Application for Planning Permission in Principle for the proposed redevelopment of the site of the former Western Infirmary site, Glasgow

Gilmorehill Campus Masterplan

UOG-DOC-10-1

May 2018

University of Glasgow
VIA VERITAS VITA

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MUIR SMITH EVANS
Planning & Development Consultants

SPACES THAT WORK

savills

Simpson & Brown Architects
with Addyman Archaeology

Application for Planning Permission in Principle

This document is submitted in support of an application for Planning Permission in Principle for the proposed redevelopment of the site of the former
Western Infirmary site within the West End of Glasgow.

The main site is on land bounded by University Place, Byres Road, Church Street, Argyle Street, the River Kelvin, and Existing Glasgow University Campus, Glasgow. Appendix 1 contains a plan showing the application site in red on an ordnance survey based location plan.
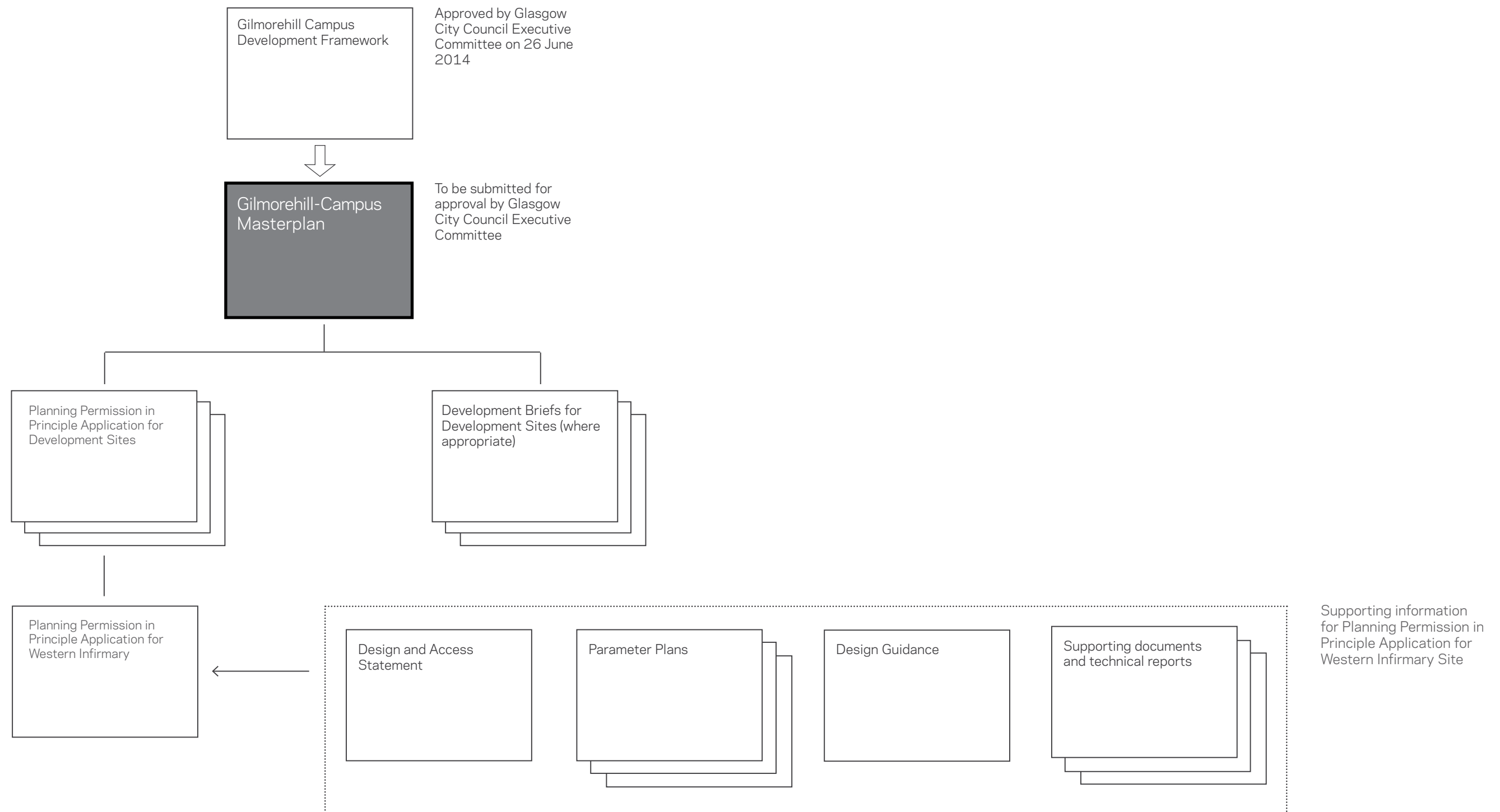
The application is for: Proposed mixed-use University campus development including:
(1) teaching and learning buildings (Class 10) (up to 65,000 sq m);
(2) university research buildings (Class 4) (up to 17,000 sq m);
(3) commercial research & development/offices (Class 4) (up to 18,000 sq m);
(4) retail shops (Class 1) (up to 4,000 sq m);
(5) financial, professional and other services (Class 2) (up to 500 sq m;
(6) food and drink (Class 3) (up to 2,500 sq m);
(7) hotels (Class 7) (up to 12,500 sq m);
(8) sports and recreation facilities (Class 11) (up to 500 sq m);
(9) day nursery (Class 10) (up to 500 sq m);
(10) crèche (Class 10) (up to 100 sq m)
(11) residential flats (mainstream or student) (sui generis) (up to 14,500.sq m);
(12) Data Centre (Class 4) (up to 3,000 sq m);
(13) energy centre (sui generis);
(14) means of access, servicing and parking arrangements:
(15) related infrastructure;
(16) related landscaping and
(17) related public realm.

The application is classed as a Major Application in terms of the relevant legislation and regulations. It has therefore been the subject of a Proposal
of Application Notice and the related public consultation process with the public and statutory consultees. A separate Pre-Application Consultation
Report details this process and the outcomes.

The application has also been the subject of a request, to Glasgow City Council as planning authority, for a screening opinion under the terms of the
Environmental Impact Assessment (Scotland) Regulations 1999 and The Town & Country Planning (Environmental Impact Assessment (Scotland)
Regulations 2011. Glasgow City Council determined that an Environmental Impact Assessment is not required for the application proposal
EIA Screening Opinion Application Number: 15/02913/DC.

Hierarchy of Information

Gilmorehill Campus Development Framework	Approved by Glasgow City Council Executive Committee on 26 June 2014

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Gilmorehill-Campus Masterplan	To be submitted for approval by Glasgow City Council Executive Committee

Planning Permission in Principle Application for Development Sites

Development Briefs for Development Sites (where appropriate)

Planning Permission in Principle Application for Western Infirmary

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Design and Access Statement

Parameter Plans

Design Guidance

Supporting documents and technical reports

Supporting information for Planning Permission in Principle Application for Western Infirmary Site

Contents

Introduction **1.0**

1.1 Purpose of the Document

The University of Glasgow Estate is spread over three main campuses, with the primary campus located in Glasgow's West End: Gilmorehill Campus.

In 2010, the former faculties of the University were replaced by a system of four Colleges, each containing a number of Schools. This was driven by the desire to:
o   Facilitate collaboration, multidisciplinary and joint working, and improve communication to stimulate creativity.
o   Enhance the efficiency and effectiveness of academic units and facilitate improved research performance.
o   Enhance the postgraduate student environment, support strategies to improve student success and quality student experience.
o   Improve administrative support and efficiency.

The University now has four Colleges (comprising various Schools and associated Research Institutes):
o   College of Arts.
o   College of Medical, Veterinary & Life Sciences (MVLS).
o   College of Science & Engineering.
o   College of Social Sciences.

This organisational re-structuring, plus the acquisition of the Western Site, has provided the need and the opportunity for the University to physically re-order the existing Gilmorehill Campus and form a new University orientated place within the city that will serve the University in its aspiration to become a 'World Class, World Changing' University.

This document sets out the vision and masterplan principles for the Gilmorehill Campus of the University of Glasgow. Building on the Campus Development Framework, and covering the same area, this document has been prepared as an update to the CDF, working at similar scales and with the intent of providing a cohesive campus wide framework and a development context for Western Infirmary site and other opportunities on the campus.

Structure of the Document

The document is organised into the following Sections:

Section 1 - Introduction: this section provides a summary description of the key relevant documents on which this masterplan rests, such as the University's Strategy (Inspiring People, Changing the World, 2015-2020) and the Campus Development Framework (CDF). It also sets out the University's aims and aspirations for the Gilmorehill Campus.

Section 2 - Context: this section provides a brief description of the context for the Campus masterplan, its location within the city, and a description of the setting for the masterplan - the city's West End. In addition this section provides a brief appraisal of the existing built form and public realm in the form of site issues and opportunities diagrams.

Section 3 - Approach: this section provides commentary on how the Campus masterplan has responded to University need (the University's aims and aspirations) and its context and provides a description of the vision for the Gilmorehill Campus as a whole.

Section 4 - Campus and Public Realm Strategy: this section provides the key principles for development across the masterplan area, such as: strategic moves, distribution of uses, access and movement, public realm and landscape and sustainability strategy.

Section 5 - Key Spaces: this section provides an illustration

Plan showing the extent of area covered by this Campus Masterplan Report

of the potential of the key Campus spaces, both existing and proposed, and describes how they can form an unified assembly of University public spaces.

1.2 University of Glasgow Strategy

Inspiring People, Changing the World, University Strategy 2015-2020 sets out the University's vision for the future. This vision has shaped the Gilmorehill Campus Masterplan, illustrated in this document, in the following ways:

Inspiring Places

Our physical environment must reflect our strategic vision. We will construct:
o   Visionary buildings which inspire learning, discovery and social interaction.
o   Good facilities which enable us to learn and work together in both small teams and large-scale collaborative endeavours.
o   Open, inviting spaces which encourage public engagement with our work.

Sustainable Spaces

We want to do justice to the beauty, legacy and utility of our surrounding areas. We will:
o   Respect and reflect the heritage, environment and communities around us.
o   Hold ourselves to rigorous standards of environmentally friendly and socially responsible construction.
o   Operate in an environmentally and socially responsible manner.

Inviting Surroundings

We want our campuses to be welcoming, secure and comfortable environments for all. We will:
o   Ensure sufficient and suitable space for study and social/recreational activity alongside our core facilities.
o   Create a balance between open, unconfined public spaces and calm, secure and private areas for study and reflection.
o   Prioritise accessibility and inclusivity in the design of new buildings and redeveloped sites.
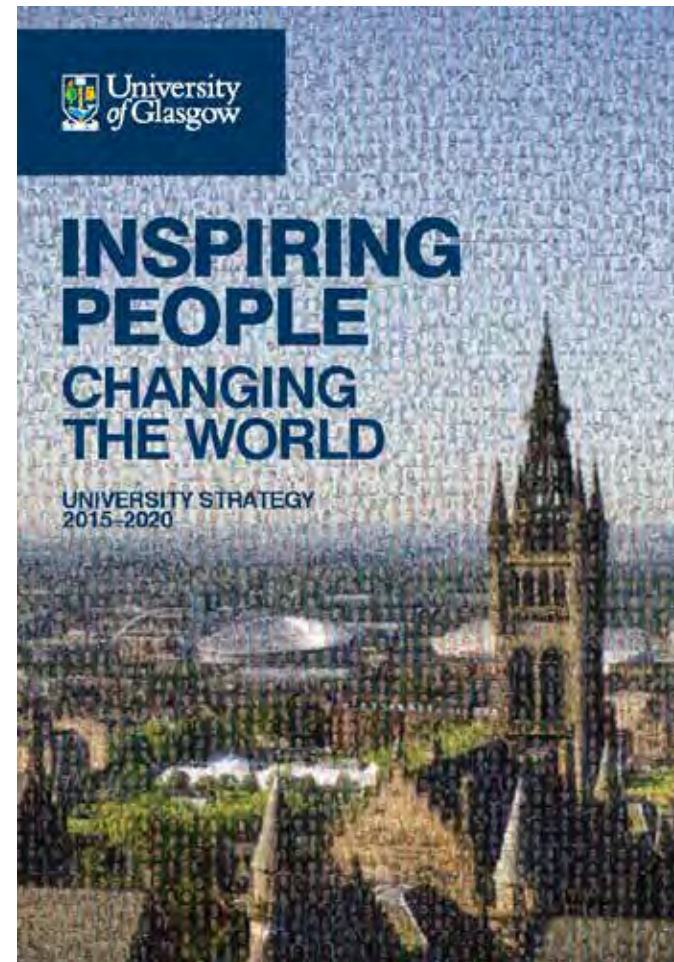
Vision:
A world-class, world-changing university.

Mission:
To bring inspiring people together and create a world-class environment for learning and research, empowering staff and students alike to discover and share knowledge that can change the world.

'The next five years will bring about the most significant development of our estate in over a century as we begin a £775m programme of investment. Whether at Gilmorehill, Garscube, Dumfries or overseas, our aim is the same – we want to create forward-looking, cohesive settings that inspire us and transform the way we live, learn and work together.'

1.2 University of Glasgow Strategy

Inspiring People, Changing the World, 2015–2020 is written in the context of an upcoming period of significant change and investment for the University and so is a critical document that has informed the approach to the Western site proposals for the Campus.

The vision reflects the University of Glasgow's global aspirations and its current position as a leading University on an international scale and part of the Russell Group.

The Russell Group highlights the importance of maintaining the best research, outstanding teaching and learning experience and unrivalled links with business and the public sector with an emphasis on positive social, economic and cultural impact.

It is therefore extremely important that the University's physical environment not only provides the right spaces for learning, teaching and research, in a practical sense, but also reflects the ambition for sharing knowledge, aiding innovation and inspiring world changing thinking.

Universities all over the world are in competition for the best students, researchers, staff members and sources of funding and collaborative relationships with business and public bodies. The context for this proposal is also informed by what other universities are doing to invest in their estate, changing trends in learning, teaching and research and what is expected of top university environments by the people who use them.

When deciding which universities to study at, over one third of students (36%) said they rejected certain institutions because of the quality of their buildings, facilities or physical environment.

The People, Place and Purpose place-making principles, derived from the University Vision, have been blended with an analysis of how the University is organised to develop a spatial strategy that is the basis of the Campus masterplan.

The analysis has sought to rationalise the spatial spread of disciplines across the campus, looking to strengthen college clusters and important functional adjacencies.

The key aspects of this approach are:

o   Moving away from the perception of the University Colleges being a series of separate buildings, or "silos", towards an overlapping network of focused centres of learning and research.
o   Maintaining the identity of each College and School within this clustered network of hubs, with the overlapping spaces in-between providing the opportunity for social activities, informal learning and collaborative working.
o   Blurring the boundaries between the University and the surrounding neighbourhoods to the west and north through the introduction of mixed uses at these interfaces within a freely accessible, network of public realm.

People
Bring inspiring people together

A place that encourages people to come together to exchange ideas and knowledge and stimulate collaborative learning and research.

o   Secure the best staff.
o   Attract outstanding students.
o   Connect with the world through internationalisation.

Place
Create a world-class environment for learning and research

An inspiring environment that, physically and visibly, connects the internal and the external spaces, and the spaces in-between.

o   Develop an inspiring and transformative campus.
o   Streamline policies, processes and systems.
o   Provide staff and students with first-class support.

Purpose
Discover and share knowledge that can change the world

Spaces that empower people to work collaboratively and can flexibly respond to evolving learning and research needs

o   Inspire learning with outstanding teaching.
o   Lead discovery through world-class research.
o   Create impact for society and the economy through innovative engagement.

1. **Gilbert Scott Quads**
2. **South Front**
3. **Professor Square**
4. **Professor Gardens** (Project Name)
5. **University Avenue southern edge**
6. **Fraser Building & Reading Room Garden**
7. **University Gardens**
8. **Lilybank Gardens**
9. **Garden to rear of Lilybank Gardens**
10. **Lilybank House Gardens** (Project Name)
11. **Queen Margaret Square**
12. **University Cross** (Project Name)
13. **Science Precinct & Science Way**
14. **University Place**
15. **Byres Place** (Project Name)
16. **New University Square** (Project Name)
17. **South Gate**
18. **Elder Chapel Place**
19. **Byres Road Triangle**
20. **Ashton Road**
21. **East Gate**
22. **Moy Street**
23. **Rain Gardens** (Project Name)
24. **West Lane** (Project Name)
25. **Engineering Way** (Project Name)

Great George St

Hillhead St

Southpark Ave

Oakfield Ave

Byres Rd

Church St

University Ave

Kelvin Way

Dumbarton Rd

River Kelvin

Illustrative Gilmorehill Campus proposals

N

0m 10m 30m 50m   100m
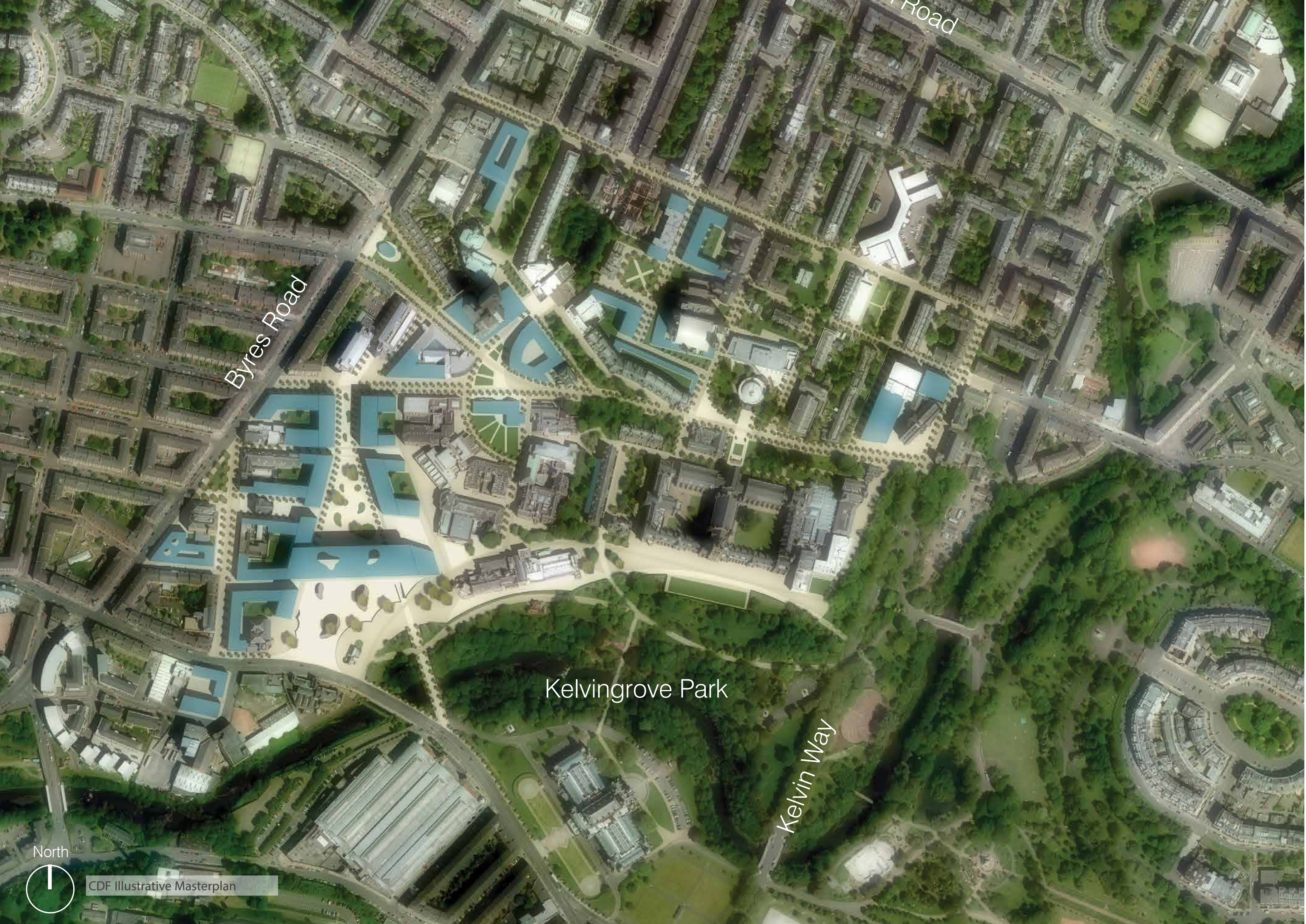
1.3 The Campus Development Framework (CDF)

The Gilmorehill Campus Development Framework (CDF) has been prepared by the University of Glasgow to inform and guide development proposals for the Gilmorehill Campus around a holistic and unified set of urban design principles, which have formed the basis of this masterplan.

The CDF was approved by Glasgow City Council in 2014, following an extensive consultation programme with University of Glasgow, Glasgow City Council, key stakeholders and the local community. It has the status of a material consideration in the determination of future planning applications.

The document provides guidance for development proposals for individual sites or clusters within the Campus with the intention to co-ordinate proposals in line with the university's vision. The guidance also aims to ensure that new development sits well within the urban context of the City and the West End. The CDF contains an illustrative plan showing how the principles might be delivered (shown on opposite page).

University of Glasgow   PAGE\PARK

Gilmorehill
Campus
Development
Framework

June 2014

www.glasgow.ac.uk
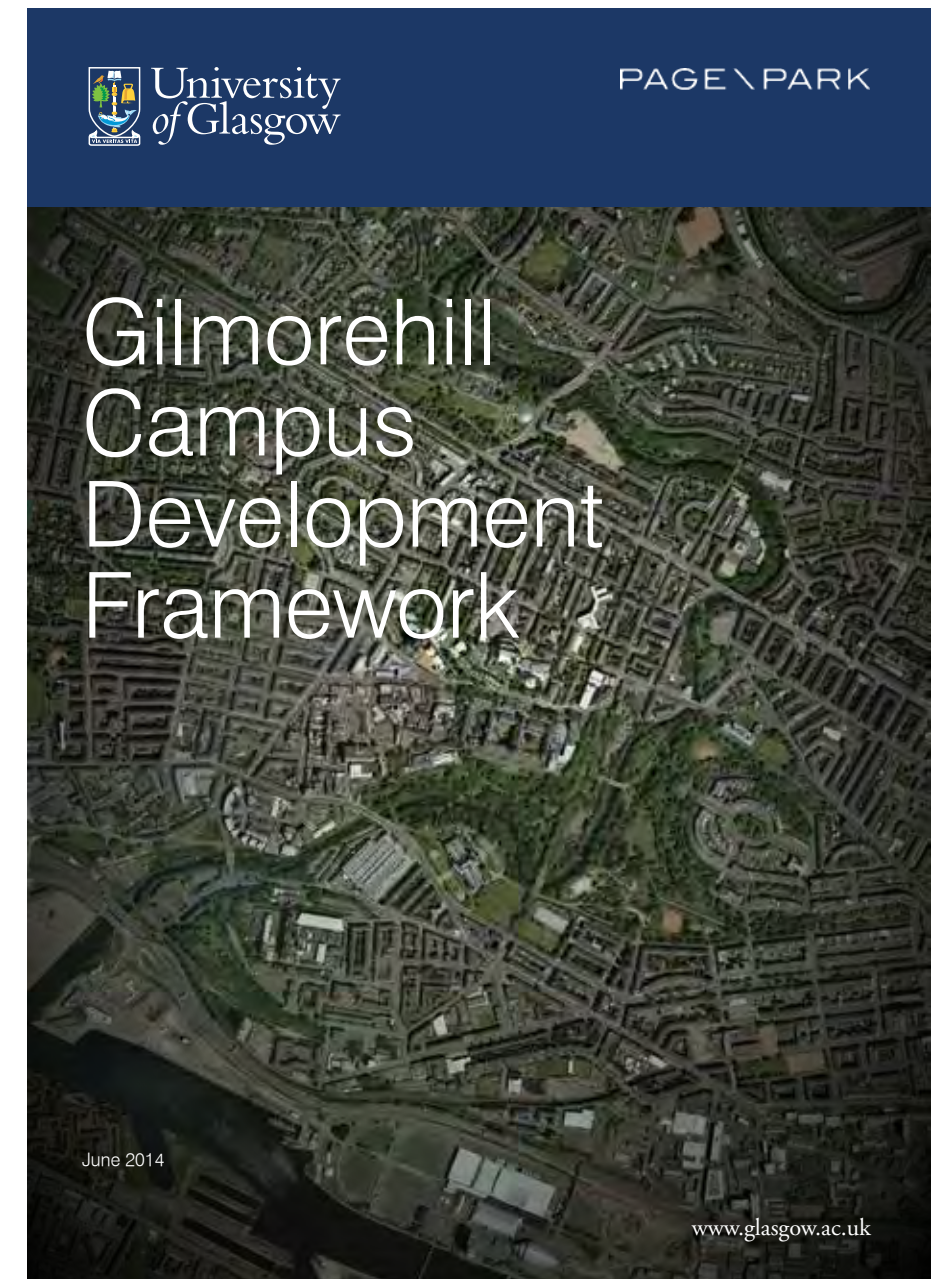
Campus Development Framework and Core Principles

Byres Road

Kelvingrove Park

Kelvin Way

North

CDF Illustrative Masterplan

1.3 The Campus Development Framework (CDF)

This Gilmorehill proposals takes the Campus Development Framework illustrative plan and develops it further to reflect the University's evolving space requirements and place-making strategies. The established principles of the Framework have been adhered to in this masterplan are:

o   Maintaining the 'Gardenesque' qualities of the 'Upper Plateau' while forming a new element of the Campus: a new piece of city on the 'Lower Plateau'.

o   Creating an assembly of new and existing University public spaces.

o   Establishing key civic gateways at the edges of the Campus, including a new Southern Gateway space on Dumbarton Road.

o   Establishing University Avenue, and the South Front as the key east-west pedestrian connections across the Campus.

o   Forming a new University space or 'urban quad' within the heart of the Western Site.

o   Create a new 'community space' on the western edge of the Western Site, focused around the existing chapel building.

o   Forming and maintaining strong links between the Campus and the surrounding city to the west and north.

The key differences or additions to the CDF Principles and illustrative plan are:

o   Maintaining the Gilbert Scott building as the primary landmark on Campus.

o   Re-integrating Kelvingrove Park to the Campus at both the Upper and Lower Plateau's.

o   Introduction of a new pedestrian connection from Byres Road, through the Western site to the Southern Gateway and Kelvingrove Park.

o   Realignment of the Southern Gateway so it is orientated more towards the park and opens up views to and from Kelvingrove Art Gallery.

o   Rectangular square at the heart of the Western Site.

o   Proposed removal of the Phase 1 Building which dictated the triangular geometry of the central spaces in the CDF illustrative plan.

o   The location of the Learning and Teaching Hub as a key social focus and University landmark along University Avenue, which aims to link the new and old Campus together and firmly establish University Avenue as a focus for the University.

Vision Principle : VP1
Recognise, respect and respond to the parkland gardenesque quality on the historic *upper plateau* and extended city urban quality on the *lower plateau*

Vision Principle : VP2
Develop a unified coherent and rich assembly of spaces within the campus defined by distinctive buildings connected at the edges into the existing urban fabric of the city

Vision Principle : VP3
Establish clear and memorable civic entrances to the campus (off University Avenue and Dumbarton Road) with clear axial connections through the campus

Vision Principle : VP4
Focus east/west pedestrian circulation along University Avenue/Place and a new southern core route linking the new southern entrance and Gilbert Scott south frontage

Core Component : CC1
Create a new University civic 'global entrance' off Dumbarton Road linking up to the Gilbert Scott front entrance and to Kelvingrove Art Gallery.

