well as food and beverage establishments [Use Class E, Sui Generis – drinking establishment]. The proposals will also include interventions to the Hollaway Wall, incorporating it into the new commercial element. Additionally, the proposals will involve the change of use of the railway arches to retail and food and beverage uses [Use Class E and Sui Generis- drinking establishment]. The proposals will also include the creation of a new public square, access and other associated works.

The design team have incorporated a number of good practice guidance documents within our approach to inclusive design, including the use of DFA2 and BS8300-2 as appropriate.

The planning application is for a base build scheme only. Tenants and occupiers of the building will be expected to fit out the office, flexible tenant spaces and flexible use arches in a way that is inclusive to all.

6.2 ARRIVAL AND LANDSCAPE

The proposed scheme contains 2 accessible spaces are provided south-east of the plan, adjacent to Mill Lane access from London Road, and 1 accessible parking space has been provided in the viaduct arch at the end of Echo Street. The intention is for these spaces to be available for use by all disabled users of the building. These spaces have been designed to the dimensional requirements of Approved Document M, the dimensions of such parking spaces, parallel to the kerb, should be 3.6 m wide × 6.6 m long. The parking spaces located on Mill Lane are within the 50m travel distance from the eastern C1 entrance,

Four further drop off bays are located at the South-east of the plan. These bays are just over 50m from the community entrance, 70m from the Collision Engine entrance and 120 m from the Sister Square entrance to Plot C. There is a greater travel distance to some of the entrances of the scheme as the areas to the South, West and North of the scheme are intended for cycles and pedestrians only. The travel distance to these entrances has been mitigated through the introduction of seating positions at regular intervals to allow someone to stop and rest upon their approach. The various parts of the upper ground floor plan are also connected through a central circulation space. If required someone could enter the building through any entrance travel to other areas in the building.

There are combined cycle and pedestrian pathways throughout the site. As the design progresses, we will ensure these spaces are detailed so that the areas accessed by cyclists and pedestrians are clearly defined, separating the two pathways with a tactile delineator strip and tram track/ ladder tactile paving to define areas for cyclist and pedestrians Where possible the design team will seek opportunities to keep cyclists and pedestrians as separate as possible. Segregated cycle paths have been provided to Holloway Forest and London Road. The cycle route to Altrincham street is a separated from the pedestrian route, with the routes being divided through the use of tactile delineator strips. Two crossing points have been provided at key junctions in the cycle routes, to encourage cyclists to slow down and allow an opportunity for pedestrians to cross this route. At the crossing points, tactile paving has been provide an indication of the crossing for cane users and guide dog users.. The main cycle routes will be located to Altrincham Street and London Road, with cyclists being discouraged from using Mill Lane and Sister Square so that these spaces can be pedestrian focussed.

Cycle parking includes enlarged bays for hand cycles and trikes with the majority of this provision located between the office buildings’ end of trip facilities. There are also a number of short stay Sheffield stands dotted throughout the scheme which we will look to ensure have enlarged cycle provision.

6.2.1 VERTICAL CIRCULATION

Sister - Plot C features an existing change in level of around 5m from North to South, with a sharp drop off in level between Altrincham Street and the space to the South. At present this direct access to the square from Altrincham Street is via stairs only, with those requiring sloped access [such as wheelchair users or parents with buggies] having to take a 400m detour to reach the same point.

The new Landscape proposal greatly improves the accessibility of this route by introducing a new sloped route with a gradual 1:21 gradient, including regular rest points and seating. This route also incorporates a more direct stepped route as many people find it easier to negotiate a flight of steps than a graded route. As the central stepped and sloped routes are developed, we will look to ensure that both routes are as accessible as possible. The design team will also ensure that the edge treatment of the slope is sufficient to guard this barrier.

The slope is a beneficial element in the landscape design, providing a connection between levels that is usable and accessible for a diverse group of people, including wheelchair users, parents or carers with buggies, runners, and those who may find stairs challenging. This route is a consistent which ensures structure, clarity, and predictability in the navigation of this route, which significantly aids navigation. It is intended for this space to feel like a large green open terrain, with good sightlines throughout the space to ensure the route is predictable and easily navigable.