Core Component : CC2
Create an improved and enhanced approach to the Gilbert Scott building on the upper plateau unifying the setting across University Avenue

Core Component : CC3
Form a new 'urban quad' within the Western site connecting a new 'global entrance' off Dumbarton Road with University Place via a sloping civic space

Core Component : CC4
Form a new eastern campus urban gateway at the junction of Kelvin Way and University Avenue

Core Component : CC5
Form a new western campus urban gateway at the junction of University Avenue and University Place

Core Component : CC6
Encourage the use of University Avenue and University Place as a core pedestrian circulation spine

Core Component : CC7
Form a new south edge circulation spine, linking the southern entrance and Gilbert Scott south front esplanade along the Gilmorehill/Kelvingrove Park

Core Component : CC8
Enhance north/south circulation routes through the campus by improving permeability, encouraging openness and linking with core east/west spines

Core Component : CC9
Consider outlying University sites in the context of a consolidation strategy of the Gilmorehill setting extended across the Western site

Core Component : CC10
Create community spaces at the eastern periphery of the campus, the Bryes Road/Ashton Road car park and the Byres Road/Church Street triangle

The Campus Development Framework - Vision Principles and Core Components

1.3 Campus Development Framework (CDF)

The established principles of the Campus Development Framework have provided the basis for the development of the Western site proposal. Our proposals have incorporated and refined these urban design principles, while ensuring that the University's needs and requirements are addressed. A set of overarching principles for the Campus masterplan are set out below.

Vision Principle 1: Understanding the unique topography.
Our proposals acknowledge and respond to the unique topography of the site, by defining a lower urban plateau of development on the Western site that contrasts and complements the established gardenesque upper plateau.

Vision Principle 2: Establishing urban connections.
It is important to acknowledge that this is an urban campus and the Campus masterplan proposal seeks to define areas for development that can provide a civic quality, establish connections that are urban in character and fully integrate our proposals into the urban grain of the West End of Glasgow.

Vision Principle 3: Defining thresholds.
In integrating with the context and the urban grain it is also important to define clear thresholds to the campus, signifying the importance of the University to the City.

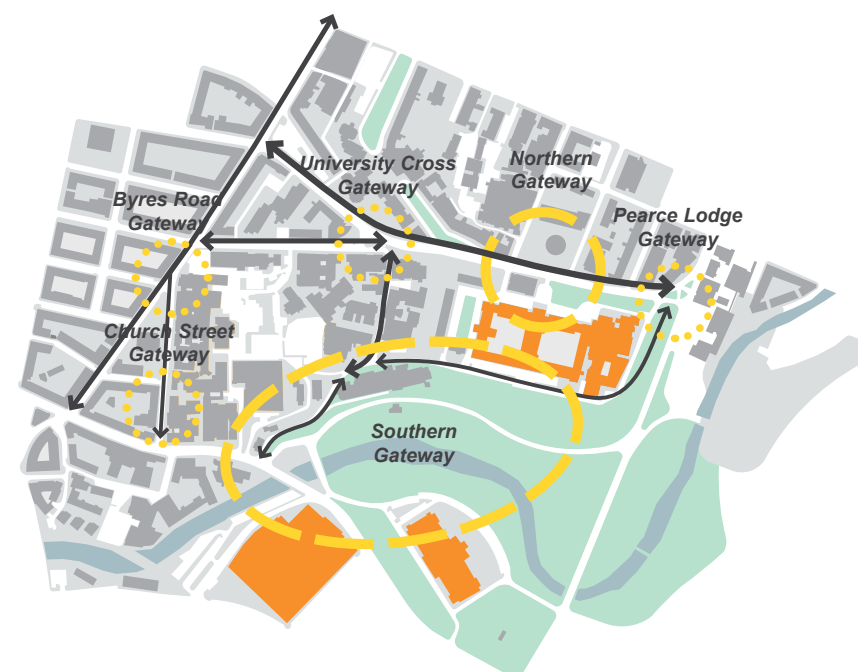**Vision Principle 4: Reinforcing hierarchy of routes.**
To ensure that our proposals have a clarity and legibility of pedestrian flow, it is important to reinforce a hierarchy of routes to and across the campus, with the linearity of the east-west connections providing the primary organisational structure to the broader campus.

Vision Principle 1: Understanding the Unique Topography

Vision Principle 2: Establishing Urban Connections

Vision Principle 3: Defining Thresholds

Vision Principle 4: Reinforcing Hierarchy of Routes

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1.4 The Brief - for Gilmorehill Campus

Aspiration and Requirements

This is the beginning of a period of significant development for the University which echoes the move from the city centre in 1870 and the construction of the Gilbert Scott Building - a building synonymous with the heritage and international standing of the University of Glasgow.

Acquiring the 14 acres of land formerly occupied by the Western Infirmary provides an opportunity to form a co-ordinated approach to re-shaping the whole campus and creating an environment that helps to achieve the University's vision of a world-class, world-changing university.

Delivering the University's vision requires more effective space and modern learning facilities to attract and retain the best staff and students and develop a strong culture of inter-disciplinary working and innovation.

This Campus masterplan is the framework which will ensure that new development delivers both the University's vision and its spatial requirements, in a coherent and co-ordinated manner, while enshrining the quality standards and place-making principles established by the CDF.

Development Areas

Through the refinement of the CDF, the University has defined the key development areas and sites and these are shown on the plan opposite:
o   The Western Site: The key site for development is the Western Site, formerly the occupied by the Western Infirmary. This site is the largest site available for development and will provide a new critical mass of University uses to the west of the existing campus,

reorientating the University towards the city and the West End. The size of this site provides the opportunity for the University to build the type of buildings and spaces that will be fit for the needs of learning and research now and into the future.
o   North of University Avenue: Development on the Western Site will enable existing University buildings to be released on this site - these can be reused to enable a greater mix and vibrancy along this key street. Underused areas of land have been considered for re-development to reinforce and rebuild the existing urban grain of the area and maintain a University presence on both sides of University Avenue. Much of the focus within this area will be public realm to ensure that the uses and developments are seamlessly linked to the wider campus to the south.
o   University Avenue/University Gardens: This site is a highly visible site located at the junction of University Avenue and University Gardens. This site has the potential to form a new hub and landmark for the University along University Avenue, and with the University moving westwards this site also occupies the new central point of the re-formed Campus. This site has been identified for a key University building - the new Learning and Teaching Hub.
o   Gilbert Scott Building: This listed building, acts as a strong visual reference point, giving the University its brand identity. The Adam Smith Business School will expand to create space required for collaborative research, legible circulation and better space planning to meet contemporary academic needs.


The Western Site - previously occupied by the Western Infirmary

North of University Avenue

1. Western Site
2. Site of OTC
3. Site of NHS Pharmacy
4. Learning and Teaching Hub
5. Ashton Lane
6. Site along Lilybank Gardens
7. Sites behind Lilybank Gardens
8. Potential Residential along University Gardens
9. Site of Adam Smith Building
10. Existing Building, Bute Gardens
11. Possible extension to plot 10
12. Site of Hetherington Building
13. Site of Hunterian Building
14. Site of Rankine Building
15. Site of St. Andrew's Building
16. Thurso Street Site
17. Dunaskin Street Site
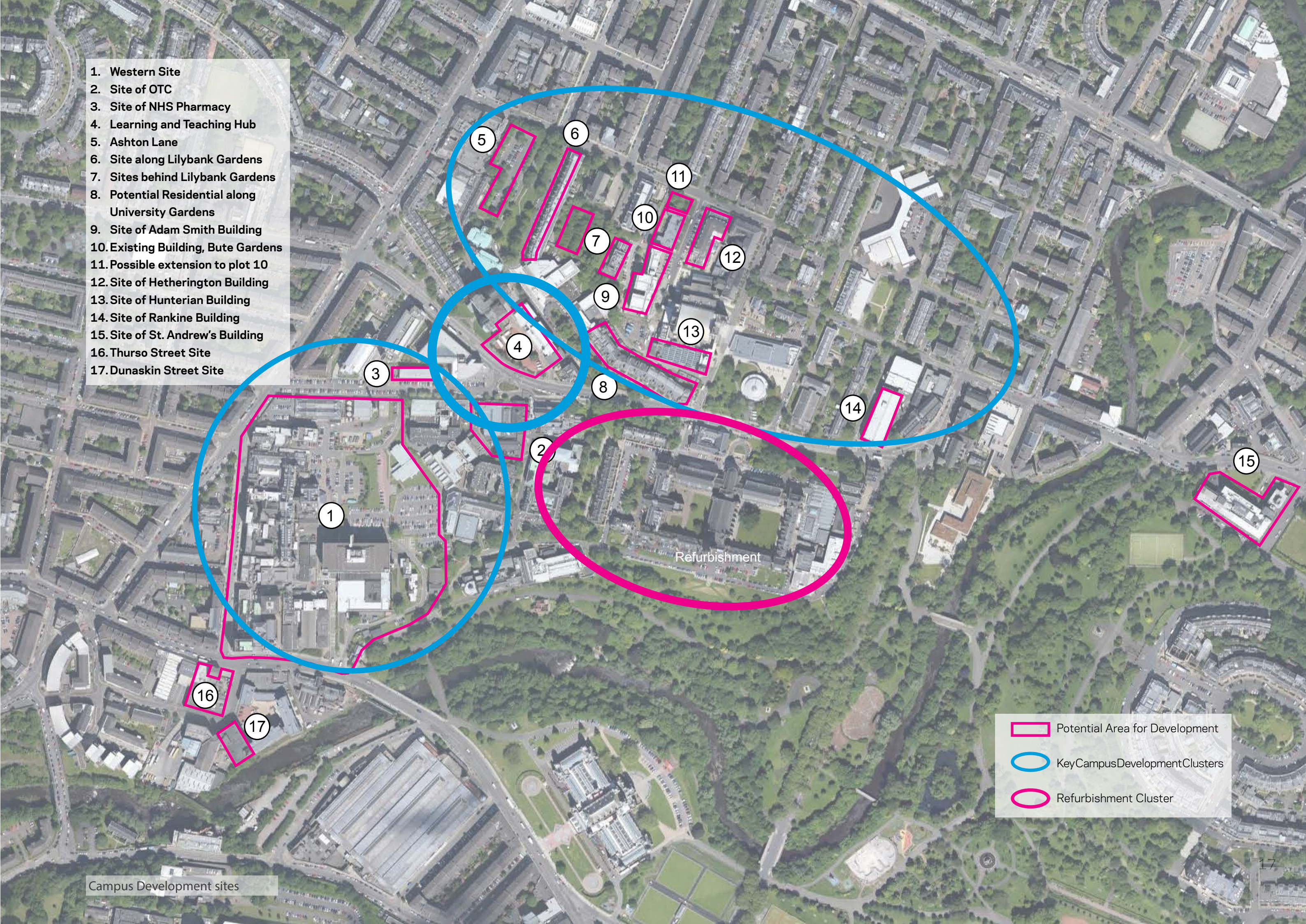
Refurbishment

Potential Area for Development

KeyCampusDevelopmentClusters

Refurbishment Cluster

Campus Development sites

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1.4 The Brief - for Gilmorehill Campus

The plan to the right indicates the University's current distribution of spaces, shown in three groups:
o   University spaces used by the four colleges;
o   University shared and support spaces;
o   Spaces currently used by other parties (leased).

At present, although there is a concentration of University buildings along University Avenue, the University's four Colleges are dispersed throughout the campus, providing neither coherence nor a functional grouping of specialisms. The former academic structure remains embedded in spatial patterns and building types that have evolved over time. This poses challenges for campus connectivity, for supporting informal interaction and collaboration across disciplines, as well as for providing day-to-day flexibility and long-term adaptability.

Western Site

University Space

University Services, Admin, Support

Leased space
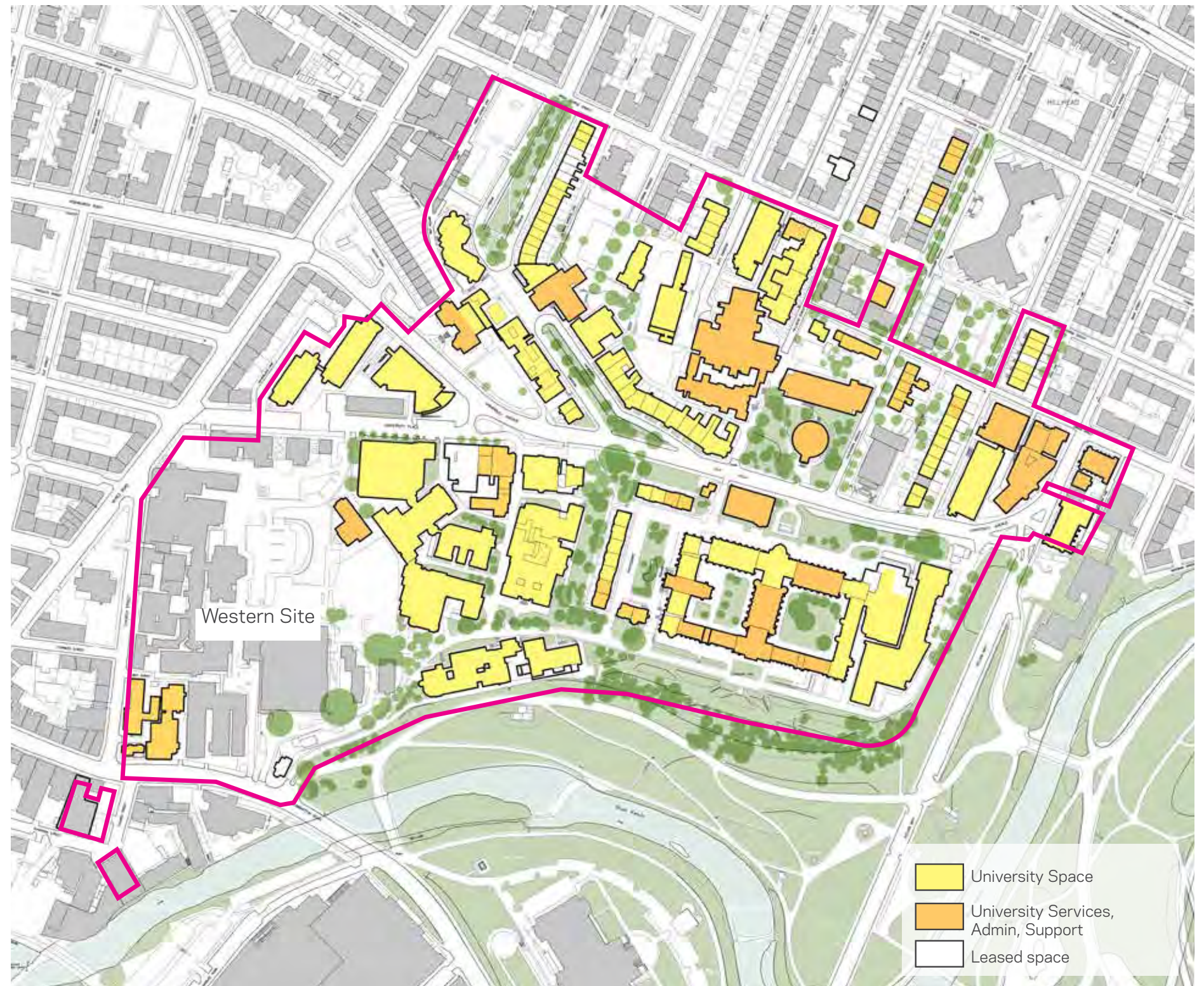
University of Glasgow - Estates, Buildings and Colleges

1.4 The Brief - for Gilmorehill Campus

The plan on this page shows the University's high level strategy for development and includes the former Western Infirmary site. The University's strategy is to move from the current disparate arrangement and consolidate activity on the Western Site and in existing and new buildings either side of University Avenue. The intention is for the Gilbert Scott building to be refurbished and new academic uses to be located within it to ensure it remains the historic heart and a vibrant part of the University. In addition, the move to the former Western Site should encourage interactions with community, culture and commerce.
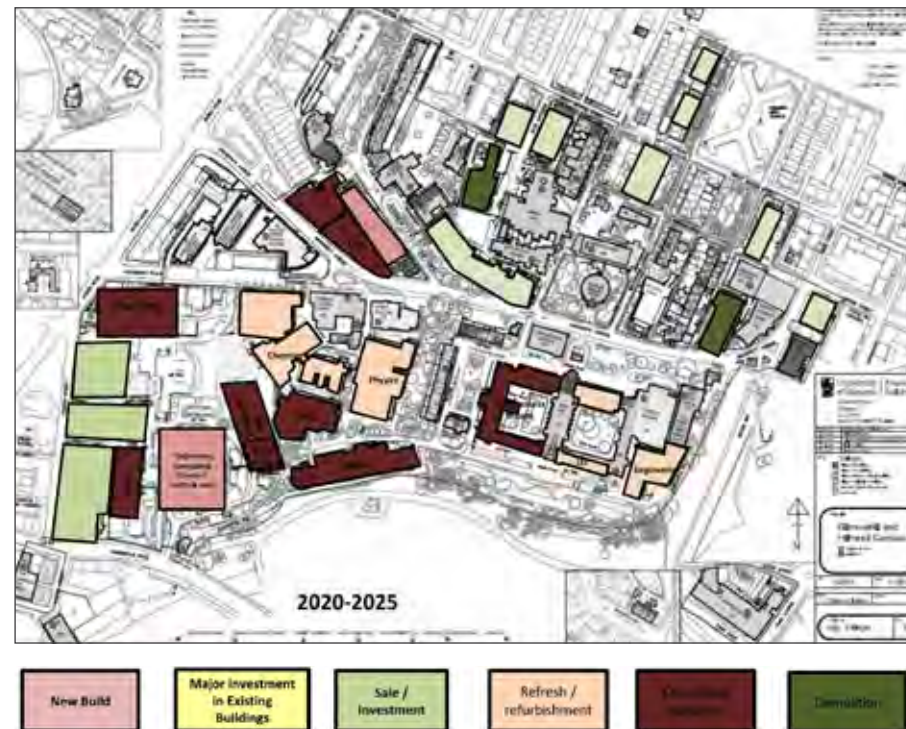
Key principles for the development of the Campus have been established:

o Establish University Avenue as the visible and active centre for the University and a principal connecting route.

o Redevelop the Western Site in such a way as to consolidate the University at Gilmorehill, while ensuring that the University integrates with the communities and activities to the west.

o Locate the new Learning and Teaching Hub at the highly visible intersection of University Avenue and University Gardens and integrate it with the Boyd Orr building and ensure it forms one of the key central hubs for the University

o Provide new types of academic buildings for the University on the Western Site, and others, which will enable it to achieve its aims and remain competitive.

o Retain and refurbish the Gilbert Scott building and ensure it remains the centre piece of the campus.

o Retain, refurbish and incorporate existing buildings along Church Street and Anderson College on Dumbarton Road.

o Retain, refurbish and incorporate the Joseph Black and the Kelvin buildings.

o Explore the area fronting and adjacent to Church Street for commercial opportunity and the formation of a potential Innovation Quarter which will ensure strong links between academia, commerce and community.

o Explore areas and buildings north of University Avenue for commercial opportunity.

o Provide a new data centre and energy centre, and other supporting functions.

o Ensure an assembly of public spaces and public realm that forms a new coherence and identity for the Campus.

o Ensure strong pedestrian and cycle connections through the Campus and to its surrounding context including Kelvingrove Park and Byres Road.

o Create a new University public space within the Western Site that provides a different kind of space for the University, and one that is inviting and accessible for the city.

University of Glasgow - Indicative development plan 2020-2025 prepared by the University of Glasgow Estate team

Context **2.0**

2.1 City Context

## The Gilmorehill Site Within the Context of the City

The University of Glasgow's Gilmorehill Campus is an integral part of the West End of Glasgow.

The Gilmorehill Campus is located to the west of Glasgow city centre at the heart of the city's West End. The Campus occupies high ground overlooking Kelvingrove Park and Kelvin River. The spire of the University's iconic building - the Gilbert Scott Building - is highly visible from areas of the city to the south.

The West End as a whole is defined in character by handsome Victorian and Edwardian sandstone tenements and residential terraces. To the north and west of the Campus are the West End residential districts of Hillhead, Hyndland and Partick, and the Campus holds an important position on the northern edge of Kelvingrove Park, which provides a setting and key focus for the residential districts of the West End.

Great Western Road and Dumbarton Road are key routes from the West End to the City Centre, and both pass to the north and south of the site. Byres Road - the active heart of the West End passes the Campus to the west.

Ashton Lane, parallel and to the east of Byres Road has, since the 1970s, defined the social heart of the area, with its lively mix of bars and restaurants supplemented by Cresswell Lane to the north.

Key:
1. City Centre
2. Byres Road
3. Finnieston
4. Hillhead
5. Partick
6. Dowanhill
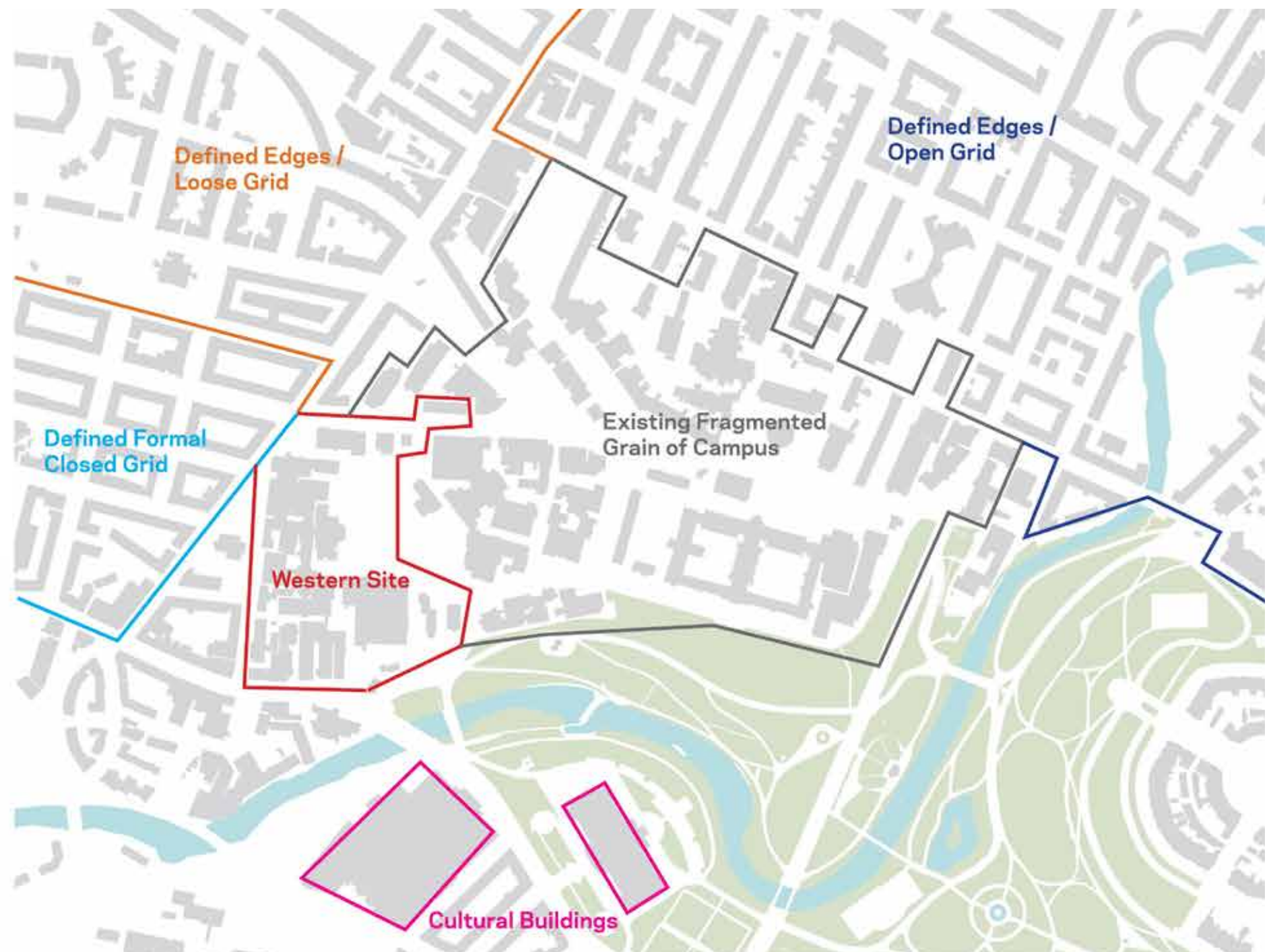7. Hyndland
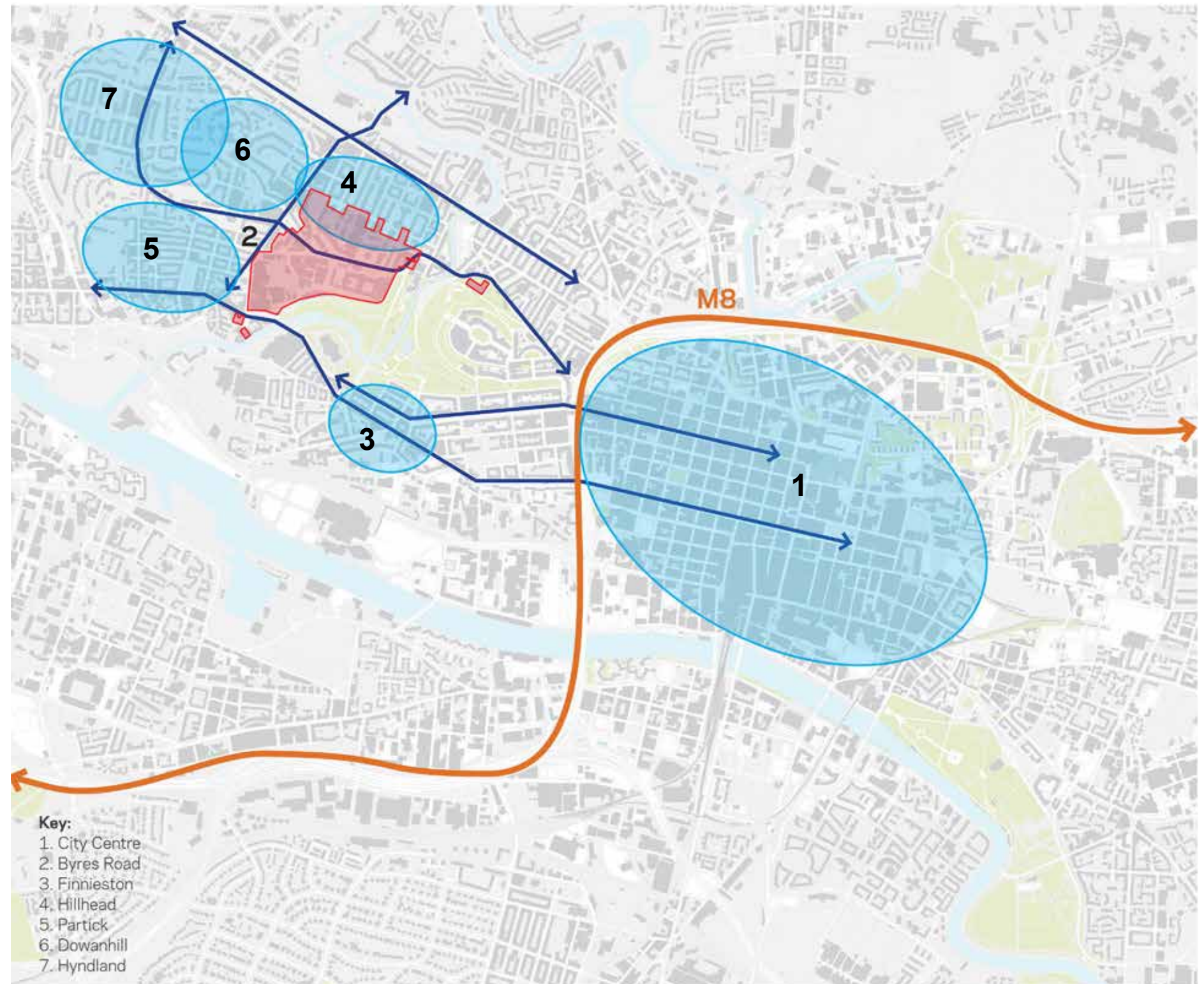
The Campus in the City

2.2 Urban Context

The Existing Urban Grain

The urban grain and character around the Gilmorehill Campus is highly varied. There is a well defined, formal and closed residential grid immediately to the west of the Campus, towards Partick. This grid becomes looser, albeit still with defined edges, to the north of this area, as the residential tenements of Patrick give way to the terraces and townhouses of Hyndland and Dowanhill.

To the north is another key urban grid of residential uses that extends through Hillhead to the Great Western Road. To the south is the 'gardenesque' Kelvingrove Park. This parkland setting sitting below the Campus is defined by mature landscape, dramatic topography and the key civic buildings further south of the park at the emerging Cultural Quarter around Kelvingrove Art Gallery.

The grain of the existing University Campus is varied and fragmented, with a mixture of building types, materials and architectural styles suggestive of buildings from across different eras.

Defined Edges / Loose Grid

Defined Edges / Open Grid

Defined Formal Closed Grid

Existing Fragmented Grain of Campus

Western Site

Cultural Buildings

West End Character Areas

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2.3 Gilmorehill and the West End

The natural beauty of Kelvingrove Park, a designated Designed Landscape, defines the southern and eastern edges of the Campus.

There is a strong and mutually beneficial relationship between the Campus and its local context that the masterplan proposals seek to strengthen. The University's ambition is to develop the former Western Infirmary site, and the Campus as a whole, as a vibrant, urban, learning and research environment which is woven into the social, cultural and physical fabric of the West End. This will involve a rich mix of buildings, spaces and uses, where the boundaries of where the University begins and ends are blurred.

The existing campus in the West End
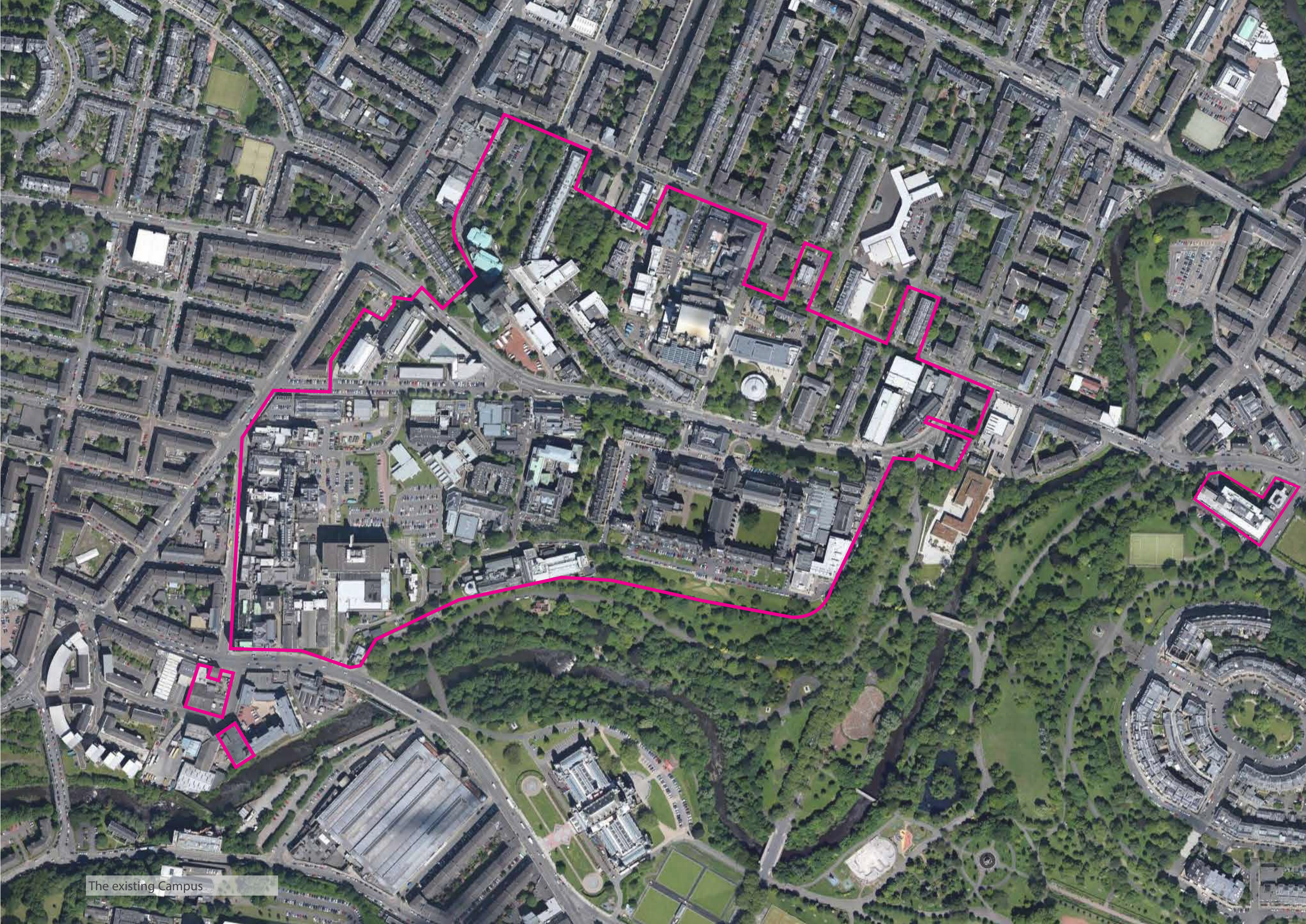
The existing Campus

2.3 Gilmorehill and the West End

The Gilbert Scott Building prior to the completion of the spire, West Range, Chapel and Bute Hall

Archive aerial photograph of Gilmorehill

Ashton Lane

Residential tenements on Cranworth Street

Lilybank Terrace to the north of the campus

2.4 Campus Development

Since the University of Glasgow campus was established in Gilmorehill in 1870 it has become integral to the West End of the city, taking advantage of and contributing positively to the unique local context, such as Kelvingrove Park, the Gilmorehill skyline and the vibrant local thoroughfare of Byres Road.

The original campus began here with the Gilbert Scott Building and over the years developed west and north between University Avenue and Great George Street. When University of Glasgow moved from the city centre to the West End, distancing itself from the Royal Infirmary, a new teaching hospital was built, in 1874, as part of the new University buildings.

Despite there having been several masterplans over the years that resulted in the addition of buildings throughout the 20th century, the University's recent acquisition of the former Western Infirmary site provides development capacity sufficient for the most significant change since the original move to the West End.

The campus masterplan therefore acknowledges the catalyst that is the development of the Western Site and the need to have a co-ordinated approach to creating a campus fit for the University's future.

Western Site

University Space

University Services, Admin, Support

Leased space
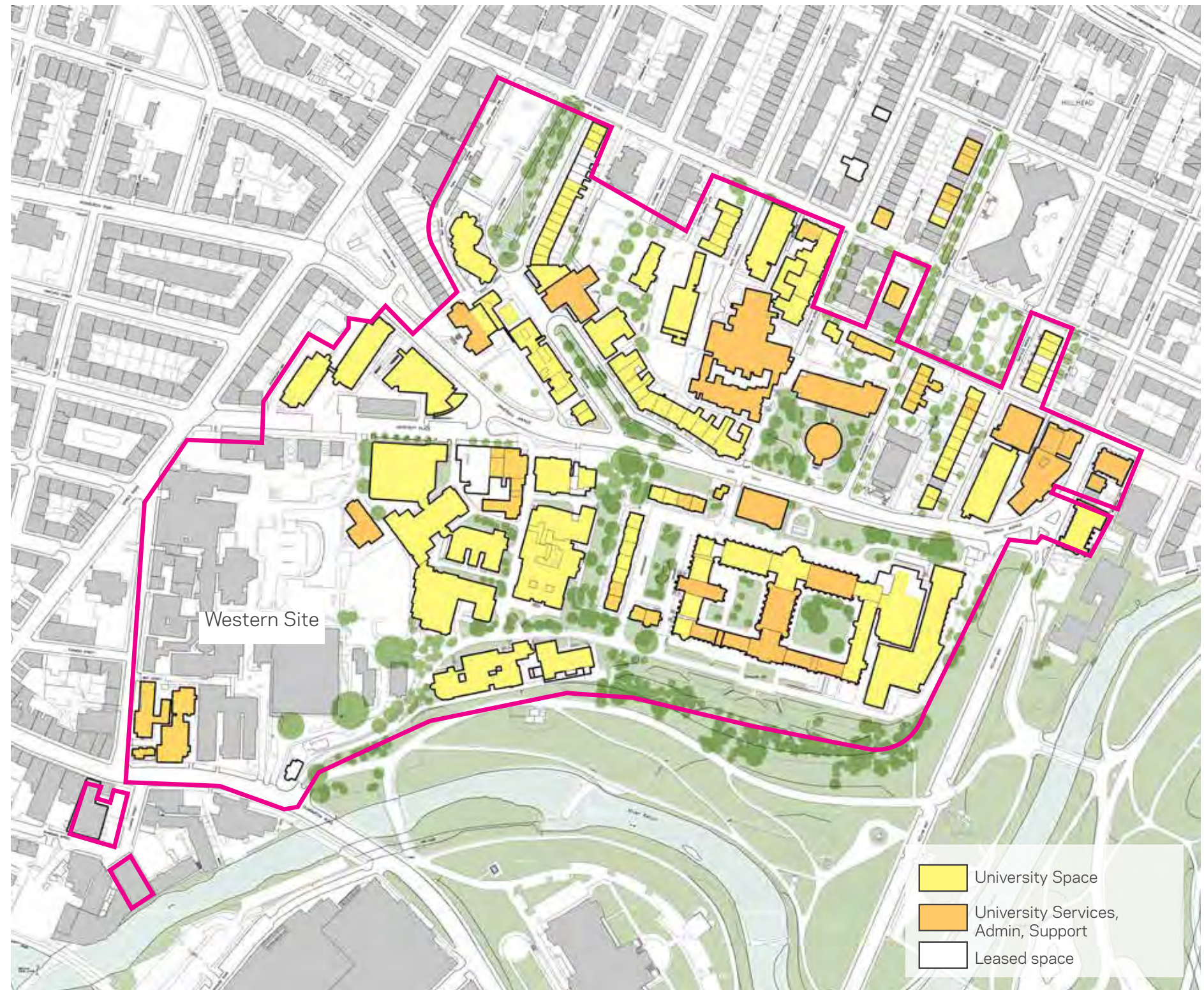
The Existing Campus

2.4 Campus Development
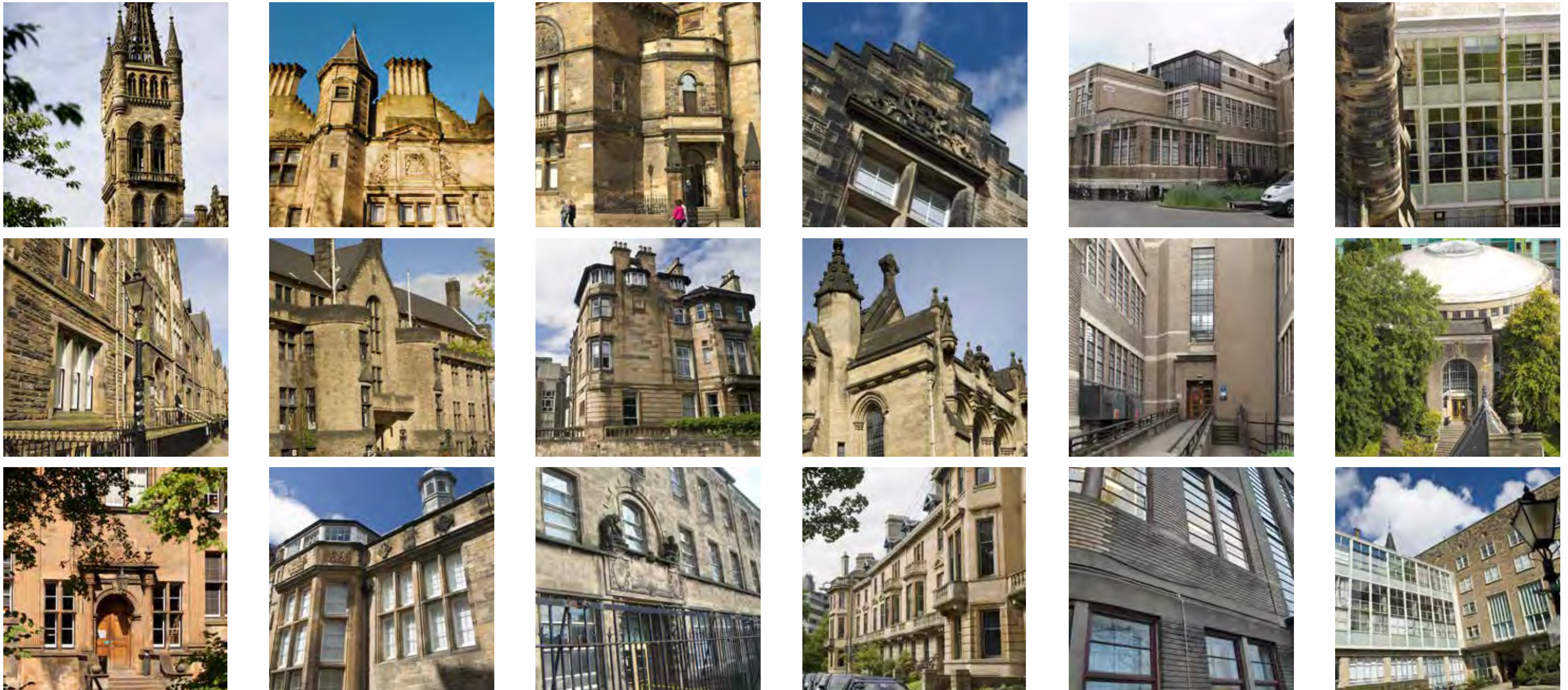
1870 Move to Gilmorehill
Gilbert Scott Building

1900 - 1908
Bower Building
Kelvin Building
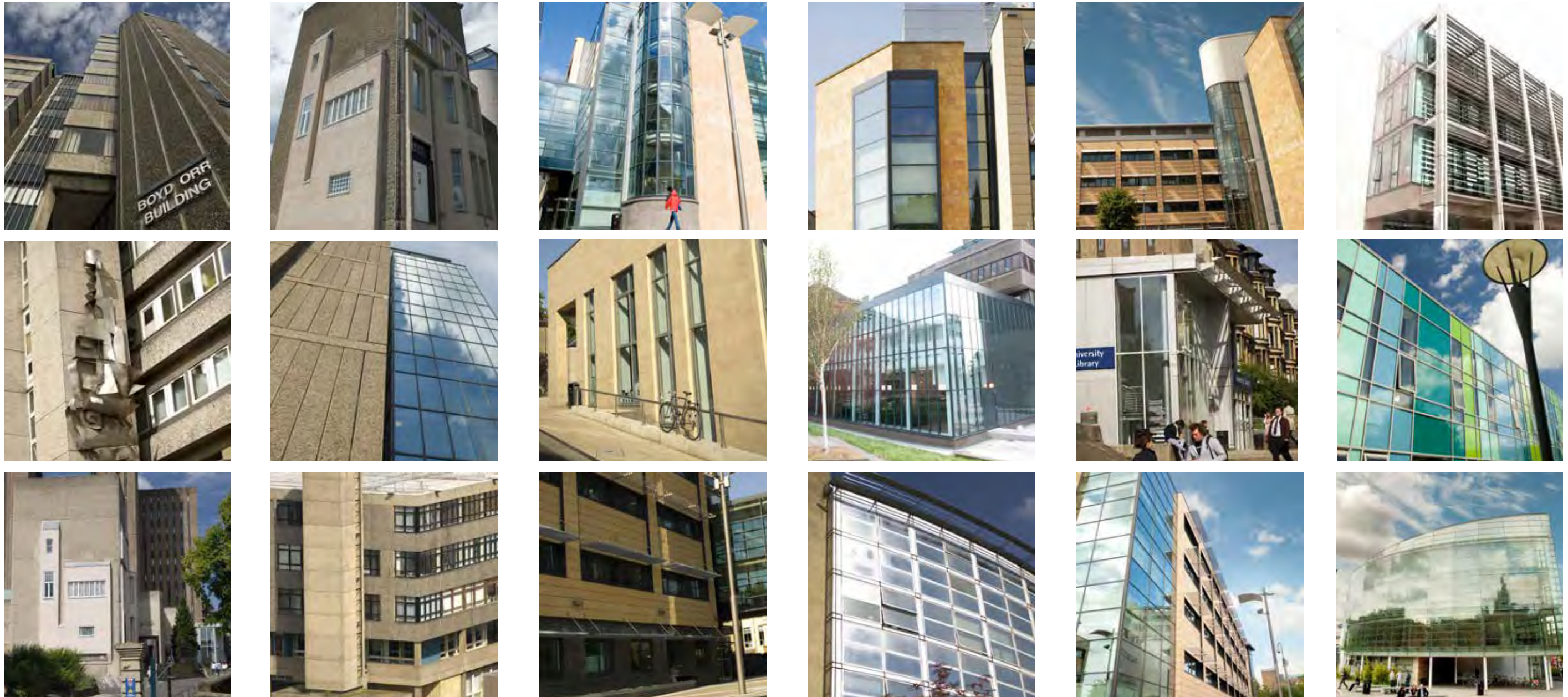
1927
Graham Kerr Building

1936 Joseph Black Building
Phase 1

1939
Macmillan Reading Room

1954 James Watt Building

2.4 Campus Development

1961 Pontecorvo Building

1968 - 1972
Library Building
Hunterian and Mackintosh House
Boyd Orr Building
Rankine Building
Adam Smith Building

2000 - 2010
Sir Alwyn Williams Building
Wolfson Medical Building
Fraser Building

2.5 Existing Built form: Constraints

The 140 years of evolution of the Gilmorehill Campus, illustrated on the previous two pages, through multiple piecemeal development over time has resulted in diverse built form, varied building types and architectural styles, which present the following issues:

Legibility

The buildings having developed individually, lack the legibility required to form a strong character of place and enable pedestrian wayfinding. The absence of a cohesive service strategy also leads to potentially pedestrian friendly spaces mixing with service yards. Uncoordinated breaks in street frontage, setbacks, changes in orientation and changes in materials is a result of piecemeal development and not a part of a conscious decision for the area.

Lack of coherence

Due to more recent overlays of development, the Campus as a whole lacks coherence:
o   **New and Old:** The campus contains numerous listed buildings and it is important that the new development complements these buildings.
o   **Architectural Styles:** The campus also presents a diversity of architectural styles and a key challenge would be for new development to complement these through the right choice of material and massing, while also developing a new visual coherence built on the best of these buildings.
o   **Landuses:** The campus to the north of University Avenue merges with the surrounding residential fabric. In some instances this residential development is located adjacent to college buildings on the campus. It is important to reconcile these somewhat conflicting landuses as a part of wider and long term strategy.

West End and University context

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2.6 Existing Built form: Opportunities

This variety and juxtaposition, an inherent part of the Campus character, present themselves not only as constraints but also opportunities

o **Coherence:** The campus proposals have an opportunity to enhance the character of the campus, reinstating the original visual coherence lost through more recent development. A co-ordinated change of character, created through both architectural expression and new open spaces of varying scales, is an opportunity that is an inherent part of the Campus masterplan strategy.

o **Massing:** The amount of new development provides the opportunity to develop a massing that: rediscovers and celebrates key views and vistas to heritage and green assets; is able to hold and define the street, both new and existing; or create unique accents or landmarks that form a new campus-wide way finding and legibility. Massing should also facilitate sun permeability and reduce exposure to wind by creating pedestrian friendly spaces.

o **Historic fabric:** The need to expand and relocate also provides the different academic Colleges a valuable opportunity to relook at the working of the College, the aspirations and its role in defining the wider campus. This is an opportunity to not only shape the University for the future but also facilitate the Colleges to work as a part of multi disciplinary, collaborating clusters that exchange knowledge and share resources. This presents the challenge of incorporating new types of buildings and spaces, that can foster this energy, into the historic fabric while also contributing a new architectural 'layer' to the West End. There is also the challenge of incorporation and re-use of listed buildings along Church Street and University Avenue, so that they perform a key function while retaining their character.

Listed buildings within the Campus

Large footprint buildings within the Campus and the West End

2.7 Existing Landscape Character: Constraints

The CDF undertook a detailed analysis of the current Gilmorehill Campus and identifies a number of issues that have informed the development of its key principles and core suggestions. Our own analysis aligned with the CDF, identifying that the core issues remain the same, which in summary include:

o **Vehicle dominance:** Where many spaces are currently overwhelmed by vehicular traffic and haphazard parking of cars interferes with the opportunities of creating an attractive public realm. On-street parking at certain locations conflict with key pedestrian desire lines. University Avenue currently suffers from the dominance of vehicles, which leads to safety concerns for all pedestrians and cyclists.

o **Fragmented, poor quality spaces:** The lack of a connected public realm has resulted in many external spaces becoming fragmented, residual and with no clear hierarchy across the campus. The University specifically lacks a focal public realm space for major events and social gathering and a range of complementary public realm opportunities that reflect the quality and inspiration of the University.

o **Historic appreciation:** Many of the very beautiful, listed buildings on the campus, such as the Gilbert Scott Building, are overwhelmed and spoilt by car parking. As historic monuments that reflect the history and importance of the University and their appreciation is currently inhibited and damaging.

o **A mature landscape:** Whilst the mature landscape, the Kelvingrove Park setting, and in particular its large trees, are a significant contributor to the beauty of the campus, it is important the landscape elements need to be appropriately managed to protect key views.

The CDF should be referred to for any further detailed analysis of the site.

Car parking dominates University Place

Railings pose a visual barrier and restricts pedestrian movement

Parking clutters South front of the Gilbert Scott building

Vehicle dominance at Professor Square and Gilbert Scott Building

2.8 Existing Landscape Character: Opportunities

Landscape corridor

West Campus

Car Parking

Gardens & Frontages

Small plazas & Open spaces

Streets & Gardens

Urban routes

Main roads

From the assessment of existing public realm a number of opportunities arose to provide a design direction for the evolving strategy, they are:

o **Landscape corridors**: Existing gardens and spaces with a mature setting that offer an opportunity to walk and cycle to the University along quieter routes away from busy car movements;

o **Car Parking**: Spaces currently being used for car parking that could potentially contribute to a comprehensive network of exciting, safe and well used public realm and would improve settings for significant buildings;

o **Emerging Western Site proposals**: An opportunity to expand the public realm offering and create a hierarchy of connected spaces and distinctive destinations that expand and enhance the University of Glasgow experience and improve integration between new and old parts of the campus;

o **Gardens and frontages**: Many of which are perceived as inaccessible and could be much better integrated into an expanded network of the University public realm without significant alteration to their appearance;

o **Small plazas and open spaces**: A series of small, residual spaces that could be integrated into a bigger network of public realm offering;

o **Streets and gardens:** Unique gardens and tree lined routes that provide a pleasant means of accessing the University could be better integrated into the public realm offering;

o **Local urban routes**: Distinctively narrow streets with building frontage create their own distinctive ambiance, potentially extended through the campus as part of the variety of public realm offering; and

o **University Avenue:** The opportunity to make this route less vehicle dominant and increase pedestrian and cycle opportunities.

Western Site

Diagram of Existing Landscape Infrastructure

N

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Approach **3.0**

3.1 Approach

Designing from the Inside Out

The Campus Development Framework undertook a detailed study of the campus and its context and made recommendations based on strong urban design principles. The aim of this Western Site proposal is not to replicate that work, but to evolve it further based on the University's aspirations and current international best practice.

This Western Site proposal poses a slight shift in viewpoint to consider design from the inside out: working from what the University wants its campus environment and buildings to provide for its staff, students and researchers.

With this in mind, the Campus Masterplan proposes a place-making strategy that looks at learning trends, spatial relationships, quality of experience and the opportunity for mixed use and collaborative interaction.

The University of Glasgow's Vision and Strategy underpin the thinking that has informed this Masterplan and the Western Site proposals outlined in the accompanying Design and Access Statement. The three interrelated themes of People, Place and Purpose serve as a framework for the major principles of the Campus Masterplan, illustrated on this and the next page.

The Campus Masterplan also recognises that it forms an integral part of the City and the vibrant West End of Glasgow. The notion of designing from the inside out is therefore also reflected at the urban scale by inviting the public into a more permeable Campus and by extending linkages (in the widest sense) from the University outwards towards the wider community.

People

Create places for people to meet people

Mix complementary uses and activate ground floors so they form part of the public realm

3.1 Approach

Purpose

Respect built heritage and creatively
re-use existing buildings

Build a high quality environment that is
enjoyable to spend time in

Encourage the sharing of knowledge and
research by creating flexible spaces for
work, study and socialising

3.2 The Learning Landscape

The University's aims are set against a backdrop of the changing nature of scholarship, learning and research which is increasingly impacted by:
o Technological change;
o Changes to researcher expectations;
o The desire for contact any time, anywhere;
o The need to store, personalise, manipulate, re-purpose and share information;
o New research methods including multi-authoring, cross disciplinary research, collaborative PhDs and cross border research;
o Learning and research that occur in multiple formats and multimedia outputs;
o Growing importance of ephemera as well as formal documents;
o A proliferation of digital information including a combination of large scale digitisation and 'born digital' information;
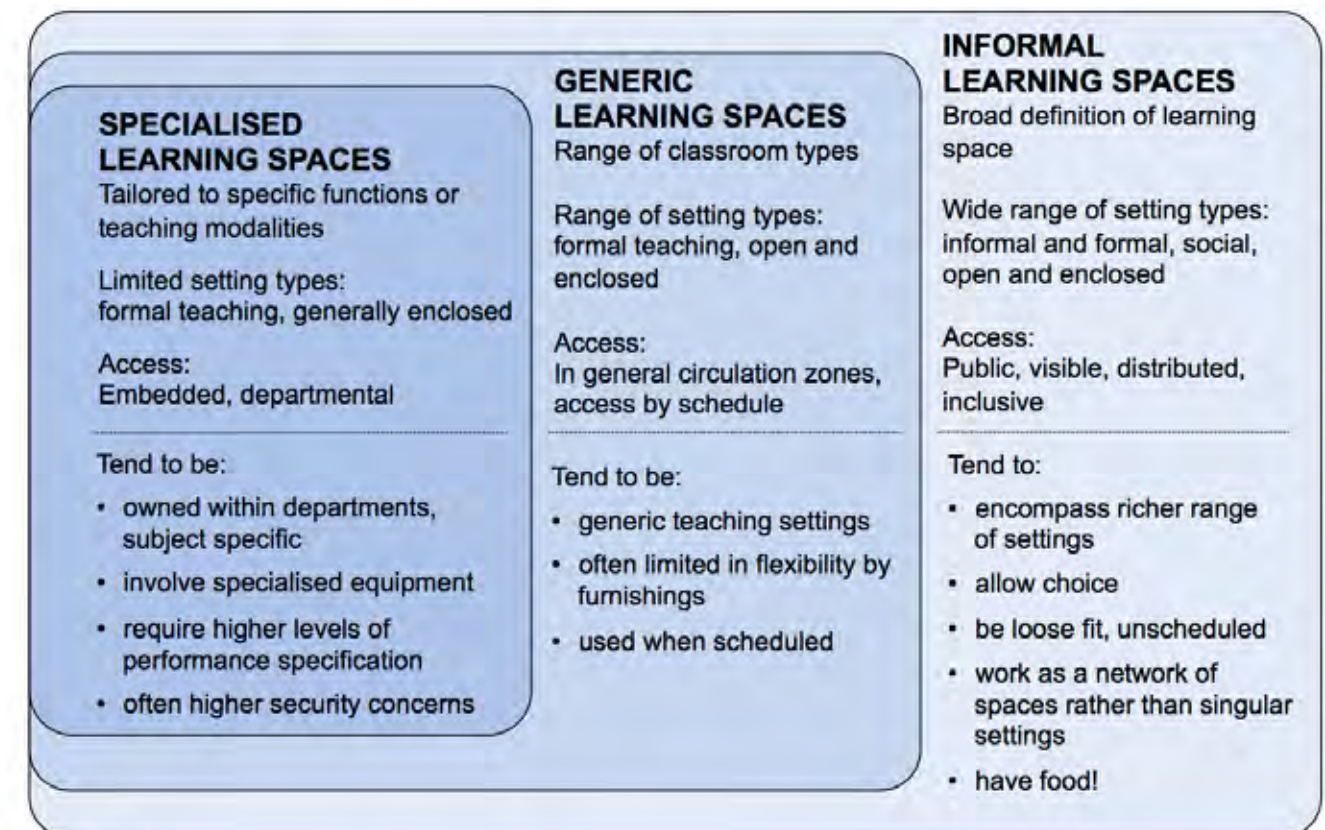o Blurring of boundaries between academic and business worlds.