A predictable built environment provides fixed points of certainty, offering a sense of security and familiarity, which is particularly important for neurodivergent people the ability to preview a space is important. This openness is also important for the safety of someone and girls, as any areas where the design is closed off can make users feel less safe. The public functions of the building at ground floor overlooking the main square and areas of public realm around the site, helps create a sense of natural surveillance over the new public spaces.

The landscape also looks to improve the access to nature within the space, adding additional planting. Planting and access to the natural environment are key to improving mental health, and this public green space will be positive for many people using the building and the surrounding sites throughout the year [planting palette chosen considering all seasons]

The stairs are located within the middle of the sloped route and will be designed to have a consistent rise and tread depths which is beneficial, when stairs are inconsistent, it can create a hazard for trips and falls. Tactile paving and handrails will be provided on both sides of the stairs that are extended at the top and bottom. This helps guide and support people e.g. people with dyspraxia, people with vision impairments and ambulatory disabled people. Some people with an ambulant disability might be weaker on one side and, therefore, a handrail on each side of the flight is essential for support, for ascending and descending steps or stairs.

The landscape also has an auditorium space in built into the terrain, the design team will ensure accessible seating positions are located at both the top and bottom of stepped access to provide a range of views for wheelchair users. Stairs with a handrail are provided to one side of the auditorium to create easier access to the central seating tiers.



6.3 ENTRANCE

All entrances into the building which have swing door exceeding 1000mm and revolving door access has been provided at the office entrances on Altrincham Street, which lead into the building’s lobby, allowing someone to easily enter the building. Secondary access routes will have swing door access which will either be automated or have an opening force of less than 30N. There is nothing to preclude the entrance doors from being accessible and inclusive to all, with further detail of entrance door controls and opening forces are to be addressed during future detailed design stages. Clear wayfinding will be provided to each entrance to ensure someone arrives at the correct entrance.

A reception desk has been provided in next to the security gates for each building, The space provided has allowed for a sufficient lowered section of counter to be provided and a suitable assistive listening system will be installed, these will be bellowed during detailed stages of the design. An allowance for a clear 1000mm security gate has been allowed for.

6.4 HORIZONTAL CIRCULATION

All horizontal circulation routes will meet the minimum width requirements for AD M. All corridor spaces to be wide and spacious to allow easy access to the scheme, with the team looking to achieve 1800mm wide corridors on main access routes.

Internal doors have been provided in all cores and are measuring 850 mm effective clear width which meets the requirements of Approved Document M and BS8300-2. Other internal doors have not been developed at this stage. As this is developed reference is to be made to BS8300-2. Lobbies will be designed to ensure sufficient clear movement space is provided between doors.

Finishes have yet to be finalised and will be developed at future stages to ensure there is sufficient contrast.

6.5 VERTICAL CIRCULATION

6.5.1 LIFTS

All levels of the building are accessible without the use of steps, with either lifts or ramps providing access across the plan.

The majority of lifts have been located around 2 main cores, each serving one building. The lift cores will have multiple lifts present to make sure wait times are low and there will be dedicated firefighting lifts in each core. It is intended that one firefighting lift per core is also used for the evacuation of disabled people. Additionally, for those entering the building at lower ground level at Sister Square or Collision Engine entrance, lifts have been provided to reach the upper ground floor level and access the main lift cores. This creates the possibility for an alternative lift route across site to be accessed when the building is open.

All passenger lifts will exceed the minimum requirements of Approved Document M which are 1100 mm x 1400 mm. There is a clear 1800mm x1800mm waiting space in front of every passenger lift entrance and lift doors are 900mm wide. Fire-fighting lifts from the stair lobby side have 1500 x 1500 mm waiting space in front.

This creates improved access to the upper floor which will make it easier for a wheelchair user to traverse the building.