Changing modes of learning results in increasingly diverse learning experiences and space types to support the changing nature of scholarship and innovation, including:
o Collaborative, active learning with hands-on experiences;
o Integrated, interdisciplinary learning and research;
o Distributed learning that takes place anywhere / anytime through the use of mobile technology that also blends learning with social activity;
o Immersive environments with simulated or real-world experiences;
o Blended activities, online with face-to-face, mixed reality.

For successful university place-making this requires a spatial translation of the overlap between pedagogy, the curriculum, technology and space provision as well as in-built flexibility and adaptability to cope with change.

The importance of non-designated space for students to work together outside the classroom is increasingly being recognised for its educational value and contribution to creating a sense of community, such as:
o blending classroom and online work and increased need for group study outside of class time will demand more informal work settings campus-wide;
o re-appropriating the 30-40% of balance space to create learning and social settings;
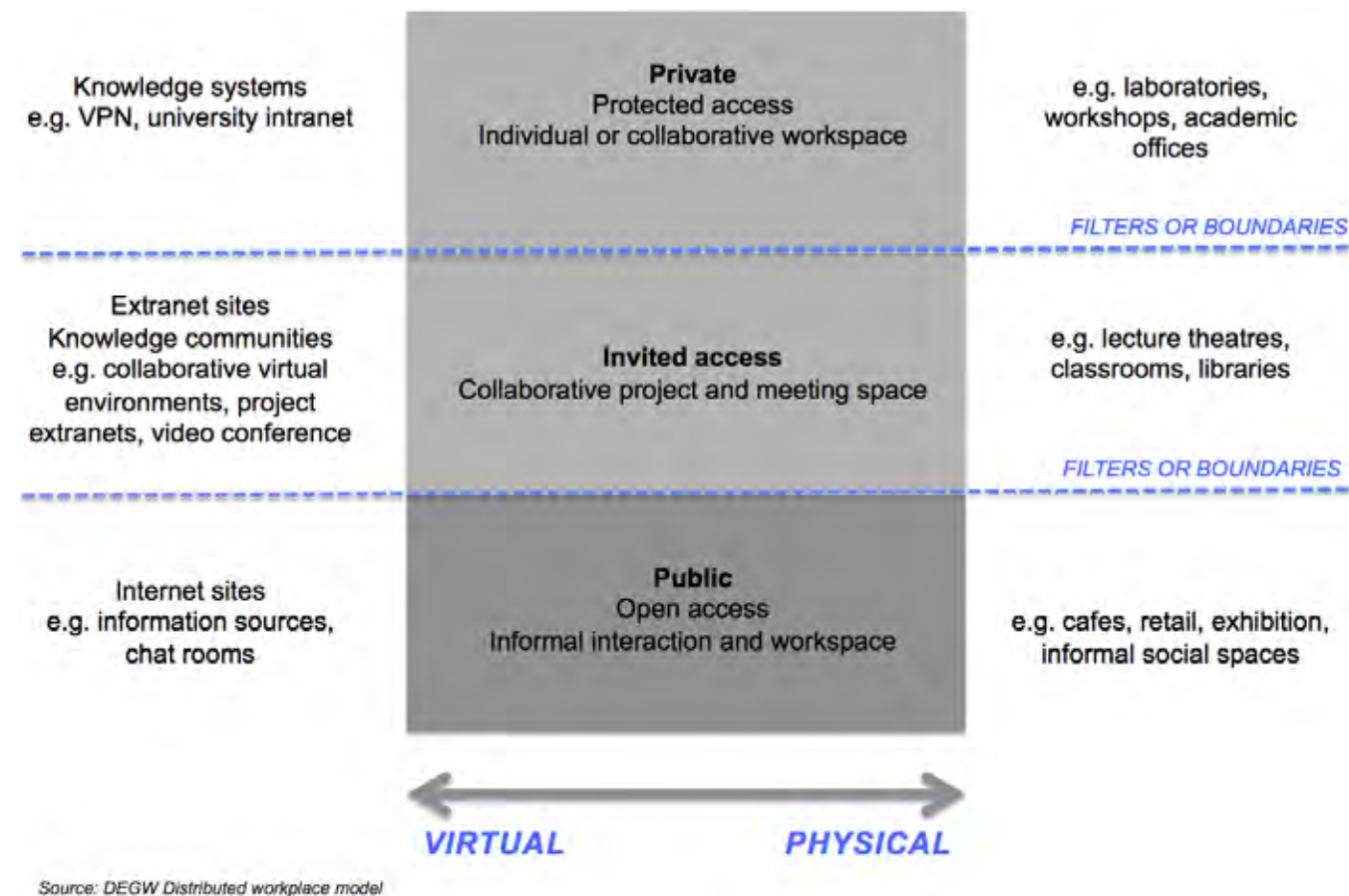o using balance space to tell stories, express ideas, celebrate success.

Defining the Learning Landscape

Social Spaces - the spaces in between

3.2 The Learning Landscape

Knowledge systems
e.g. VPN, university intranet

Private
Protected access
Individual or collaborative workspace

e.g. laboratories,
workshops, academic
offices

FILTERS OR BOUNDARIES

Extranet sites
Knowledge communities
e.g. collaborative virtual
environments, project
extranets, video conference

Invited access
Collaborative project and meeting space

e.g. lecture theatres,
classrooms, libraries

FILTERS OR BOUNDARIES

Internet sites
e.g. information sources,
chat rooms

Public
Open access
Informal interaction and workspace

e.g. cafes, retail, exhibition,
informal social spaces

VIRTUAL ←→ **PHYSICAL**

Source: DEGW Distributed workplace model

Progression of Access through Managed Thresholds

High Interaction

**Team Learning/
Interactive Learning Environments**
- Group Study Rooms
- Seminar Rooms
- Media Authoring Labs
- Synchronous Distance Learning

**Interactive Knowledge Creation/
Touch-down Facilities**
- Collaboration Spaces
- Consultation/Support Centers
- Virtual Environments
- Information Commons
- Cybercafes

Continuous Occupancy

**Training/
Independent Workstations**
- Academic Computer Labs
- Training Rooms
- Lecture Halls
- Demo Labs

**Independent Study/
Scholars' Workstations**
- Quiet Study Areas
- Reference Resources
- Print & Media Collections
- Navigation Assistance

Intermittent Occupancy

Low Interaction

CHANGING MODES OF LEARNING. SOURCE: S DUGDALE IN HARRISON & HUTTON 2014

Changing modes of Learning

Our approach is therefore based on the creation of a space model for the future University of Glasgow campus that:

o   Reduces fragmentation by strengthening College clusters within the Masterplan while also exploiting functional and creative adjacencies between Schools, Institutes and University functions within a combination of existing and new buildings to accelerate knowledge exchange and promote shared identity.

o   Creates adjacencies and overlaps with a variety of agile and flexible co-location hubs, space types and settings that encourage collaborative exchange between Colleges, while fostering multi-stakeholder collaboration and industry partnerships.

o   Safeguards and enhances the architectural character and heritage of existing listed buildings by ensuring fitness for purpose between building types, their functions, occupants and adjacencies while planning for appropriate change, adaptation and

compliance.

o   Establishes a network of vibrant central and local hubs throughout the University Estate to share key facilities and resources, within and across disciplines.

o   Creates a porous grouping of spaces that encourages interaction with the wider community, particularly at ground or street level, but also around vertical circulation routes and within shared spaces. Access between these types of spaces can be managed via a series of thresholds denoting public, private and invited areas.

3.3 A Smart Campus

The Smart Campus programme recognises the need for the University of Glasgow to embrace dynamic shifts and disruptive innovation within a rapidly evolving global environment and marketplace. Digital innovation has changed the way people work, learn, interact and socialise. This has impacted on user requirements and expectations from an advanced learning and research environment.

The Masterplan aims to align with the physical and social principles emerging from these trends as illustrated in the August 2015 'A Smart Campus for University of Glasgow' document by Catapult Future Cities. A major driver behind the strategic brief and the resulting Western Site proposal is the power of collaborative working and the opportunity to strengthen links with the wider world. The interface of the campus on the western edge along Church Street is proposed as a potential new Innovation Quarter, with spaces for small businesses and start-ups who can benefit from close proximity to the University. Similar resonances and adjacencies are exploited along the southern edge of the Campus, linking the relocated College of Arts with the cultural hub of Kelvingrove Quarter.

The creation of a more open and accessible Campus will engender a feeling of community and belonging, as people won't feel restricted to particular Institutions and Colleges, but more interconnected with the wider city and the global learning and research environment.

Personal

The Campus Masterplan provides a strong focus on place-making and designing from the inside out with an emphasis on people and their personal experience of environment as a key priority. This feeds into a number of aspects of the Western Site proposal, including ease of movement and pedestrian/cycle priority, active frontages and ground floors, as well as a general move towards creating a University that is a connected part of the city rather than a more self-contained campus.

Collective

The need to work, learn and socialise together is a key consideration in the evolution of the Western Site proposal. Enabling strategies include the creation of a variety of quality spaces for meeting, informal working and socialising. This will include cafe and restaurant spaces with a diversity of provision and a variety of break-out and collaborative working spaces within buildings that are open and accessible for use. This can tie in with a digital resource for information access and sharing, for wayfinding, the availability and booking of more formal spaces, as well as seeing what amenities are on offer, including cafe menus, listings and events.

3.3 A Smart Campus

Campus

This Campus Masterplan presents an opportunity to optimise buildings and space utilisation by sharing resources, making buildings, services and facilities work harder, and by encouraging collaborative interaction.

It establishes a network of vibrant central and local hubs throughout the University Estate to share key facilities and resources, within and across disciplines, while offering extended hours access and support throughout the year for different combinations of learning, research, social, amenity and leisure activities.
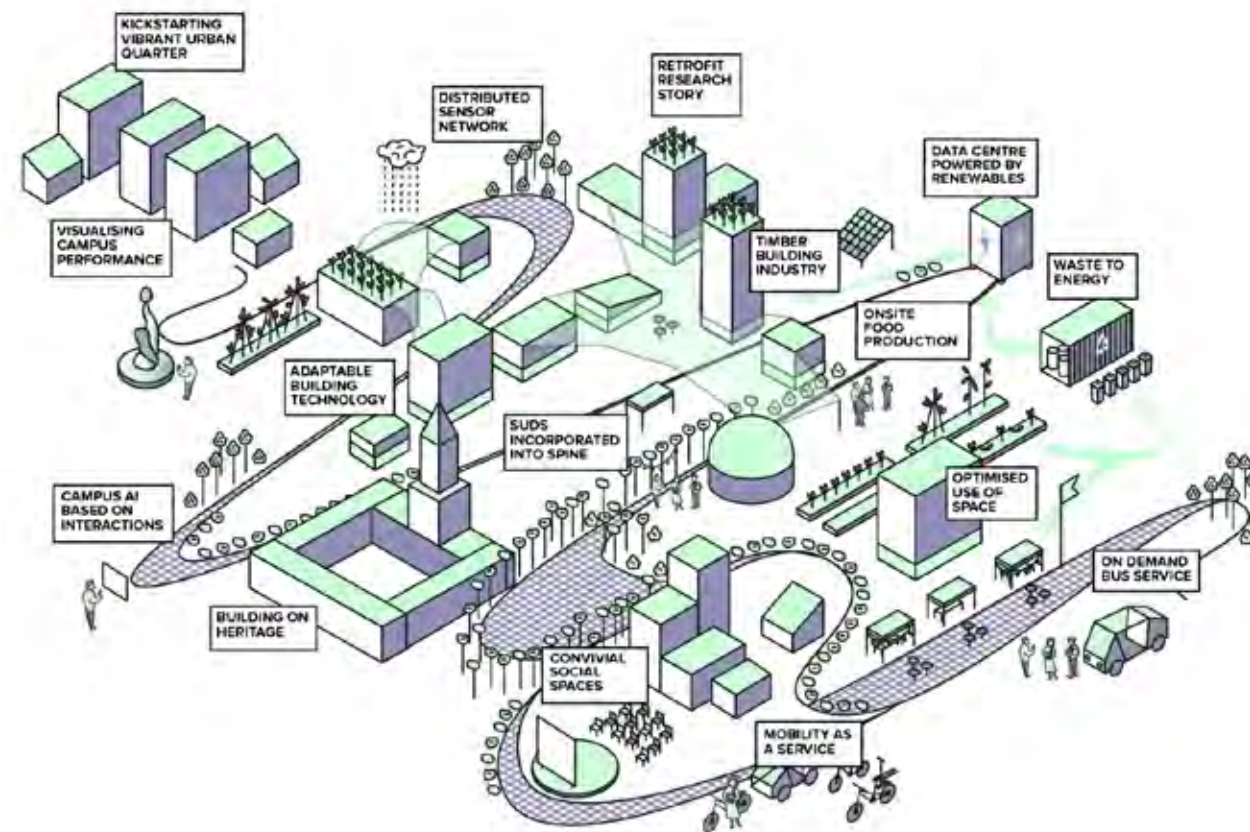
City

In line with a trend towards wider public engagement, the new facilities and spaces conceived as part of a 'connected urban environment', will enable the University of Glasgow to be more outward looking and foster stronger links with the West End and the City. The proposed new urban square on the Western Site and the buildings around it will have both academic and civic significance. It is anticipated that this space will engender a sense collective ownership by the wider local community and the university at large.

The expansion of the Campus onto the Western Site will provide the University with a significant opportunity to utilise the development programme as a test bed for research, teaching and possible enterprise, in the Smart Cities field – exploring aspects of urban innovation, city systems, big data, informatics, energy management and transport policy as well as improved health and well-being.

3.4 University Place-making Exemplars

Other universities and research institutions, both within the UK and internationally, are now facing the combined challenges of needing to update their estates, technology provision and academic offering, to remain competitive in a rapidly changing global marketplace. They are consequently beginning to develop new campus frameworks, building and space typologies, as well as transforming existing spaces and neighbourhoods to attract the best staff and students, to facilitate world class scholarship and research, while improving the overall quality of social experience. The following pages provide a flavour of some of these new 'Learning Landscapes'.

University College London and the Wellcome Trust: Colonisation and consolidation

University College London (UCL) is rediscovering and reconfiguring spaces to meet new requirements. It is an example of how a critical mass of academic uses attract associated research institutions to co-locate, enabling collaboration.

o   UCL is part of the wider King's Cross Knowledge Quarter in London.
o   UCL has re-discovered spaces and reconfigured them to form new academic facilities such as the Institute of Making (combined with the Faculty of Engineering's materials library) and increased retail/cafe uses;
o   There is active colonisation of linking spaces such as internal corridors (in Wilkins Building) and service lanes (such as Malet Place) to provide additional space for informal learning and social activity for students.

Mallet Place, UCL, London

The Wellcome Trust, Gibbs Building, London

Institute of Making, UCL, London

Write-up space, UCL Cancer Institute, London

Colonisation of corridors

3.4 University Place-making Exemplars

**University of the Arts London:
A new place within the city**

University of the Arts London (UAL) is an example of academic uses as the focus and catalyst for regeneration, major new development and civic activity. The combination of re-purposed listed buildings with the programming of events to occupy and enliven the flexible public realm - including Granary Square - has created a new destination within the city. The extent of UAL's activities now provides a critical mass at Kings Cross, transforming the area into an 'academic public realm' embedded in this part of the city. UAL is also part of the wider King's Cross Knowledge Quarter.

**London School of Economics, London:
An academic public realm**

The London School of Economics and Political Science (LSE) provides an example of enhancements to an academic public realm that is carved from existing streets. A series of recent, distinctive, academic and social buildings are transforming the campus and attracting a lively concentration of student and academic activity. The quality and combination of interventions have been successful in attracting students to the area on a daily basis and encouraging them to stay longer. Through a place-making approach LSE has established an open campus, which is both part of the city but which remains defined and identifiable. A series of programmable, managed thresholds determines which parts of the campus are accessible to the wider public from those that are dedicated to academic use.

Granary Square, Kings Cross, London

The Student Centre at LSE, London
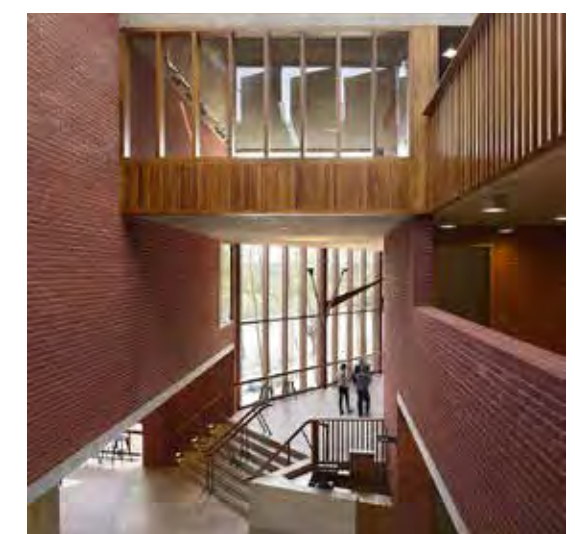
The Academic Building at LSE, London

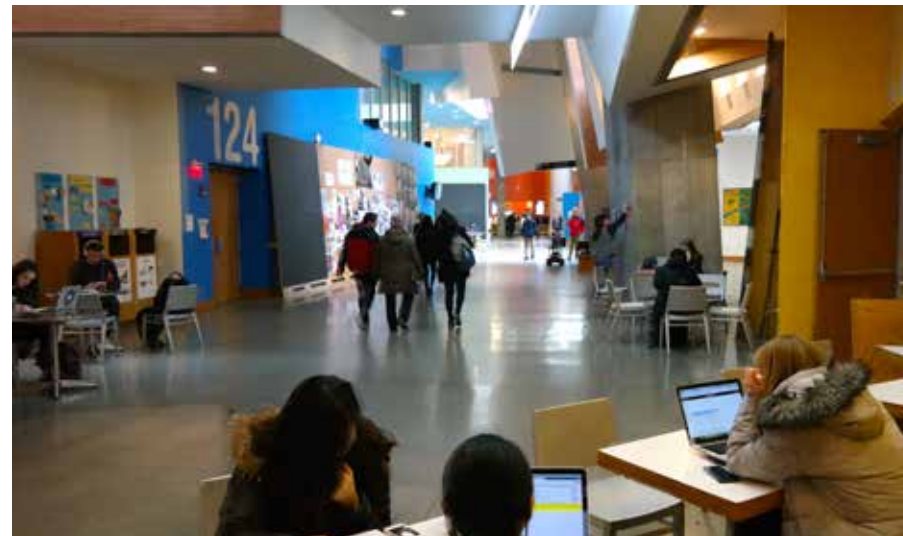# 3.4 University Place-making Exemplars

Massachusetts Institute of Technology, Cambridge, Mass.: A flexible framework that encourages innovation adjacencies

'MIT 2030' is a flexible development framework devised in-house by Massachusetts Institute of Technology (MIT) to enable the Institute to make well-informed choices about its physical development and renewal in support of its mission. Four overarching themes permeate its campus developments (most of which involve densification and infill): innovation and collaboration; renovation and renewal; sustainability; enhancement of life and learning.

o   MIT has an emphasis on creating flexible and adaptable spaces or buildings that support collaborative, interdisciplinary learning and research.

o   MITs reputation attracts corporates and entrepreneurs to locate in close proximity to its campus enabling all parties to potentially benefit from adjacencies. This commercial development often takes place on land leased from its property holding company MITIMCo (MIT Investment Management Company).

o   MIT has a campus wide network of basement and ground level corridors that provide covered service and/or pedestrian routes linking buildings in all weathers. The Infinite Corridor is one such example. Recent improvements have also been made to colonise and enhance the spaces in between and within buildings.

MIT Media Lab, an adaptable, interdisciplinary research and teaching facility with commercial partnerships

Department of Physics: enclosing and enhancing spaces in between buildings

The Student Street links teaching spaces in the MIT Stata Centre

Underground service link between Stata Centre and Koch Institute

3.4 University Place-making Exemplars

**New York University, New York City:
Densification and outreach**

New York University's development framework 'NYU 2031' rationalises it's landholdings through concentration and densification in three key clusters in Manhattan and Downtown Brooklyn. 'The Core' represents the main campus located around Washington Square in Greenwich Village where two 'superblocks' are being redeveloped for arts and humanities. Located some blocks further north-east, is NYU's 'Health Corridor' - a hub for medical teaching and research facilities. The outreach component of the framework involves the acquisition of MetroTech Centre in Downtown Brooklyn where the School of Engineering is based as well as innovative programmes such as the Urban Future Lab, Media and Games Network (MAGNET) and NYU's Centre for Urban Science and Progress (CUSP). These University programmes take advantage of the burgeoning commercial start-ups and enterprises in this dynamic, mixed use urban neighbourhood.

Washington Square, the focus of NYU's Core Campus where densification is taking place on two 'superblocks' to the south-east
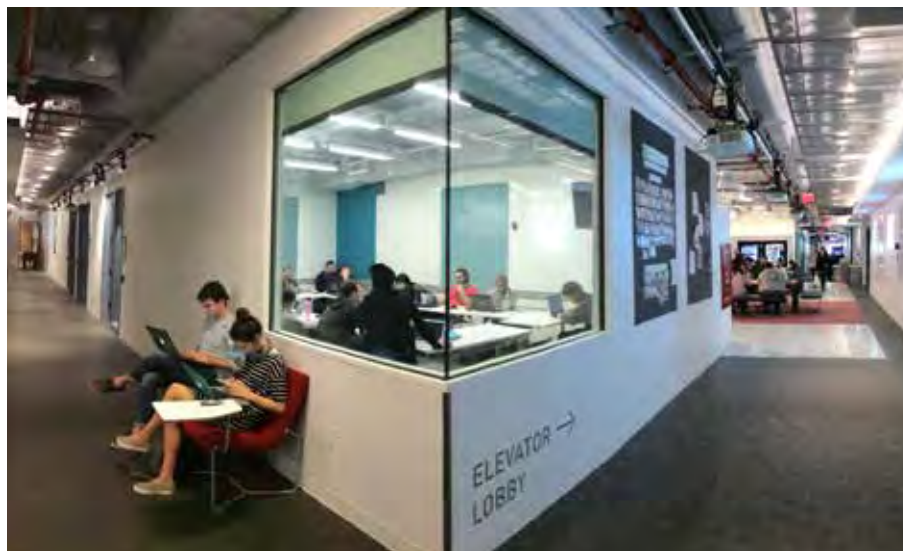
NYU MAGNET production space, MetroTech Campus, Brooklyn
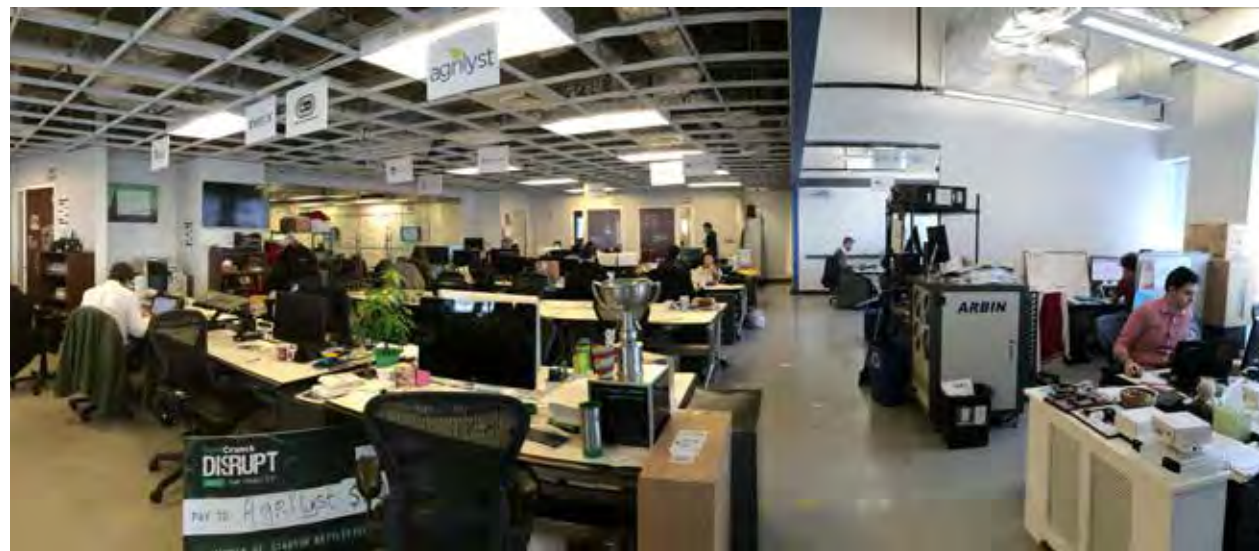
NYU Urban Future Lab, MetroTech Campus, Downtown Brooklyn

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3.5 Character: What Kind of Place

A reading of the existing character of the Campus and its historic development has revealed that although the Campus has an abundance of important and special listed buildings, the Campus as a whole suffers from a lack of visual cohesion, brought about by more recent 20th Century development.

The Campus Masterplan provides an opportunity to learn from the best of the old and new buildings and spaces, and build a new visual coherence, which will define the University within the city and reinforce and update its identity throughout the world. This will be achieved through both careful design of new development but also importantly, public realm. This new character will be dependent on not just the external materiality of the buildings but the visibility and celebration of internal social and learning spaces.

3.5 Character: What Kind of Place
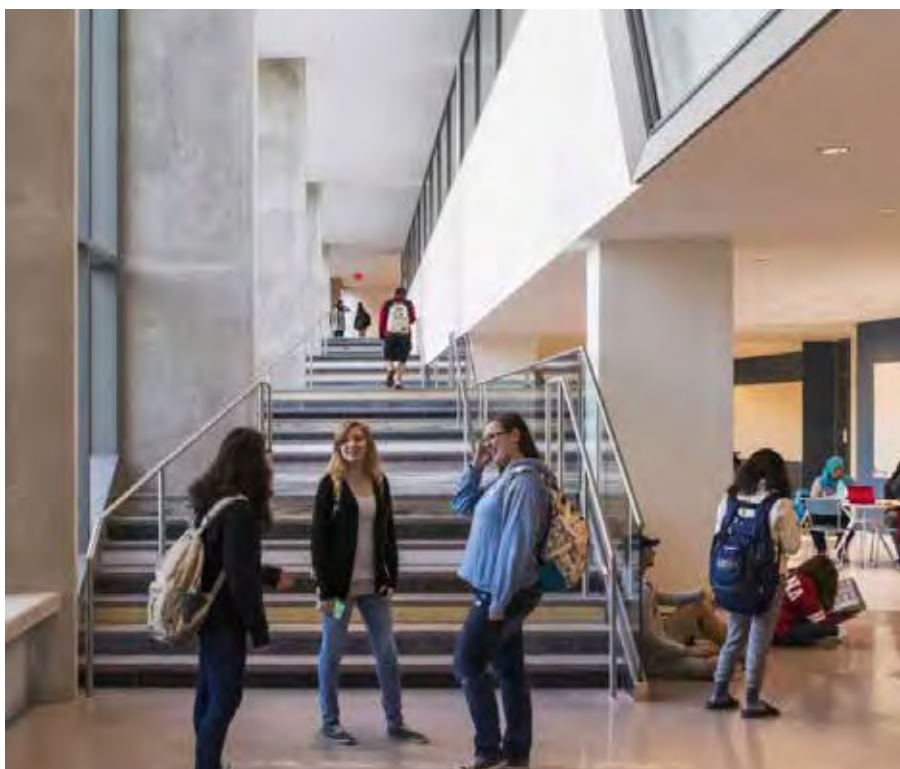
3.5 Character: What Kind of Place

Spaces a University Needs

A successful public realm plays a pivotal role in ensuring a healthy, animated and enjoyable campus is achieved. The University sees public realm as a major contributor to the success of the expanded Gilmorehill Campus aiming to:

o Provide a public realm that is **connected** both physically and through social and online media.

o Has a variety of external space and destinations providing locations for social **gathering** and events, whether large, flexible or intimate, for **contemplative** purposes.

o Where the quality of the public realm reflects the success of the University and contributes to student and teacher **pride**.

o Is animated through its appeal and success and provides opportunities for activity, art and **performance**.

o Which expands the mature landscape setting across the campus to merge the beauty of **nature** and architecture together.

Connected

Contemplation

Activity, Art and Performance

3.5 Character: What Kind of Place

A ten point vision statement identifies the underlying criteria for the public realm and landscape approach, they are:

Principles:

The vision is to develop the urban design principles established in the CDF along with the key design objectives as follows:

Character:

Create a public realm that is reflective of the history and heritage and success of the University, yet is contemporary and forward thinking, reflects innovative, artistic, scientific and engineering endeavours within the University.

Networks:

Improve and extend existing public realm to establish a coherent, accessible network of pedestrian and cycle friendly routes to connect with existing and proposed University facilities, local communities and Kelvingrove Park.

Appreciation:

Improve the quality of spaces surrounding existing buildings by removing vehicles and unwanted clutter, improve connectivity and establish a comfortable, functional and aesthetic public realm that allows appreciation of its architectural heritage.

Variety:

Create a range of connected public realm types within the campus for University users and the community, such as spaces and routes for ceremonial use, quiet spaces for contemplation and study, and active spaces for social gatherings and events.

Destinations:

Establish new, much needed major public realm spaces within the extent of the new campus, including new arrival spaces and a public square for the west campus.

Avenue

Reduce the impact that the busy University Avenue has on the campus by reducing car influence, encouraging public transport and cycle use and increasing pedestrian priority areas.

Gateways:

Use public realm to improve the exterior appearance and arrival experience into the University.

Wayfinding:

Create a network of public realm that is easy to navigate, supported by a hierarchy of branded signage including SMART phone interfaces with the University.

Parks:

Creating a public realm setting that reflects its urban context, but applies landscape to complement the adjoining Kelvingrove Park, mature tree setting of the University and increase the habitat, biodiversity and sustainable urban drainage opportunities across the campus.

Campus & Public Realm Strategy **4.0**

4.1 Masterplan Strategy - 'The Big Moves'

The opportunity to build significant new buildings on the Western Site and, in doing so, vacate some buildings to the north of University Avenue, releasing them for alternative use, means that there will be a shift in the centre of gravity of the campus. This presents a number of key strategic elements of the masterplan:

Weaving into the West End

There will a more direct relationship between the Campus and Byres Road, characterised by a mixed-use zone along Church Street, incorporating the adaptive reuse of existing buildings. The range of uses proposed for here can support and enrich the university community, with business start-up spaces, cafes, and residential uses.

Relationship to the Park

Connections to the park will be strengthened with improvements to the Gilbert Scott Building and the creation of a new interface at the south-west corner of the campus the Southern Gateway.

Relationship to Hillhead

The Campus will largely be consolidated along University Avenue/University Place and around the Reading Room Garden and University Gardens. The University Campus North of University Avenue and West of Byres Road, undergoes transition as it fragments into number of smaller ownerships interspersed with the surrounding residential neighbourhood. The University is using this as an opportunity to strategically relocate, decant and refurb properties to consolidate its campus around the University Avenue.
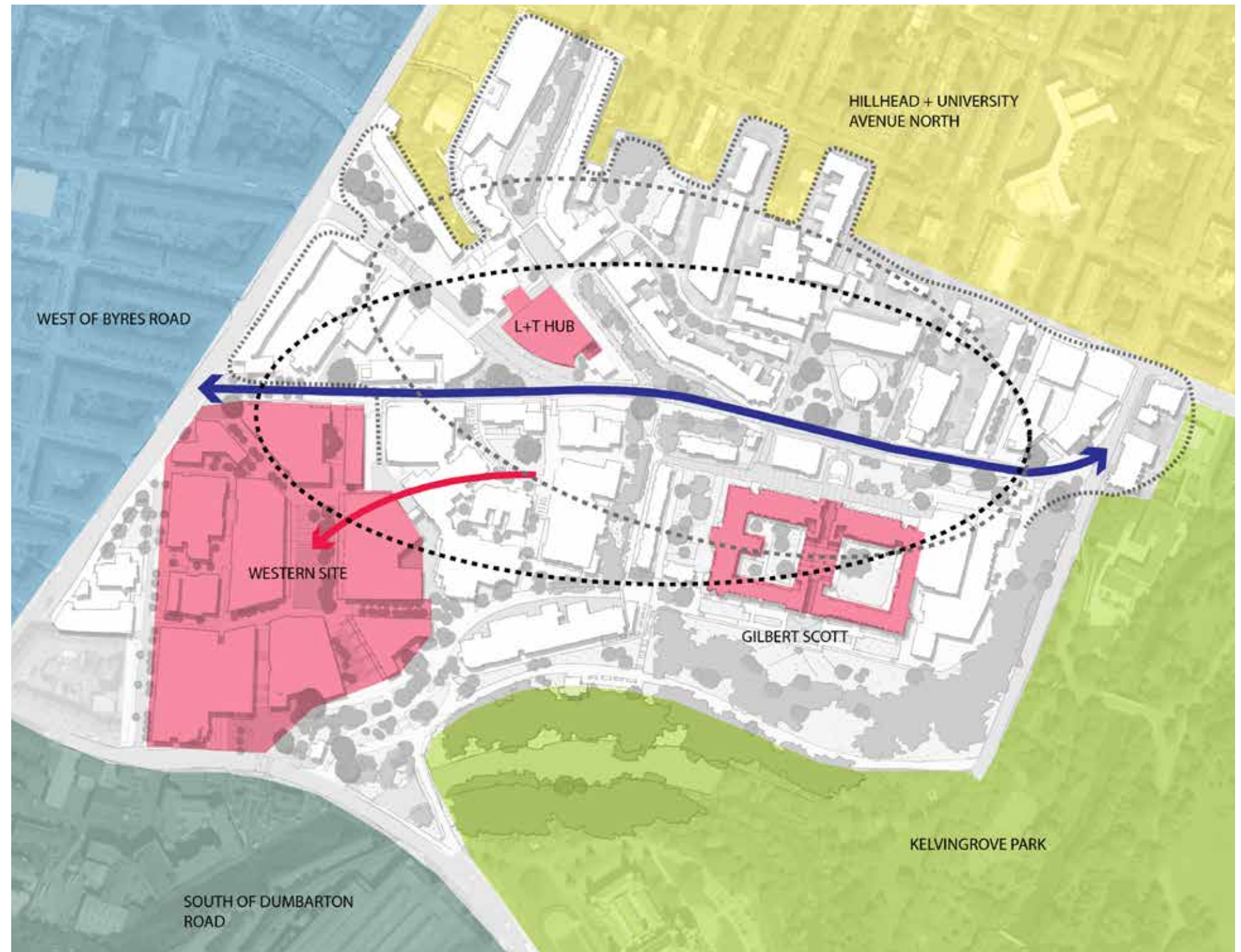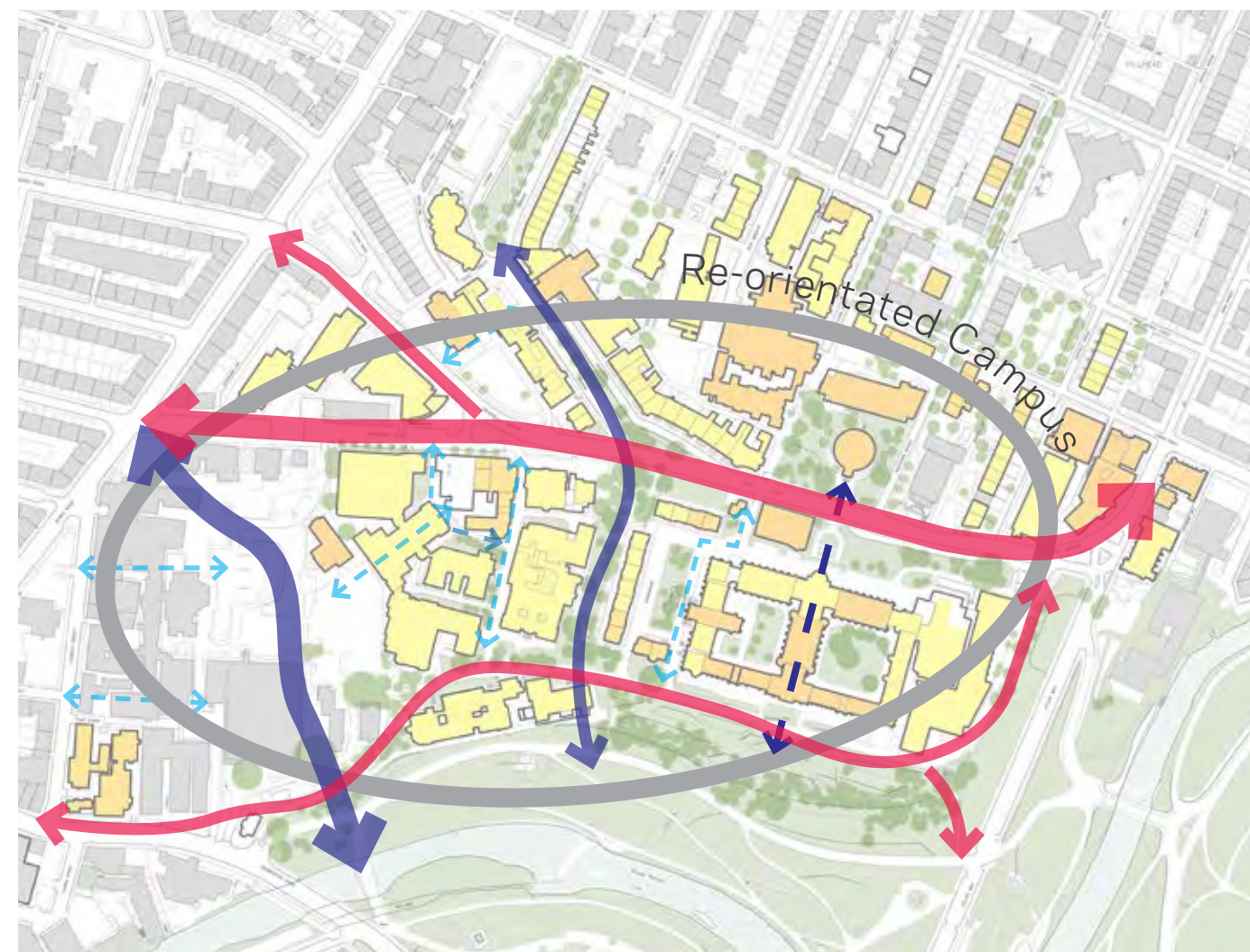

Gilmorehill Campus - 'The Big Moves'

4.2 Masterplan Strategy: Spaces and Routes

Improving Legibility and Quality of Movement Through the Campus

A fundamental shift in the centre of gravity of the Campus means that there is an opportunity to re-appraise movement through the campus and the legibility of the network that connects colleges and building clusters. This page shows a high level overview with further detail on the character and design of routes and spaces outlined in the Section 04 and 05 of this report.

While University Avenue will act as a principal east-west spine, it can be supported by the improvement of the route at the southern edge of the campus, restoring prominence to what was originally designed as the front door to the Gilbert Scott Building.

North-south primary routes are shown in blue, with improved emphasis on the axial route through the Gilbert Scott Building and a new primary route through the Western Site. These links serve the purpose of connecting the Campus and the areas of city to the north of the Campus to Kelvingrove Park for the first time in many years.

Finally there are smaller linking routes between and through buildings, that provide more intimate connections between the Campus and it's surroundings and with the primary routes and spaces, form a network of links and spaces.

The green areas highlight the network of key spaces and gateways, formed from existing and proposed spaces, that act as destinations and meeting places for the buildings located around them.

Gilmorehill Campus - Key connections
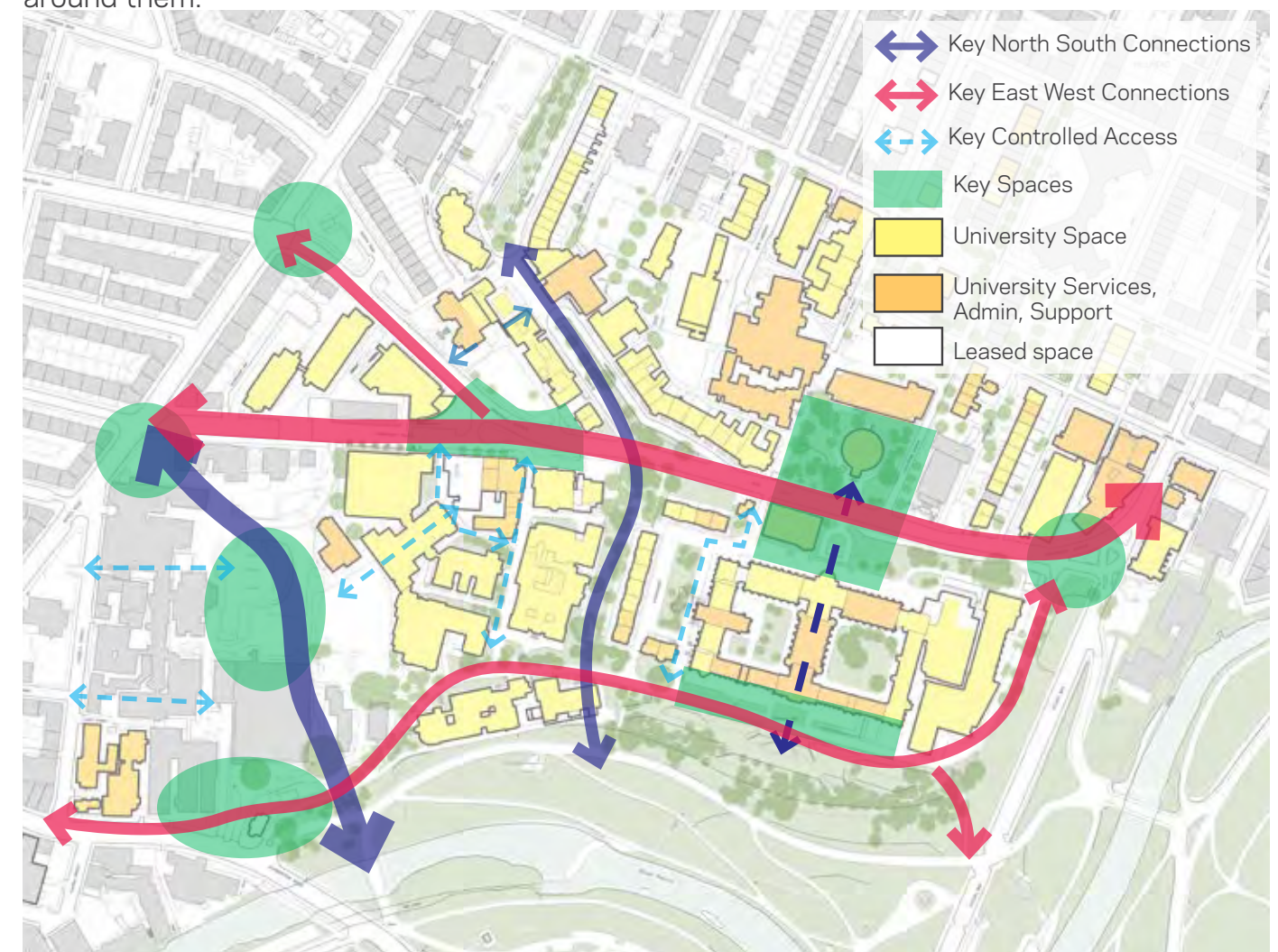
Gilmorehill Campus - Key spaces

4.2 Masterplan Strategy: Spaces and Routes

In-Between Spaces

The strength of this masterplan will be in the provision of the 'spaces in-between' that encourage collaborative working and social interaction. These spaces enliven life at University and promote a strong feeling of community. They will create a rich variety of learning and social settings that can also be designed to tell stories, express ideas and celebrate success.

By space in-between, we mean the following:
o   Public spaces that several buildings from different colleges feed into.
o   Parks and gardens that encourage stopping and sitting.
o   Cafe and restaurant frontages.
o   Where the outside overlaps with the inside in publicly accessible foyers and routes through buildings.
o   Corridor and break-out space that is free to colonise for informal working.

'In-between' space also recognises the value of a variety of learning, teaching and collaboration spaces that provide different types of space for different needs. This is in response to the changing needs of the campus community for more flexibility in how knowledge sharing and working together takes place.

Interior routes through buildings

Street frontages allowing social interaction


small pocket parks along key routes

Internal corridor spaces working as informal breakout + exhibition areas

4.3 Masterplan Strategy: Integrating with Surrounding

The diagram adjacent shows a campus wide strategy to make the Gilmorehill campus, (including the Western Site) a part of the surrounding context.

This integration with the surrounding context is done by:
o   Increasing north south and east west pedestrian permeability through the campus
o   Creating a stronger public realm network consolidated along University Avenue and Dumbarton Way to the south. These key routes then continue east towards Kelvin Way and Gibson Street, offering opportunities to connect towards the city centre. Westwards, University Avenue connects to Highburgh and Dumbarton Way opens onto Dumbarton Road allowing connections to neighbourhoods of Dowanhill and Partick.
o   Developing and strengthening the green corridor from Lilybank Gardens, extending southwards to University Avenue, Professor Gardens and Kelvingrove Park.
o   Developing smaller secondary routes that connect across the Western Site, providing further controlled accesses through buildings (such as the Gilbert Scott), all allowing for stronger integration of the campus with the city.
o   Considering the location of the existing underground stations and the pedestrian routes available also ensures a better connectivity of the campus with wider city network.
o   Providing a new diagonal route across the Western Site, that connects Byres Road to Dumbarton Way, allows access between Dumbarton Road and Argyle Street to the south and Hillhead underground station on Byres Road, and allows the potential for the integration of the emerging cultural quarter at Kelvingrove Gallery with the Campus.
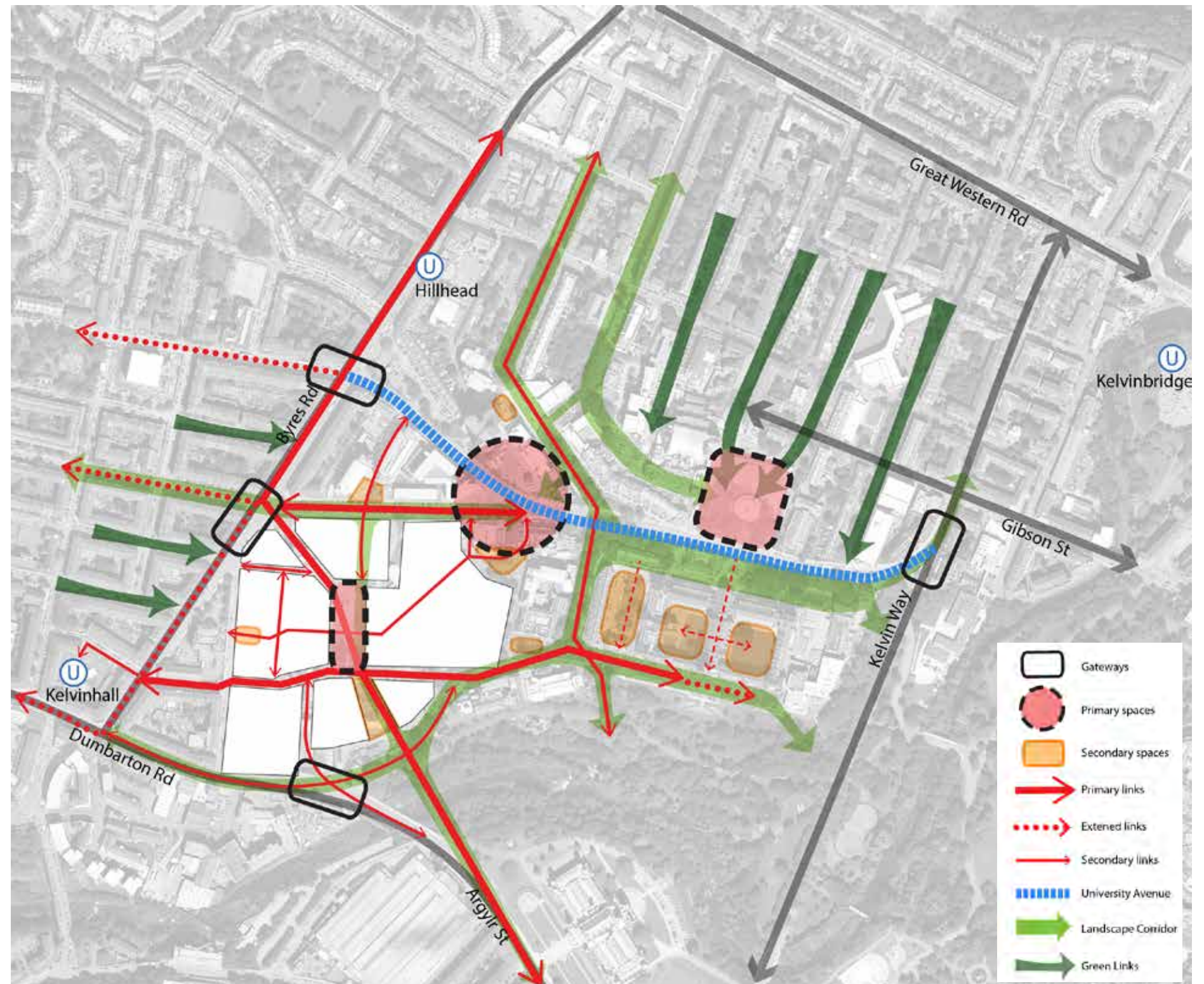
Gilmorehill Campus - Integration with surrounding context

55

4.4 Masterplan Strategy: Hubs and adjacencies

Strengthening discipline clusters

The provision of major new buildings and facilities, combined with the shift of the Campus to integrate the Western Site, presents the opportunity to strengthen the identity of the four Colleges themselves and bring a newly defined structure and hierarchy to the campus. Clusters of College uses can be formed at key locations across the campus, and the adjacencies and relationships that can be formed between different college clusters will aid collaboration.

A network of hubs

Central Hubs have a campus-wide focus and include:
o   Gilbert Scott Building
o   Main Library and Fraser Buildings
o   Boyd Orr / Learning & Teaching Hub
o   The Western Site

Local Hubs are more College or neighbourhood focussed. They serve as local centres of activity with good levels of support and extended-hours access at key points throughout year. These may be shared between schools / service units or the users of single buildings depending on their size and design.
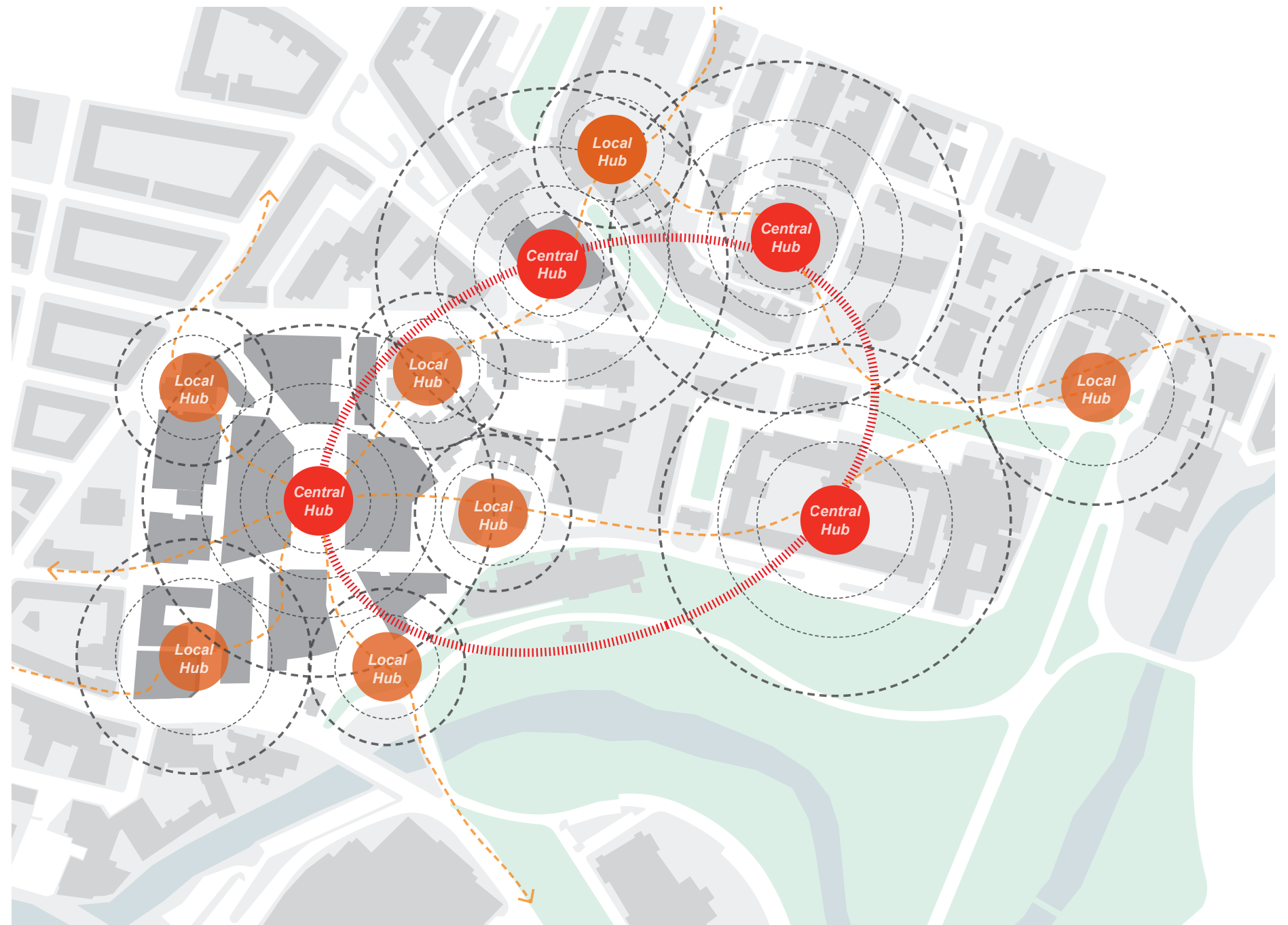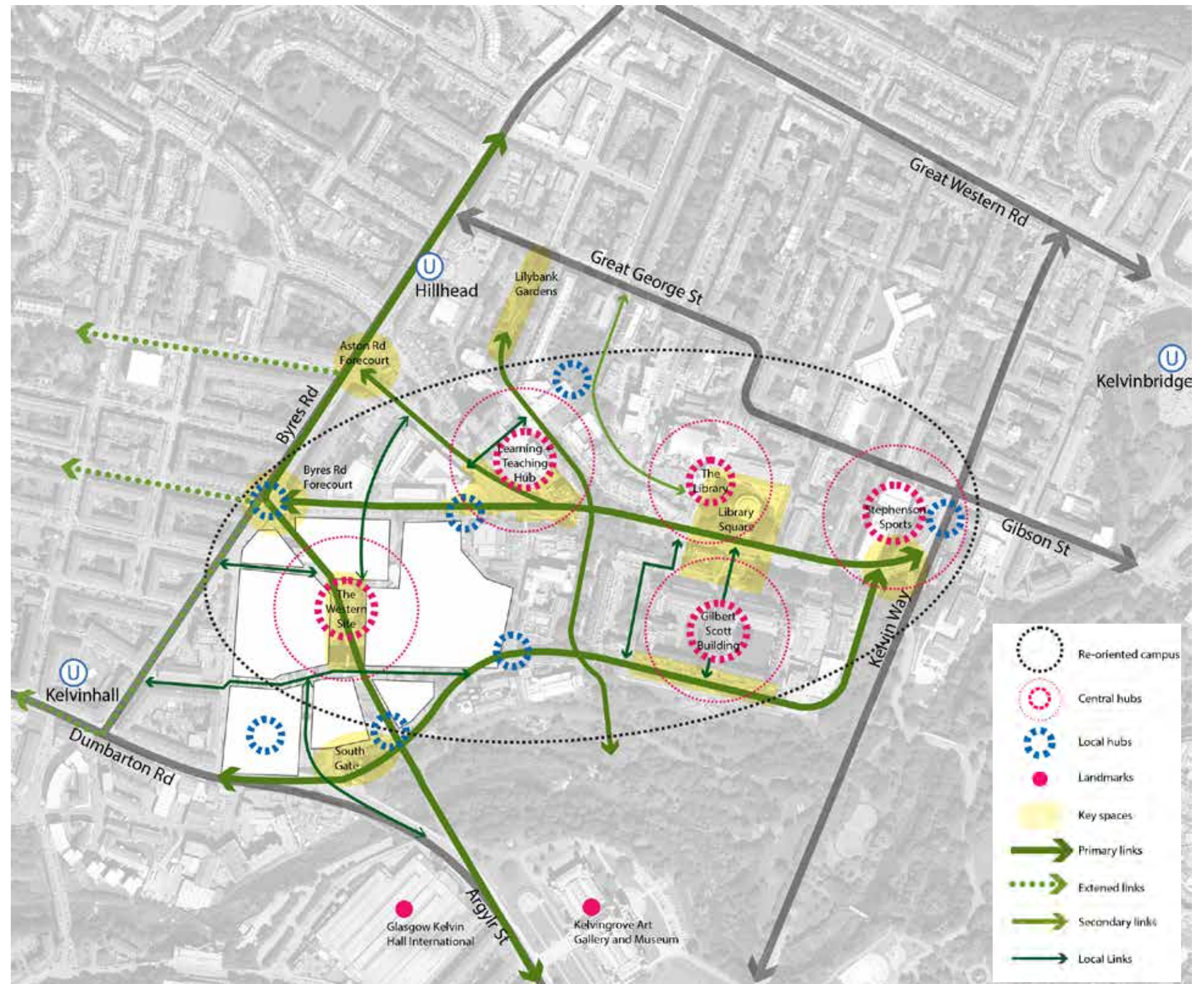

Gilmorehill Campus - Hubs

4.5 Masterplan Strategy: Key diagram

The diagram adjacent shows the proposed central hubs, the proposed assembly of key spaces and public realm that relate and reinforce the Central Hubs, the movement hierarchy through the campus and demonstrates the links and adjacencies that are a fundamental part of the Gilmorehill Campus Masterplan.