The use of firefighting lifts for egress provides a more independent and dignified egress route for disabled people.

Access to the mezzanine within the arched spaces on Altrincham Street will continue to be reviewed as the design of these spaces are further defined.

6.5.2 STAIRS

Stair cores have also been designed in line with AD K guidance to ensure that those using the stairs can ascend the building safely and comfortably. Some flights of stairs have 13 flights, exceeding AD K guidance. This helps address the level change across site and should not be an extensive barrier to access as it is expected that the majority of building users will us lifts to access other floors.

6.5.3 INTERNAL RAMPS

There are a number of internal ramps provided within the building to help address the level changes across the site. Wherever possible routes have been designed as gentle slops with 1:21 gradients, including the route through the main community space. In a couple of locations ramped access has been required to address level changes and there is nothing to stop these ramped routes meeting all access requirements upon completion of the building. Additional guarding included 100mm high kerbs and handrails will be provided in appropriate locations as the design progresses to ensure sufficient support and safety is considered.

6.6 TERRACES

There are several terraces located on different floors. Access to each terrace has been designed so there is a level threshold between the internal space and the terrace, enabling a range of people to enjoy this space. Access to nature is shown to benefit people’s mental health. This space provides a safe and private outdoor area to enjoy nature.

6.7 CHANGING ROOMS

Changing rooms are provided on the lower ground floor. This is a great feature to have within the building as it promotes employee wellbeing. Changing rooms allow employees to freshen up, change into more comfortable attire, or switch to workout clothes if they plan to exercise during breaks. This can help them feel more comfortable and maintain personal hygiene throughout the day. Each changing area will provide accessible changing facilities, and all-gender facilities will also be provided to ensure members of the LGBTQ community who do not want to use a gendered space are provided a changing area.

6.8 WELFARE AREA

A welfare area has been provided on the lower ground floor. In settings where stress and sensory overload may be particularly overwhelming for some individuals, offering quiet spaces can be highly beneficial. This can provide individuals with a peaceful environment to recover when experiencing sensory overload.

6.9 SANITARY FACILITIES

6.9.1 SELF-CONTAINED

The self-contained universal toilets appear to meet the dimensional requirements of Approved Document T 2024, Diagram 4.1 Type B. Toilets will be assigned as male and female provision based on how tenants choose to divide the space, allowing the building to flexibly meet the requirements of AD T. Toilets are located in 4 main blocks, two in the C1 core and two in the C2 core. Some provision can be retained as All-Gender toilets. While not a requirement of building regulations, there’s spaces are important for some people who are non-binary or transgender and anyone who feels uncomfortable using spaces designated as male or female.

6.9.2 AMBULANT WC

Ambulant toilets have been provided in each toilet block ambulant facilities will either meet the guidance of AD T or alternative ambulant cubicle proposals in BS8300-2.

6.9.3 ACCESSIBLE WC

The Accessible WCs will meet the requirements of Approved Document M, and where possible the design team will look to exceed this to provide more room in toilet spaces and make the area easier to use. Accessible WC’s are provided at every toilet block which is a positive and inclusive feature to have within the building. Toilets are located in a consistent location across the plan.

The travel distance to an Accessible WC is no more than 40m from anywhere on the same floor in the towers which meets the requirements of Approved Document M. Depending on the use of the flexible unit’s additional toilets may be required as part of the fit out.

6.9.4 CHANGING PLACES

It is not expected that the intended use and capacity of the building will trigger the requirement for Changing Places Toilets, however this will be continuing to be reviewed as the design progresses.

6.10 CONCLUSION

Overall, the new Sister - Plot C development will greatly improve accessibility across the site, with a new sloped route providing step-free access from Altrincham street into Sister Square. Care has been taken to ensure access is provided to all levels of the building and that the facilities and spaces across the scheme are useable by a wide range of people. The site will not only improve access for those people who use the building, but also the wider community who live and visit Manchester through the improved public realm.