It is important to note that creation of new Hubs along University Avenue in the form of Learning and Teaching Hub and the Western Infirmary Site, does not disrupt the current existing hierarchy within the campus but only adds to it while opening up future opportunities for improvement and consolidation.

Gilmorehill Campus - Masterplan Strategy Diagram

4.6 The Gilmorehill Campus Masterplan

The plan on the opposite page shows the Illustrative proposals for the Gilmorehill Campus. This masterplan image incorporates the proposals for key sites such as the Western Site, the Learning and Teaching Hub and the opportunities for development for areas to the north of University Avenue. The image also incorporates the work held within the Public Realm Strategy, described in more detail in the following pages.

The illustrative Campus proposals demonstrate that the two main characters of the Campus - the gardenesque 'upper plateau' and the urban 'lower plateau' can be stitched together, with the green corridor of an extended University Gardens forming the transition. This green corridor as well as the new link through the Western Site form strong new connections between the city and the park, finally re-integrating Kelvingrove with the West End in this area.

University Avenue is transformed into a pedestrian orientated street that can firmly connect from east to west but also links both sides of the street to form an integrated Campus.

The settings of listed buildings are enhanced and improved through use of public realm and listed buildings along Church Street are integrated with new development, forming a transition between old and new and University and community.

The new university square within the Western Site, provides a new social hub and focus for the University that is open to the community and forms a transition space between the bustle of Byres Road and the tranquillity of the Park.


Illustrative view of Gilmorehill Campus

Gilmorehill Campus proposals

4.6 The Gilmorehill Campus Masterplan

The Historic Core

The Gilbert Scott building presently is a valuable asset for the University which forms a part of its heritage, brand identity and a key city-scale landmark assisting in orientation and wayfinding while on campus.

As the Western site is developed and uses moved, the space will be freed on the 'upper plateau'.
Over the course of development a significant investment will be made in this historic core of the campus to refurbish and expand the current facilities, including the Gilbert Scott and James Watt buildings. This will provide space for expansion of the world-class Adam Smith Buisness School.

Key to this part of the Gilmorehill proposals is the improvements to the setting of Gilbert Scott building, both to the north along University Avenue and to the south at South Front. Professor Square will also be improved to provide a third pedestrian 'quad' at the heart of the University.
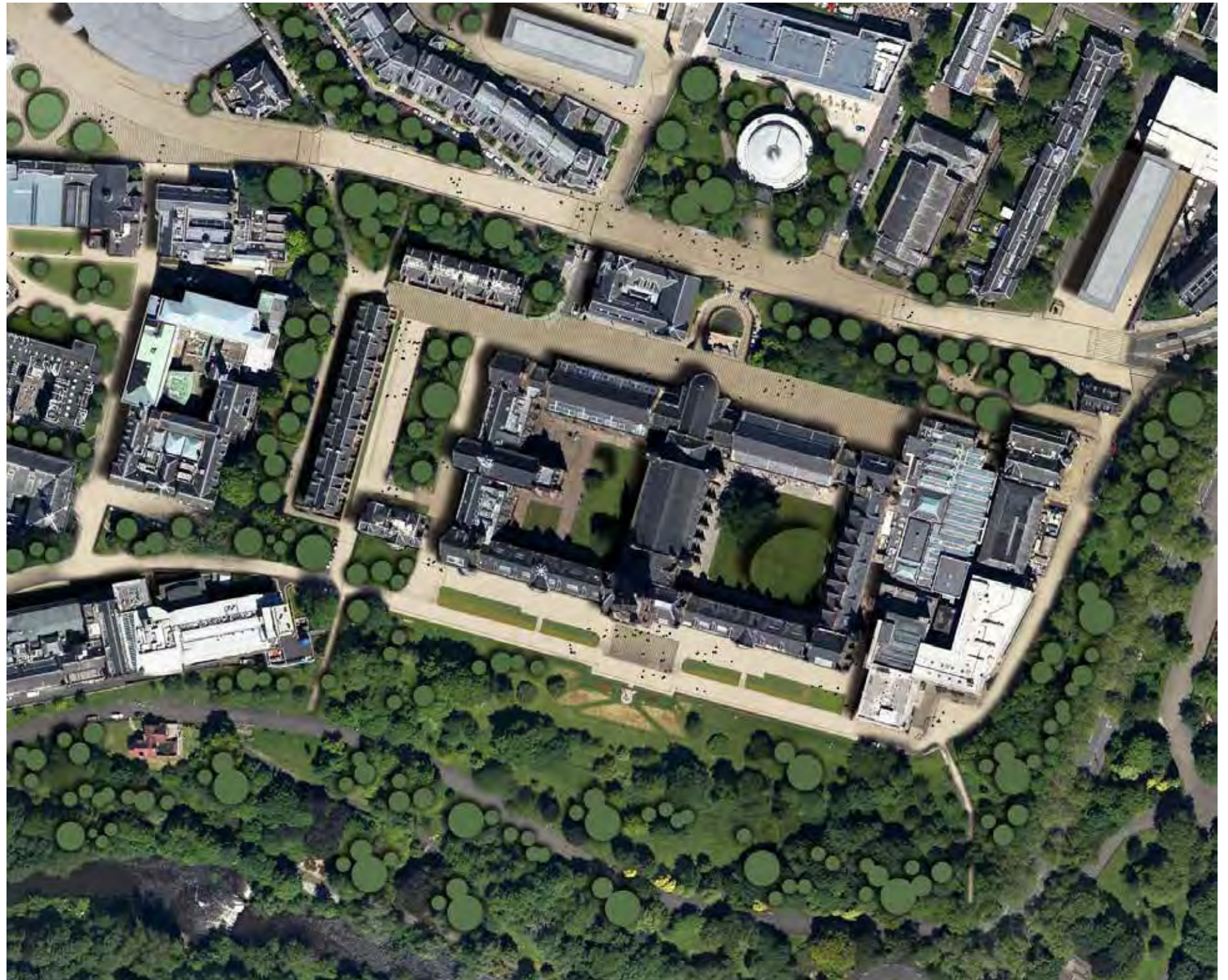
The Gilbert Scott building and the 'Upper Plateau'

The Western Site

This development site forms the key opportunity for the University and its size enables the University to fulfil its aspiration to form new types of academic buildings and spaces.

The central space is a pedestrian university square, which is surrounded by new academic buildings with active ground floors - lobbies, social spaces and commercial uses - which can spill out into the public realm. A key link is provided through this space linking Byres Road and Kelvingrove Park, which ensures that activity will be drawn into the space from Byres Road. Views to the Park are opened up from within the development, ensuring strong visual connections in addition to the physical ones. An additional key link ensures that University Place and University Avenue is strongly connected to this new University place.

The Southern Gateway to the south of the Western site provides a new 'Global Gateway' for the University. Active and University uses will form a new landmark frontage, visible from the approach along Dumbarton Road. These buildings will form a strong relationship with the Park as well as the Kelvingrove Cultural Quarter further to the south.

A network of smaller pedestrian orientated links in the form of lanes traverse the site ensuring the new space and the University buildings of the Western Site are visible, accessible and open to the city. These links continue eastwards to the upper plateau and the Gilbert Scott Building.

The Western Site

Learning & Teaching Hub

This key site accommodates the proposed Learning and Teaching Hub one of the key Central Hubs proposed in the Gilmorehill proposals strategy. This hub will become a central focus of the Campus and of University Avenue. Visible from along University Avenue, from University Place and Byres Road and from University Gardens, it will become a new, modern landmark for the University.

Social spaces within and through the new Learning and Teaching Hub will enliven the public realm around it, and a new shared-surface public space, notionally called 'University Cross', will provide a new arrival space for the University. This space will help to transform the nature of University Avenue ensuring it becomes a key pedestrian orientated place within the Campus.

Learning and Teaching Hub, university cross and University Avenue

Library, Reading Room Gardens and areas North of University Avenue

North of University Avenue

As part of the Gilmorehill campus study the development potential of a number of decanted sites to the north of University Avenue has been considered. In addition, the move of academic spaces to the Western Site has de-congested this area, allowing listed buildings and urban fabric to be renovated for a new use.

The University Campus to the north of University Avenue and east of Church Street/Byres Road, undergoes transition as it fragments into number of smaller ownerships interspersed with the surrounding residential neighbourhood. The University is using this as an opportunity to strategically relocate, decant and refurb properties to consolidate its campus around University Avenue.

There is potential within this part of the Campus to reinstate and reinforce the historic urban fabric and grain. There is potential also to bring a new mix of activities to the north of the Campus.

The diagrams on the next pages describe more fully the Campus Masterplan Strategy in terms of its key structuring Principles and to provide more detail on the key public realm elements and spaces in Section 05 of this document.

4.7 Strategic Public Realm & Landscape Infrastructure

The Public Realm & Landscape Strategy defines a comprehensive level of change to establish the University of Glasgow campus as one which is unique, connected and reflects the quality and importance of the University. The co-ordinated aim is to achieve:

o   A navigable network of landscape corridors connecting different public realm spaces and University destinations set within a predominantly soft landscape infrastructure;

o   Enhancements to the University Avenue environment to improve the public realm experience;

o   A series of public realm hubs for University activity at key points within the extended campus;

o   Celebration of its main gateways and points of arrival, such as local streets and gardens, into the campus;

o   Urban routes and connections with distinct and local character throughout the campus;

o   Protection and improvements to gardens and courtyard spaces that are of heritage significance; and

o   A variety and flexibility of public realm space offering throughout the campus.

KEY

- Landscape corridor
- Gardens & Courtyards
- Gateways
- Hubs
- Small plazas & open spaces
- Urban routes
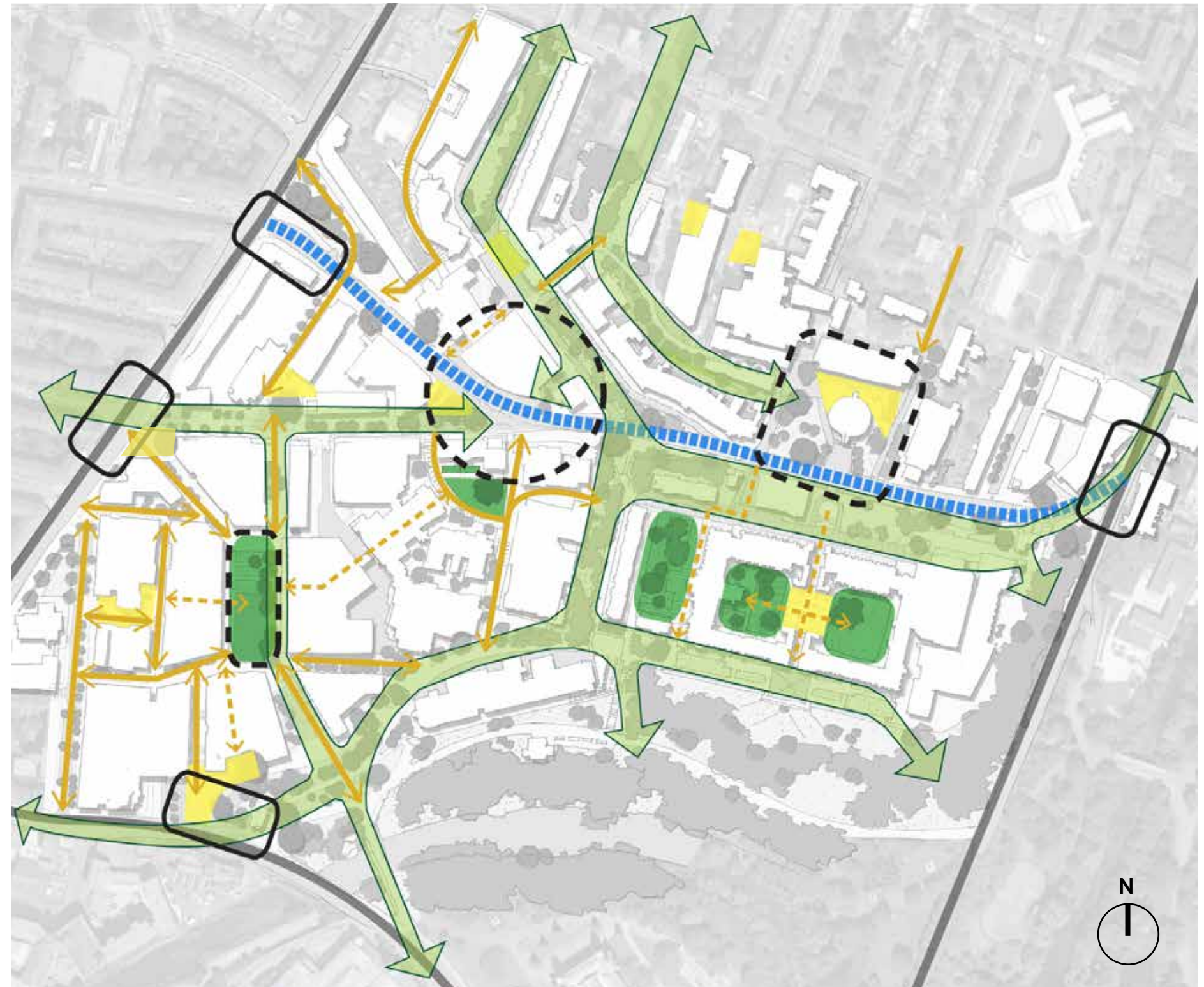- Internal routes
- University Avenue
- Main roads

Diagram of Strategic Public Realm & Landscape Infrastructure

Illustrative view showing Byres Road forecourt, North West of the Western site opening onto new university square

4.8 Hierarchy of Public Realm Spaces

A coherent hierarchy has been defined for the proposed public realm spaces, with:

Primary spaces focused around the established and listed buildings, in key locations identified within new parts of the campus, and public realm associated with the improvements to University Avenue.

Secondary spaces are defined as those along key circulation routes that connect students with their University destination, other public realm spaces and to local City context.

Primary: High to Medium quality materials
Secondary: High quality materials in historic situations and medium quality materials in all others
Landscape Corridor: Medium quality materials
University Avenue: Medium quality material with focused area of high quality materials

KEY

Primary spaces

Secondary spaces

Key Circulation spaces

Diagram of Hierarchy of Public Realm Spaces

Illustrative view of new university square looking towards Kelvin Hall

4.9 Public Space Programme

There are significant opportunities to expand on and distribute across the expanded campus a programme of activities and events within its public realm. These activities, events and daily opportunities will help to enrich and promote the Gilmorehill campus as a vibrant, attractive and dynamic destination. The following strategy provides a level of use for the key areas of the masterplan with the intention that this can be expanded and enriched as the design for the public realm and the University's programme of events develop further.

KEY

Symbol	Description
	Arrival
	Civic
	Connector
	Active Social
	Quiet Social
	Events
	Ceremonial
	Primary spaces
	Secondary spaces
	Landscape Corridor
	University Avenue

Diagram of Public Space Programme

4.10 Masterplan Strategy: Gateways

Primary access gateways are located to the east, south and two on the west side of the campus. The aim of these spaces is to:

o   Identify the threshold of the University campus within the city context;
o   Be welcoming and reflect the character, importance and quality of the University;
o   Showcase the quality of the public realm across the campus;
o   Form an important part of wayfinding and engagement with local public transport;

Secondary gateways occur between the campus and local roads, parks and spaces and where there is the potential to include low key thresholds to inform visitors that they are within the realm of the University. One such example of this would be to the proposed north end of Lilybank Gardens where the point of entry into the campus for students, cyclists and vehicles could be demarked to reflect the character of the site.

KEY

☐ Gateways   ◎ Secondary Gateways

▪▪▪▪ University Avenue

▬ Main roads

Precedent Image - Gateway marker

Enhance existing gateways
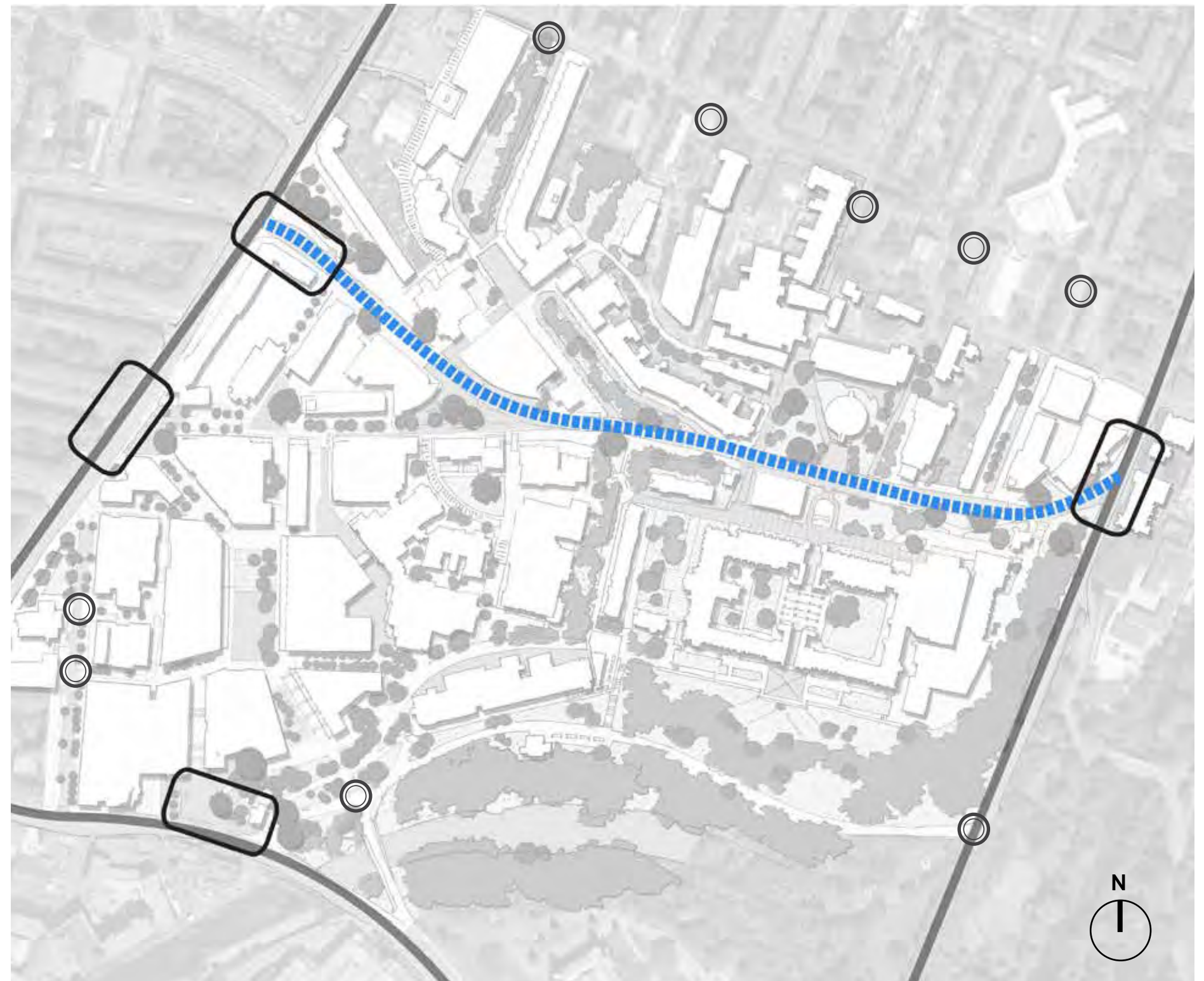
Diagram of Gateways

N

4.11 Masterplan Strategy: Public Realm Circulation

The circulation potential for pedestrians within the University campus has been defined in a hierarchy of primary, secondary and tertiary routes, where:
o   Primary routes are improved to create a better public realm for pedestrians and cyclists alongside vehicular movement;
o   In secondary routes priority is given to pedestrians and cyclist movements and overall aim to reduce the impact and dominance of vehicular movement and parking; and
o   Tertiary routes that provide low-key pedestrian and cycle routes.

This network of clearly defined routes aims to:
o   Provide clear routes of travel with improved pedestrian and cycle connections between north to south sides of the campus;
o   Reduce the impact and severance of University Avenue;
o   Increase links between established parts of the campus with new parts of the campus to the west; and
o   Remove surface parking to create a safe and navigable public realm, which is critical to the success of establishing an improved public realm.

KEY

⬭ Hubs

—— Primary Circulation: routes that have a wider section with dedicated bus routes, SUDS, cycle routes

—— Secondary Circulation: routes with pedestrian access, SUDS and occassional cycle access

—— Tertiary Circulation: routes which preliminary enable pedestrian access

Diagram of Public Realm Circulation

4.12 Masterplan Strategy: Proposed Accessible Routes

Whilst topographical level changes across the campus are challenging in some areas to achieve current accessibility standards, the overall aim for public realm is to provide accessible routes over the majority of the west campus development area and to initiate improvements across other parts of the University campus so they achieve a greater level of accessibility for all. In doing so, the aim of the Public Realm & Landscape Strategy is to:

o   Provide coherent accessible routes to key destinations across the west campus development area where physically possible;
o   Provide majority of routes at a gradient of no steeper than 1:20 where accessible routes can be integrated
o   Ensure accessible routes are direct routes between University facilities and public transport;
o   Where accessible routes cannot be provided in public realm areas, an alternative route is to be provided, such as lifts within adjacent buildings.
o   Steps and steeper routes to be assessed and updated to improve general accessibility throughout the site.

KEY

——— Accessible route	⬆ Lift
········· Internal / lift route	
——— Steeper then 1:20	Optional accessible route through rain garden
——— Steps	
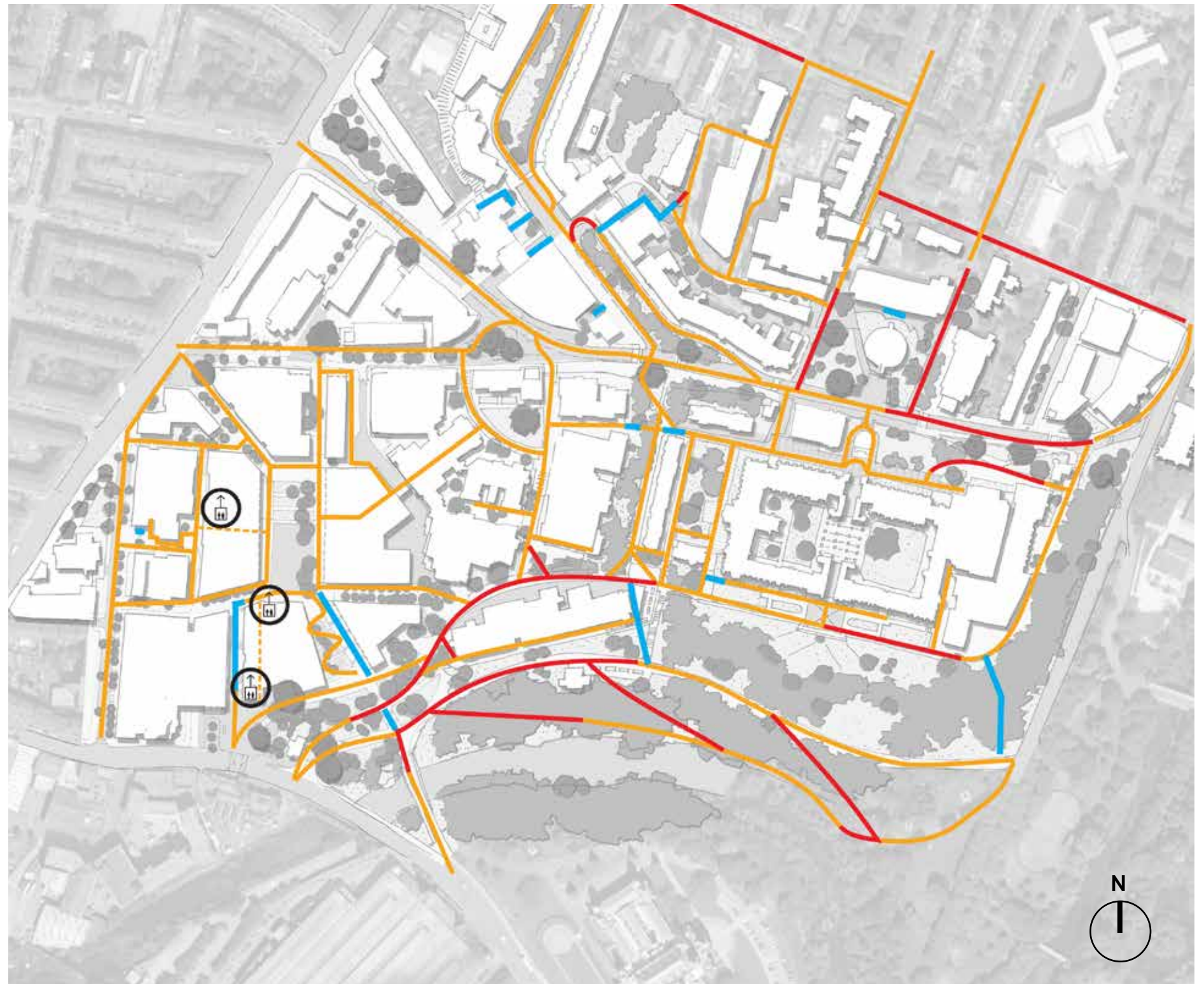
Diagram of Accessible Routes

4.13 Masterplan Strategy: Pedestrian Flow Analysis

The pedestrian flow analysis has been done based on extrapolation of local knowledge of prevalent pedestrian flows, existing building occupancy numbers and potential routes one would take to connect different places on the campus and outside as indicated by ARUP Travel Assessment Report.

o The existing pedestrian flow shows University Avenue, Byres Road, Dumbarton Road and a link through University Gardens+ Lilybank Gardens as being primary pedestrian flow routes.
o Despite these key surrounding routes the permeability through campus is low.
o North South connectivity and engagement with Kelvingrove park with the campus is weak.
o The Western Site in particular shows extremely low connectivity with the surrounding context, due to presence of car parking, pedestrian -vehicle conflicts, service yards, Hospital functions etc.

Primary pedestrian flow
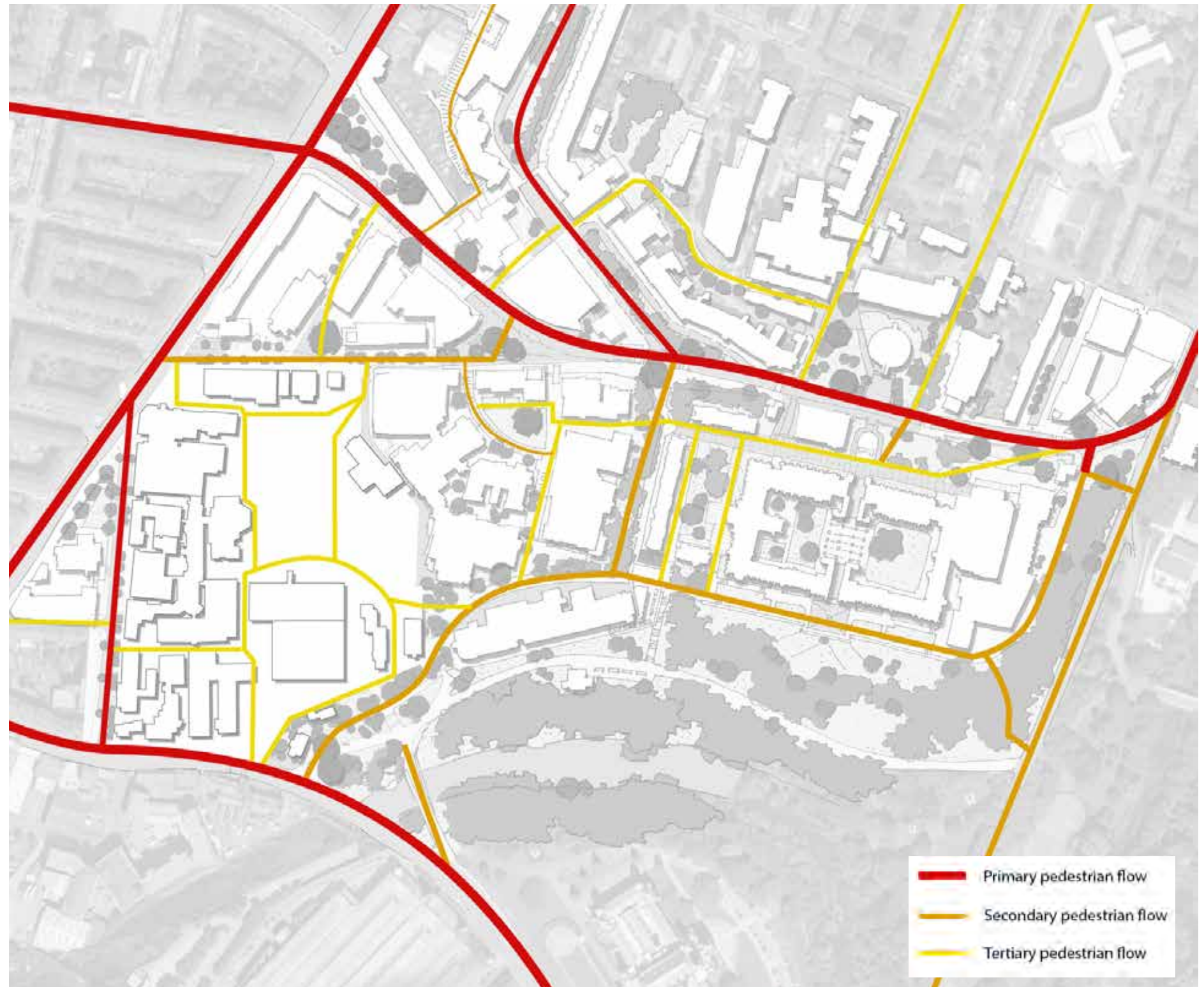Secondary pedestrian flow
Tertiary pedestrian flow

Diagram of Existing Public Realm Circulation

4.13 Masterplan Strategy: Pedestrian Flow Analysis

The adjacent pedestrian flow diagram is a conjecture of potential scenario as a result of the existing conditions being retrofitted to allow higher permeability, connectivity, legibility and spatial cohesion that facilitates a stronger pedestrian network connecting the campus and the surrounding urban context.

Developing a cohesive campus wide strategy which includes unlocking the Western site facilitates the following:
o   A key pedestrian link developing from Byres Road to Kelvingrove park cutting diagonally across the Western site.
o   A new Moy street connection as a result of better visibility and legibility of sequence of spaces towards new university square and further east.
o   A continuation of pedestrian connection from University Avenue. cutting across Sir Graeme Davies Building, crossing University Place and landing in new university square.
o   A stronger North South pedestrian permeability allowing a strengthening of Dumbarton Way connecting Western site with Gilbert Scott as a key pedestrian route.
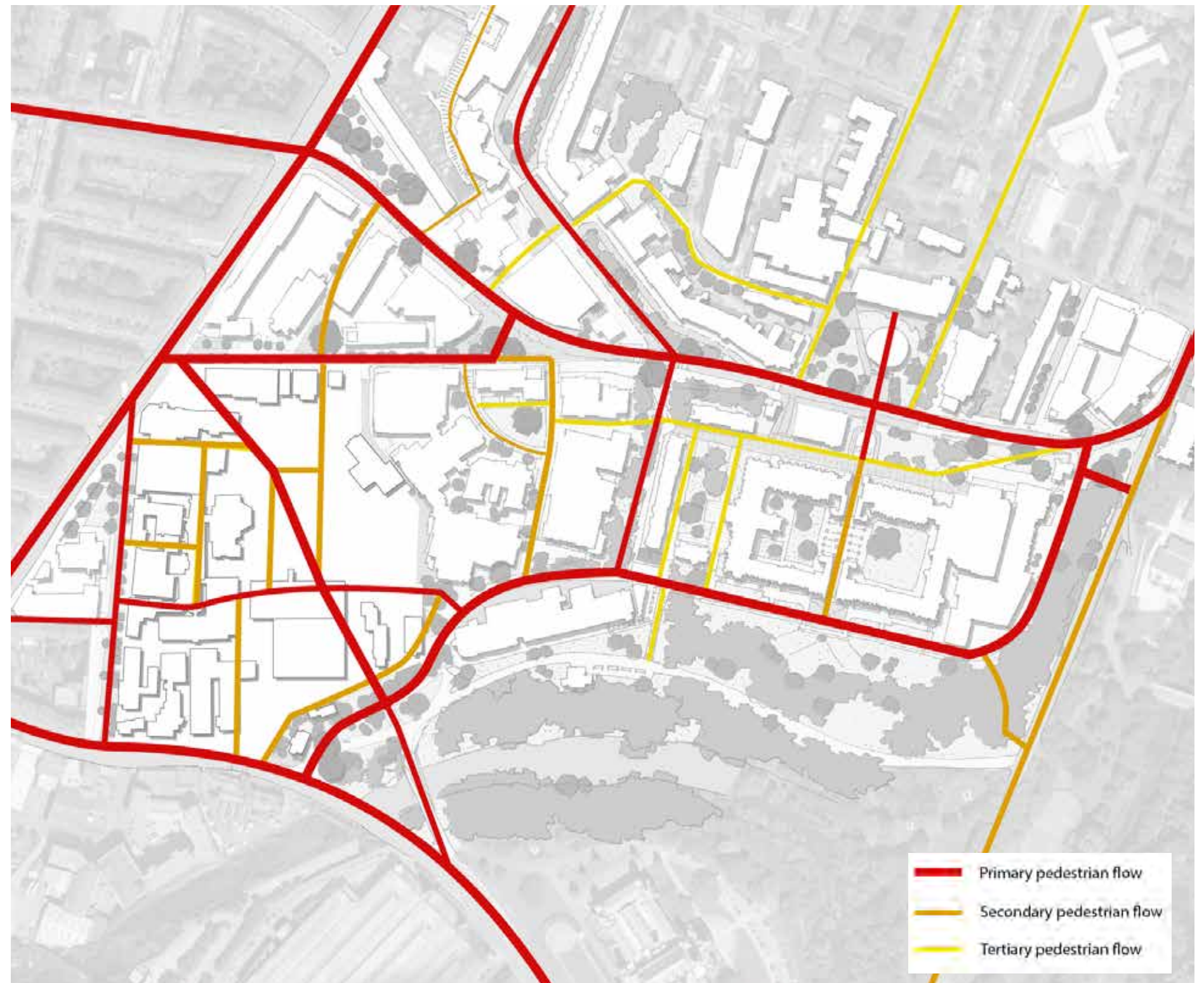o   A potential controlled connection through Gilbert Scott.

Primary pedestrian flow
Secondary pedestrian flow
Tertiary pedestrian flow

Diagram of Proposed Public Realm strategy

4.14 Masterplan Strategy: Views & Reference Points

The University campus has a number of significant views to be embraced and improved upon. The Public Realm & Landscape Strategy encourages:

o   Views of distinguished buildings should be maintained and improved upon from University Avenue. Grounds adjoining these special architectural moments should not be over planted with trees and should be managed to reveal improved views of these important buildings;

o   New tree planting adjoining new development along University Avenue should be located strategically to reflect the character of the campus, but maintain key views to reference points;

o   A number of key views align with the Gilbert Scott building tower, such as through University Gardens. These key views are to be maintained and improved through the public realm and encouraged from the expanding west side of the campus;

o   The demolition of unwanted existing buildings to reveal existing buildings of architectural significance are to be enhanced through the inclusion of larger public realm areas so that views of these buildings can be appreciated better; and

o   Some long distant views across Kelvingrove Park are currently blocked by trees. These historic views in and out of the park and to surrounding buildings should be restored through the selected management of existing trees.

KEY

	Gilbert Scott Building
	Views towards Gilbert Scott Building
	University Avenue
	Views along University Avenue
	Views towards Kelvingrove Park
	Views from Byres Road to Pathology
	Views from Joseph Black
	Intended view towards Anderson College
	Sequential views on route towards Gilbert Scott via Dumbarton Way
	Views of 20th century buildings of significance, Reading Room and Library
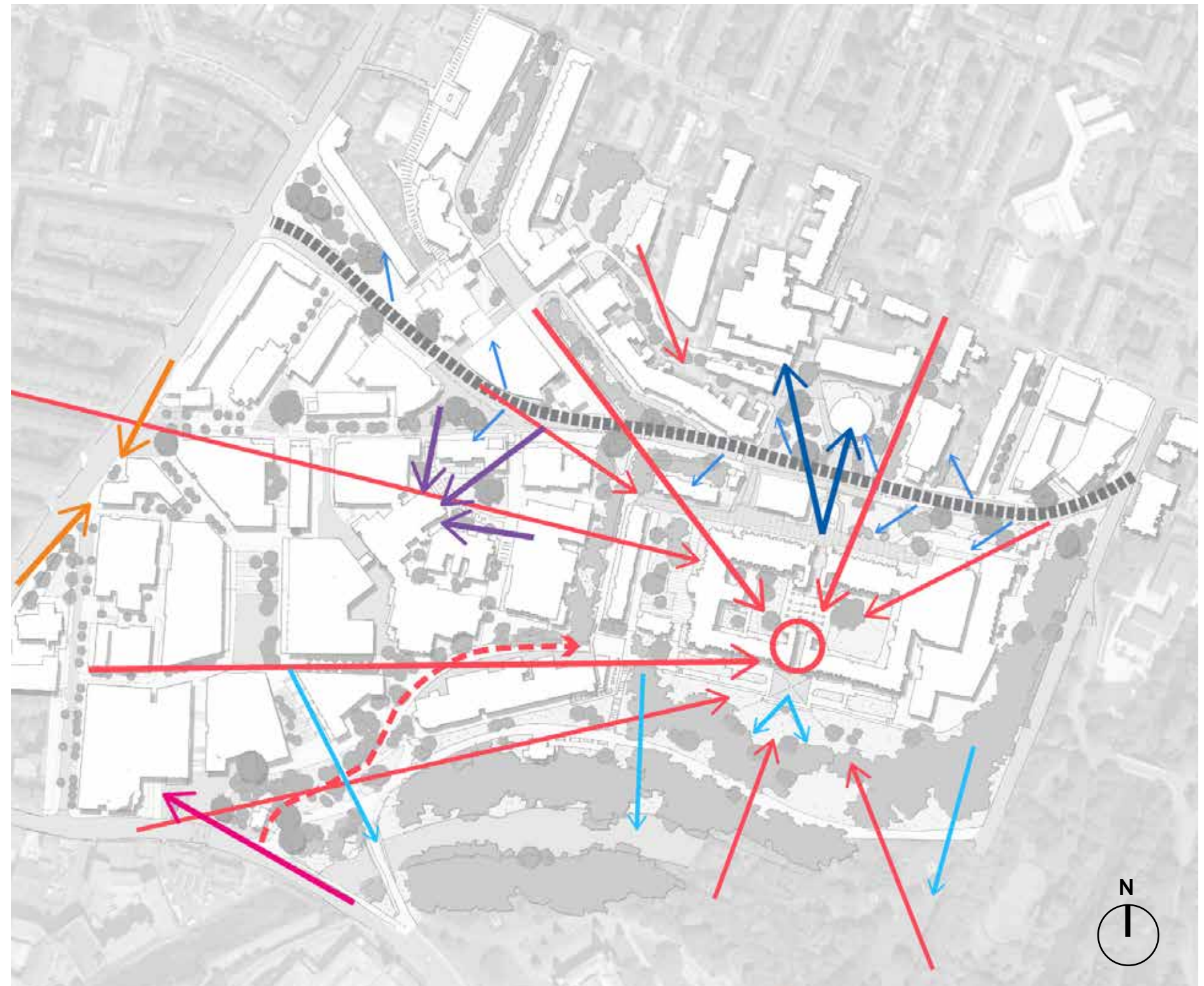
Diagram of Views & Reference Points

4.15 Masterplan Strategy: Cycling Network

There are opportunities to increase the amount of cycle use by students, visitors and University staff. The Public Realm & Landscape Strategy promotes this direction and identifies opportunities to be further developed that include:

o Providing a network of public realm and landscape corridors that allow cyclists, alongside pedestrians, to navigate safely from peripheral streets, through gardens and public realm spaces to University destinations across the campus; and identifies

o Cycle hubs across the University to complement existing facilities and which have the potential to provide cycle parking, maintenance, integration of the Glasgow bike hire scheme and other associated cycling support mechanisms.
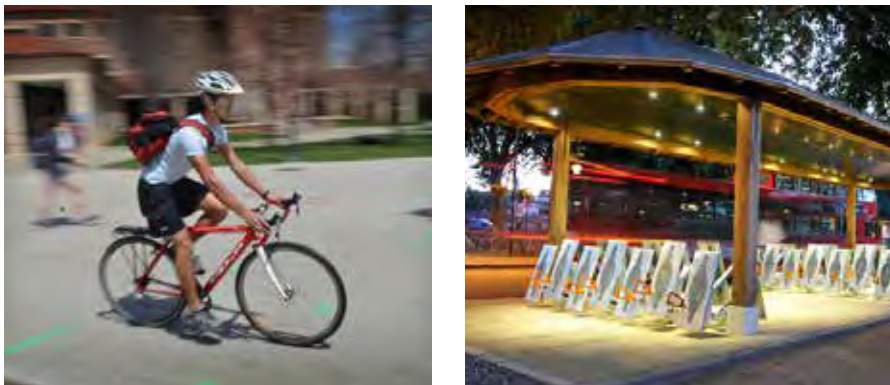
KEY

🔴	Existing Cycle Hubs
＊	Existing Cycling Support facilities
🔵	Proposed Cycle Hubs
＊	Proposed Cycling support facilities
🟢	Proposed Bike Hire locations
→	National on road Cycle Route
→	Proposed Cycle Network
→	National Cycle Network
----→	City Cycle Network
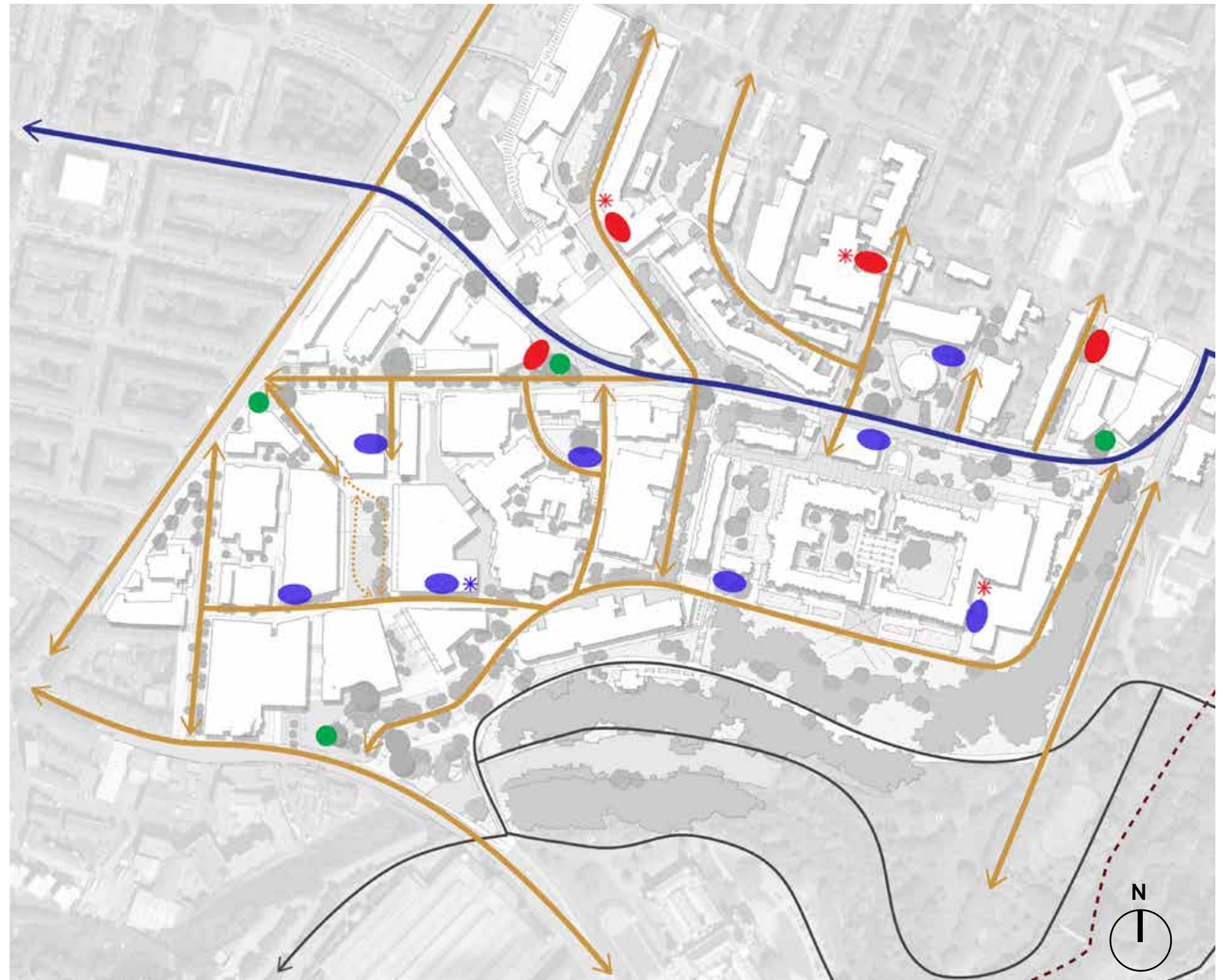
Diagram of Cycling Network

N

4.16 Masterplan Strategy: Public Transport Network

The Public Realm & Landscape Strategy supports the University's aspiration to encourage more use of public transport to arrive and leave the campus, enabling a phased removal of many of the car parking spaces which currently litter the campus. The University is very well connected by both the Subway system and bus services.

The strategy aligns with CDF LOS1 by providing bus stops at the focal activity points of University Cross and the Fraser Building and aims to:

o   Provide focused arrival and departure points for buses on University Avenue within University Cross and in front of the Gilbert Scott Building;

o   Make it easier for buses to travel through the campus on University Avenue;

o   Maintain existing bus stops within key points of arrival to the periphery of the University campus; and

o   Improve public realm networks to provide better pedestrian and cycle accessibility from public transport stops to University facilities.

KEY

Subway Stations

Bus Stops

Proposed Bus Stops

Hub

Glasgow City Bus Routes
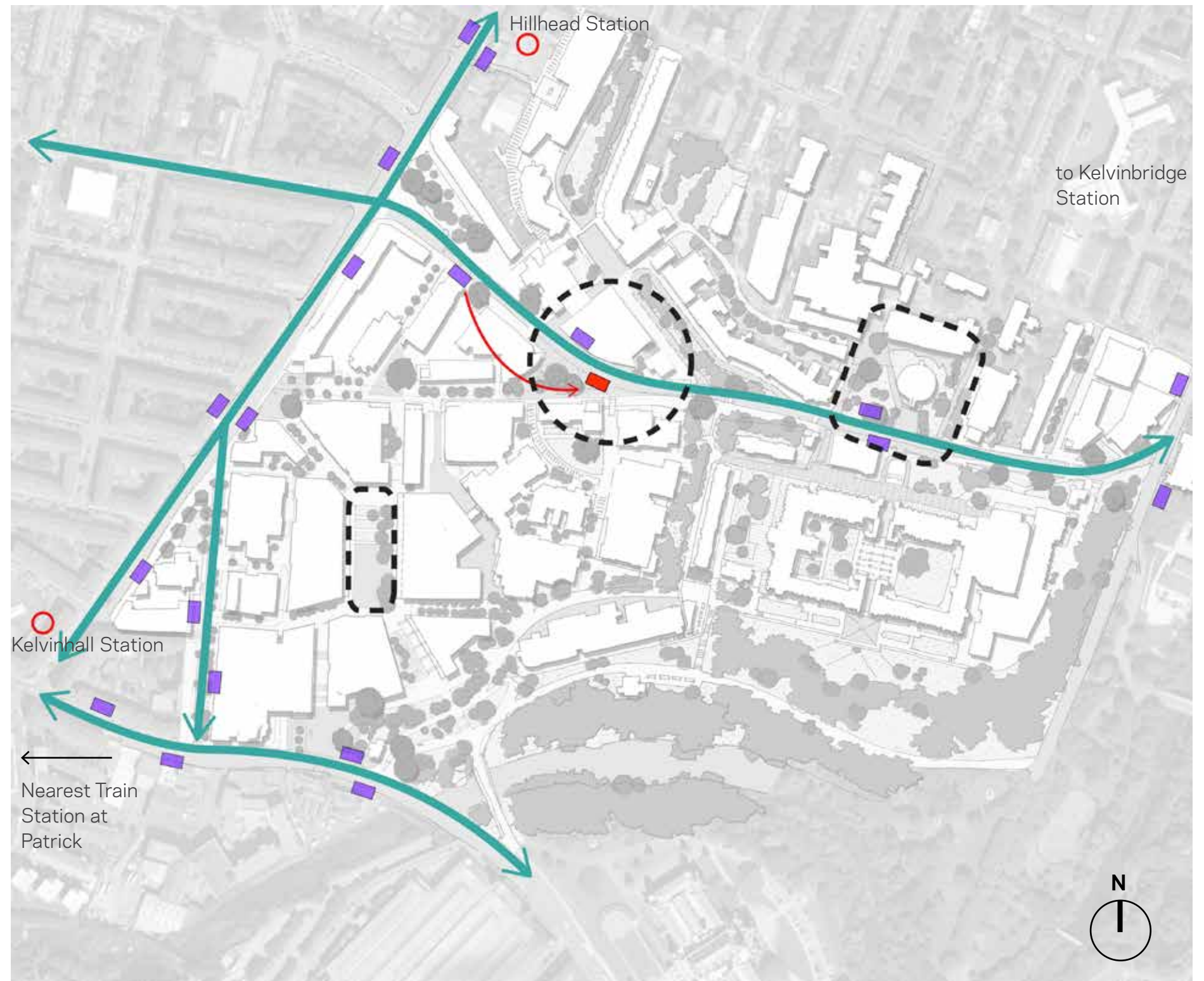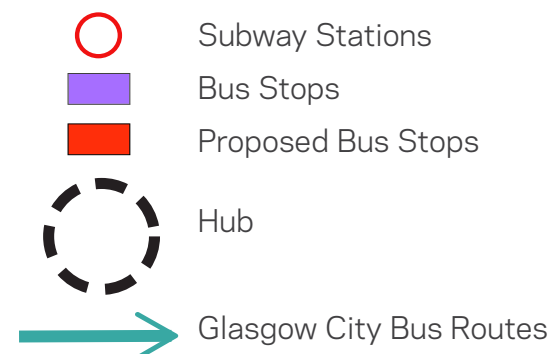
Diagram of Public Transport Network

4.17 Masterplan Strategy: Parking Approach

Parking within the grounds of the University and, in particular, the spaces around its most significant buildings affects the quality of usable public realm, the appearance and perception of the campus. Improvements necessary for the Public Realm strategy to succeed include:

o   Removing the majority of surface parking to the south of University Avenue;

o   Provide some visitor and disabled parking across the south of University Avenue for accessibility purposes;

o   Focus in removing parking around listed buildings to protect the heritage of the University;

o   Introduce new undercroft parking to the west campus development area; and

o   Reduce surface parking to Lilybank Gardens and University Gardens to create an improved pedestrian and cycle network that students can travel through more safely. These will link with new public realm spaces to connect with destinations throughout the campus and into local streets and Kelvingrove Park.

It is most likely that removal of parking within the campus will be undertaken in phases. Their removal should follow the hierarchy of public spaces identified in the Public Realm & Landscape Strategy with primary and secondary spaces and those parked within key routes being removed first to support the establishment of a new, high quality public realm network.

Further study to support this has been undertaken by the Infrastructure team.

KEY

▬▬▬	Surface Parking to remain
▬▬▬	Remove surface parking
▬ ▬ ▬	Parking undercroft
▪▪▪▪▪▪	University Avenue
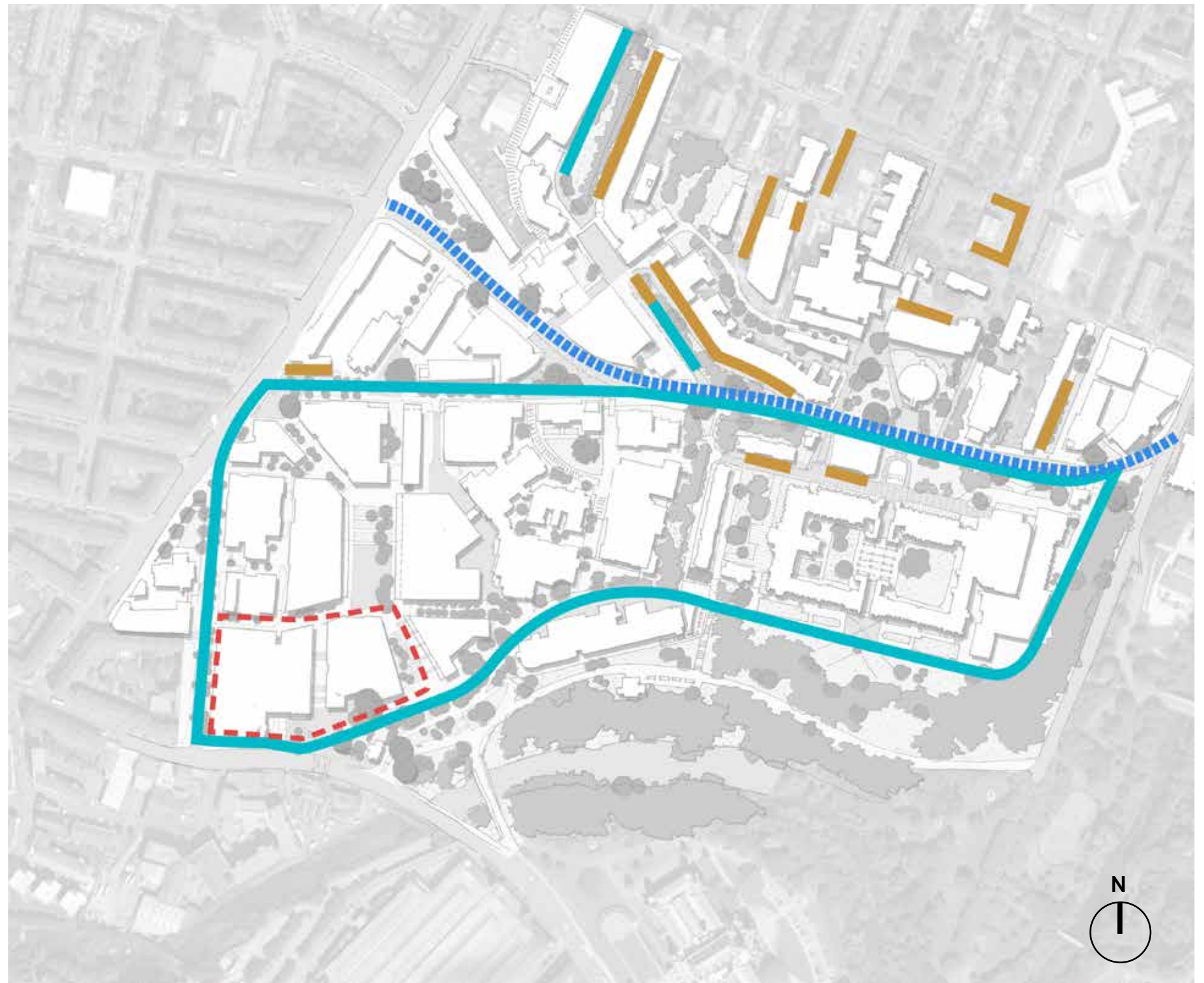
Diagram of Parking Approach

4.18 Trees & Planting

The University has an established green infrastructure which contributes to the appearance and perception of the University campus with its Urban/ Kelvingrove Park setting. Most striking are the 'big' trees located in and around its most established parts of the campus. These trees contribute significantly to the perception and quality of the campus. It is envisaged that improvements to the public realm in existing areas and those proposed in its new western development area would aim to contribute further to the significant benefits that trees and planting bring to the campus. Clusters of appropriate street trees should be combined to help define/activate key spaces, mitigate against vehicle dominance and meet the vision principle of linking the parkland with the upper plateau.

Trees are to be located according to the following principles:

o   Replicate the significant contribution that trees bring to the campus within, amongst other locations, a network of landscape corridors connecting different parts of the campus;

o   Locating new trees in significant locations with plenty of space to mature that will, in time, become part of the tree setting for all of the campus;

o   In a number of instances, there are existing areas of the campus that would benefit from the management of its trees to improve the quality of environment at ground level and open up significant views, particularly across the Kelvingrove park;

o   The positioning of trees such that they enhance and frame views to significant building, but do not block them; and

o   Tree planting to the University Avenue should avoid reinforcing the road route and further severing the campus, but be strategic in their placement to promote north and south views of significant buildings and spaces, help define public realm and cycle routes between the north and south parts of the campus.

o   Encourage the use of native tree and plant species to expand biodiversity and habitat through the campus.

KEY

➜   Landscape Corridor

◌   Strategically Planted Tree Clusters

▮▮▮   University Avenue
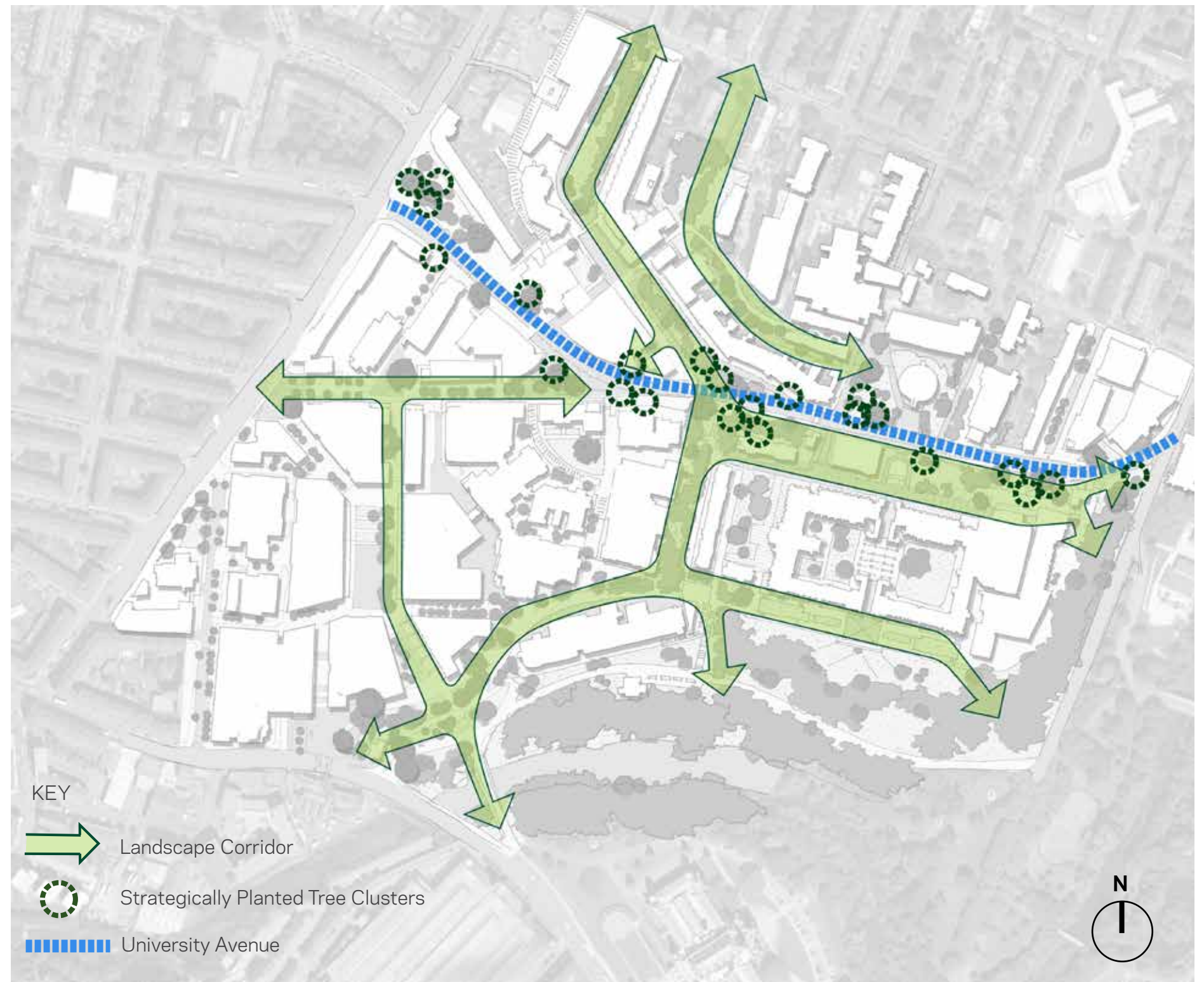
Diagrams of Strategic Tree Planting

4.19 Street Furniture

Street furniture within the University campus contributes greatly in making the public realm a stimulating, accessible and sociable destination. The nature of furniture used, its location, material and style are to be co-ordinated with paving materials, lighting and signage and architectural style to provide a unified approach across the campus. Street furniture would aim to:

o   Respond to the hierarchy of public realm spaces and landscape corridors proposed;
o   Establish a palette that is sympathetic to the local vernacular i.e. are historic or contemporary;
o   Contribute to a unique and identifiable aesthetics across the Gilmorehill campus;
o   In contemporary settings be artistic, colourful and engaging;
o   In historic settings be reserved and modern;
o   Be complementary to integrated furniture elements;
o   Not be used excessively that they become clutter; and
o   Be located in designated spaces so they do not inhibit pedestrian and cycle movement.

Operational factors must be considered for all street furniture such as durability, ease of use, cleaning, anti-graffiti, etc.

Furniture Precedent image 01

Furniture Precedent image 02

Furniture Precedent image 03

Furniture Precedent image 04

Furniture Precedent image 05

Furniture Precedent image 06

4.20 Sustainable Urban Drainage

The development of the Western Site study area to enlarge the Gilmorehill Campus provides a substantial opportunity to integrate sustainable urban drainage within the public realm to complement other sustainable targets within the development. Proposals include:

o   Providing rain gardens to University Place to provide surface water storage from the Learning and Teaching Hub and local public realm areas;

o   Creation of underground attenuation beneath the new university square to store surface water run-off from public realm areas before entering rain gardens and the River Kelvin;

o   Creation of rain gardens to the southeast link between the new university square and Kelvingrove Park; and

o   Introduction of rain gardens to Church Street to provide storage for surface water run off from local public realm areas and help establish a new aesthetics for the street.

KEY

→ Surface Water

→ Pipe Connection

▬ Rain Garden

▬ Underground Attenuation

Teaching & Learning Hub

University Place rain gardens

Terrace lawn with underground attenuation

Rain gardens

Vegetated Swale

Controlled outlet to the River Kelvin

University Place

KEY
Surface Water
Pipe Connection

Church Street rain gardens

Underground attenuation

to sewer

N

Diagram of SuDS
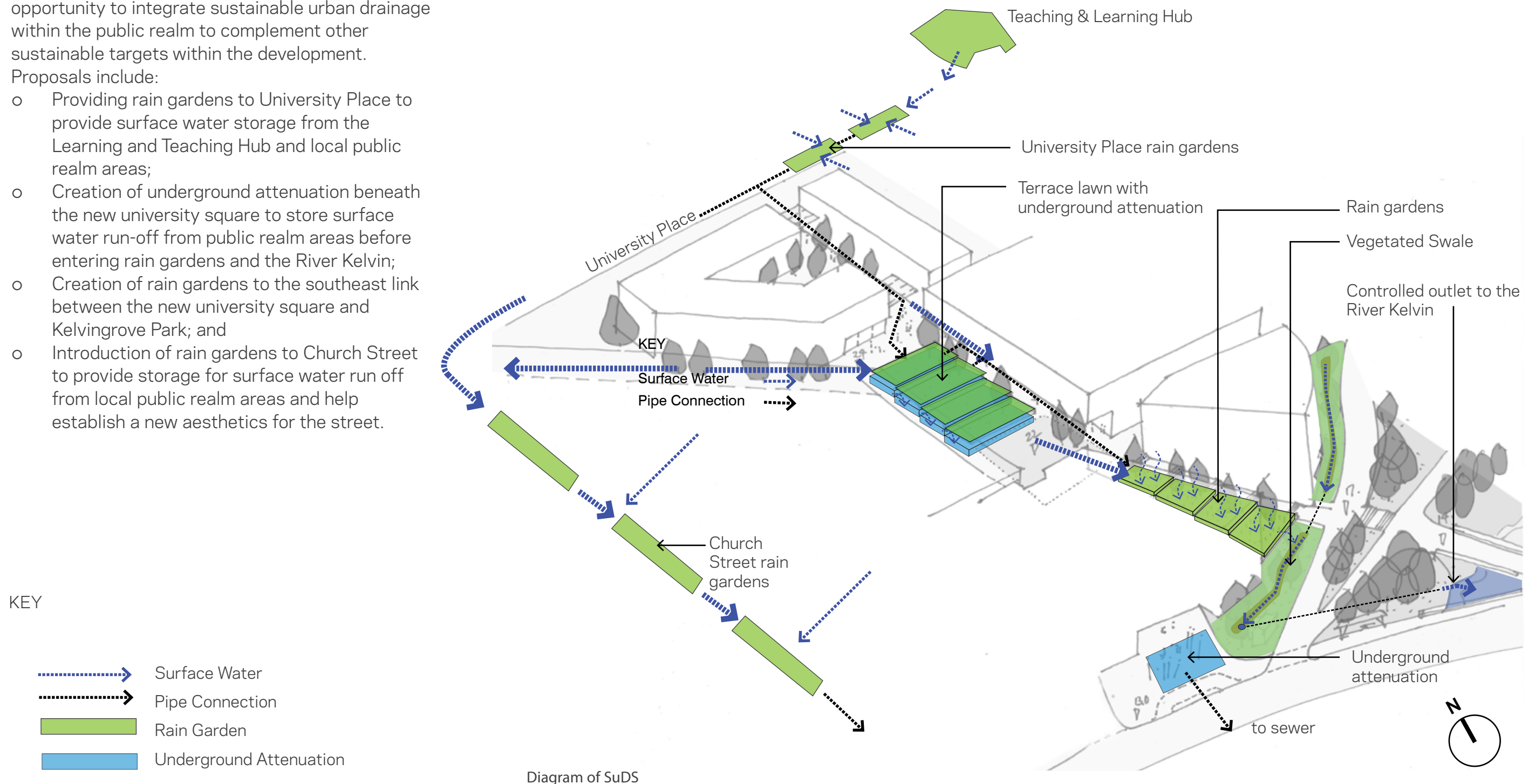
4.20 Sustainable Urban Drainage

The development of SuDs integrated with the campus public realm allows for the following:
o   Developing a sustainable urban drainage strategy that could avert water flooding during heavy rains.
o   Natural attenuation of water through tree pits and rain gardens could ensure water quality fit for landscape re-use
o   A green campus that strengthens place-making
o   A strong over arching principle of sustainability apparent through streets, parks, buildings and overall campus.
o   A stronger integration with Kelvingrove Park and surrounding ecology of Kelvin River.

Stepped rain garden and planters designed with steps and accessibility features along a sloping site.

Formal tree pits forming a part of a forecourt or square space
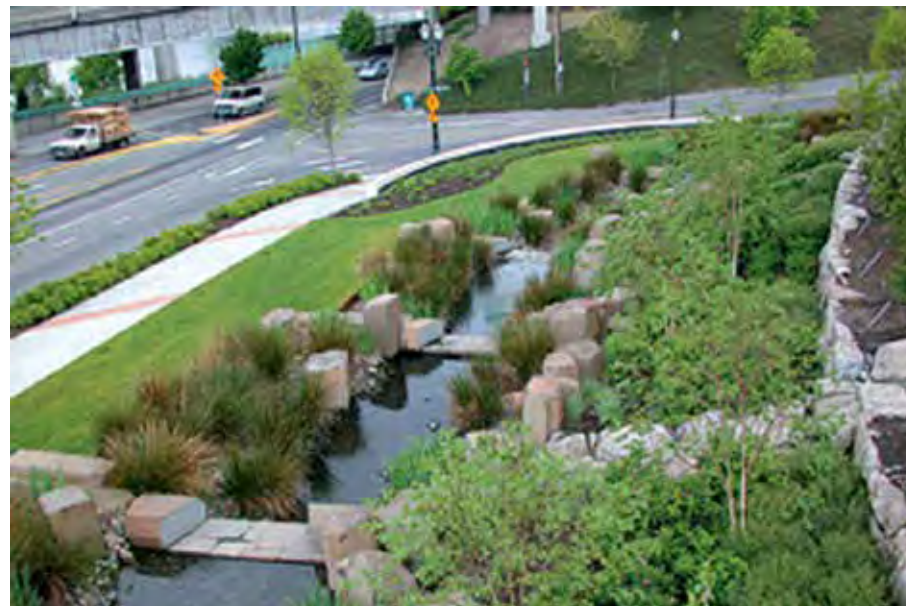
A open water course designed to form a part of the streetscape and allow natural water attenuation.

On street rain garden allowing buffering of pedestrian pavement and smaller pocket plazas from the traffic.

4.21 Public Art

The Public Art Strategy aims to:
o   Ensure the University campus is a place to experience and encounter public art regularly, not just as an add-on;
o   Enrich the public space with art works that reflect the abundant and varied characteristics of the place and help create local identity;
o   Foster a genuine excitement and commitment to including art within the University;
o   Encourage sustainable and diverse opportunities for existing and future University and public communities to engage and benefit from art;
o   Use the good that art brings to bridge relationships between the University, long term development projects and the local community;
o   Allow for a flexible methodology that adapts over time;
o   Co-ordinate: appoint an art coordinator to manage the roll-out of the art methodology;
o   Embrace creative lighting solutions to enhance the artwork and create a memorable aesthetic.

Art Precedent image 01

Art Precedent image 02

Art Precedent image 03

Precedent Image of Public Art Installation

Opportunities
Artists can potentially be involved in the following areas:
Design and Implementation
o   Residency: During implementation of its proposals over time the University could consider a residency programme where commissioned artists can prepare works that connect deeply with the application site and curated to involve community and University engagement;
o   Design collaborations: Artists will be invited to identify opportunities to generate creative approaches to the development infrastructure. Their commissions will be generated in collaboration with design teams and integrated into the built environment and public realm. Areas where these commissions may contribute include:
Wayfinding – creative infrastructure elements to help define routes and gateways;
Architecture – cross disciplinary collaboration between

artists, architects, Interior designers and landscape architects;
Lighting – Creative lighting solutions to buildings, public realm and artwork; and
Public amenity – adding value, interest and creative input to paving, street furniture, signage, bike storage and public realm features.

Long term programme
Permanent and temporary events programme: Have a continuing art programme that includes:
Permanent collections - art installations across the campus in focused areas; and
Temporary event programmes - between the University and local community, participation events such as screenings, temporary light and sculpture, student exhibits and events, urban food projects, the possibilities are wide ranging.

4.21 Public Art

Public Art Opportunities:

Permanent
Design Integration – Artists and designers work collaboratively to integrate permanent art into the built environment and public realm.

Permanent collections – Installation of art in focused areas.

Wayfinding – use of art integrated into built environment and public realm corridors to help wayfinding through the campus.

Temporary
Artists in Residency: To be located on site during implementation of the Western site proposals to activate community and University engagement. This could include temporary installations, such as creative Lot hoarding, and include activities, events and temporary installations throughout the construction period.

Temporary Events Programme: Events and changing installations to promote community and University engagement with the arts across the campus once the site is predominantly complete.

Performance Art
Performance Space: Public realm across the campus that can accommodate a range of external performance scales as part of a programme of events.
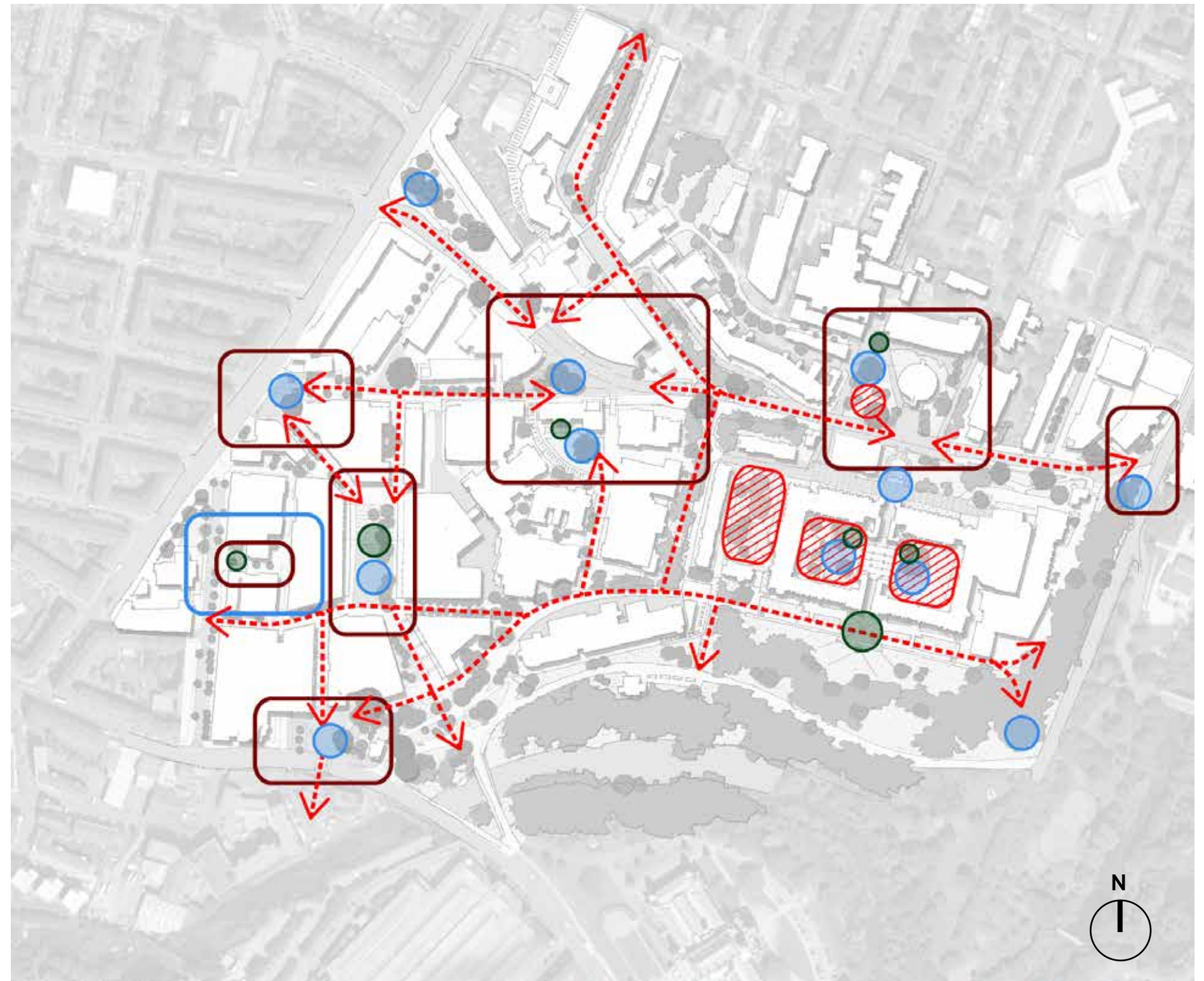
Diagram of Public Art Opportunities

N

4.22 Signage & Wayfinding
Defining a strategy

The University's wayfinding and signage strategy aims to:

o   Establish a network of public realm that is easy to navigate and reinforces the universities legibility, currently based on mostly landmark buildings;

o   Support this network through a hierarchy of coordinated signage types that provides the most required information at relevant locations;

o   Provide physical information mapping and directional information on signage;

o   Establish SMART phone accessibility to mobile web and near field technology to provide further, more detailed information from the University. As part of a wider scheme for SMART cities. Include mobile devise charging in social areas;

o   Signage types brand to reflect the University campus, following a system similar to that used for Legibility London; and

o   Co-ordinate interpretive signage to inform users more about the University, its heritage and future.

o   Provide a system that is aesthetically co-ordinated but also durable and easy to maintain, and

o   Ensure signage fulfils the needs for all users.

KEY

Monolith Map

Minilith Map

Fingerpost Sign

Interpretive Sign

Gateway Sign

Subway Station

University Avenue
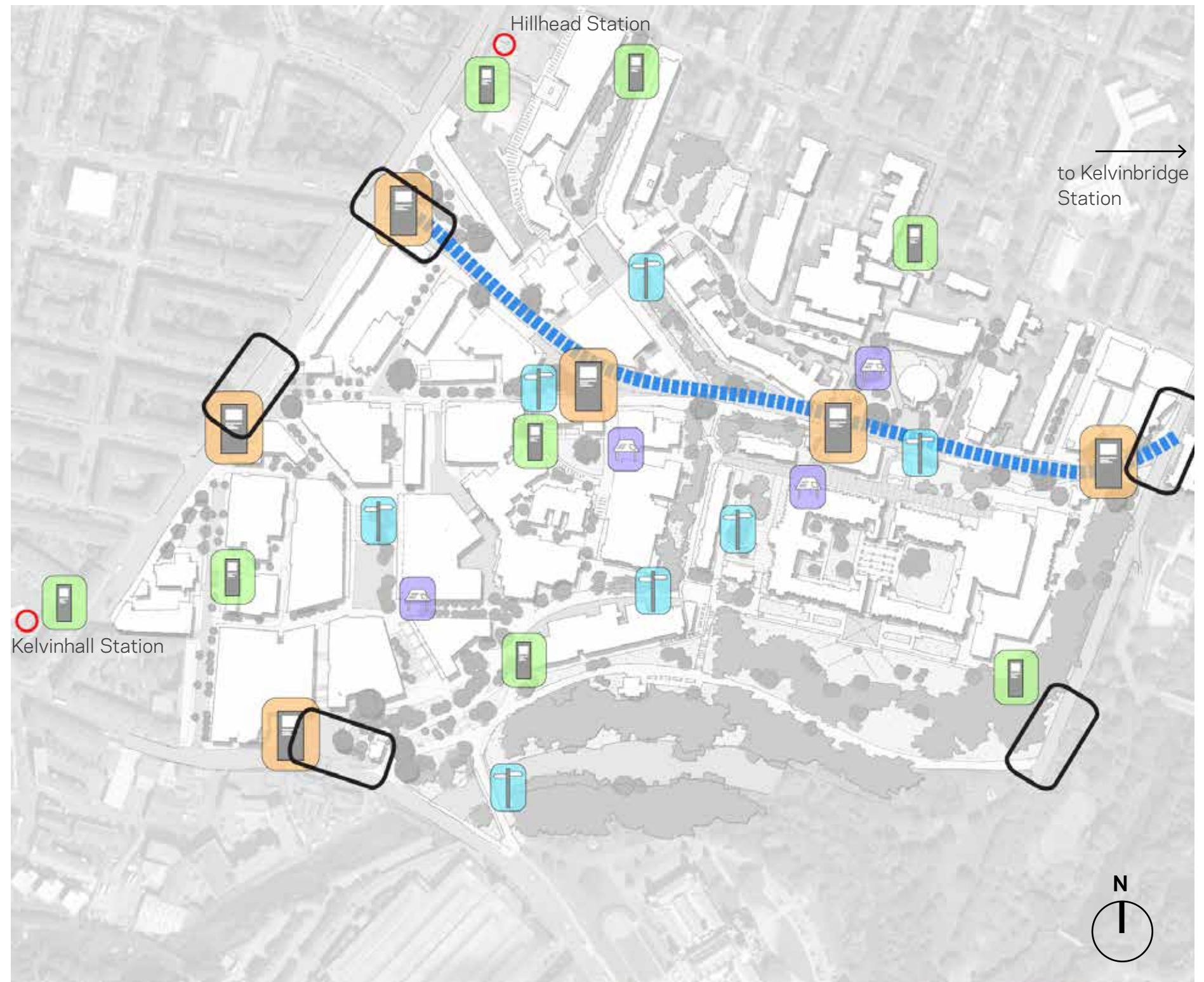
Diagram of Signage & Wayfinding

A range of signage types to consider include:

Example of Gateway sign

Example of Monolith sign

Example of Minilith sign

Example of Fingerpost

Example of Information post

Gateway sign

Function: To announce arrival at the University of Glasgow.
Location: At Gateways and key areas of arrival.

Monolith Map Sign

Function: Provides wider area mapping information and enables pedestrian journey planning at points of arrival and key spaces. Access to physical and digital information.
Location: Gateways and arrival areas, major public realm spaces on the pedestrian network.

Miniliths Map/Marker

Function: Provides local area mapping information and enables pedestrian journey planning at secondary points of arrival and key locations where space is limited. Access to physical and digital information.
Location: Secondary arrival locations, dwell spaces and decision points on the pedestrian network.

Fingerpost

Function: Provides local route reinforcement and aids pedestrian journey planning.
Location: Secondary arrival points, dwell spaces and decision points on the pedestrian network.

Interpretation or commemorative

Function: Provides interpretation or commemoration information at points of interest. Access to physical and digital information.

4.23 Lighting

Lighting design will create a coherent night-time lighting aesthetics that is memorable and safe for students, staff and visitors, and:
o   Considers the visual requirements for each type of a public realm user: motorists, cyclists and pedestrian;
o   Enhances the image of the campus;
o   Provides lighting that promotes safety and wellbeing; and
o   Provides visual cues that promote intuitive site navigation and orientation.

Design Principles
Complement landscape and architecture by accenting views and spaces with light by:
o   Lighting effects and equipment typology that are strategically used to create an illuminated visual hierarchy and connections between architecture and landscaping;
o   Lighting design which includes a hierarchical accenting of buildings, spaces and landscape feature according to their site location, importance and character; and
o   Use of different colour temperature, cool white to warm white, in a controlled fashion to articulate the hierarchy of the areas and places. The use of coloured light should be avoided.

Respond to ecological, environmental, economic and educational factors. In order to accomplish this, the lighting design shall:
o   Prioritise low energy consumption and/or best whole life cost.
o   Select luminaires and lighting equipment that are energy efficient, sustainable and environmentally responsible;
o   Utilise energy efficient light sources with precise optical control and long maintenance cycles;
o   Lighting shall be designed to minimise light pollution; and
o   Reflect the intent to minimise ongoing maintenance costs and consider ease of replacement.

Design Strategy
Lighting is intended for vehicular, cycling and walking

Lighting Precedent image 01
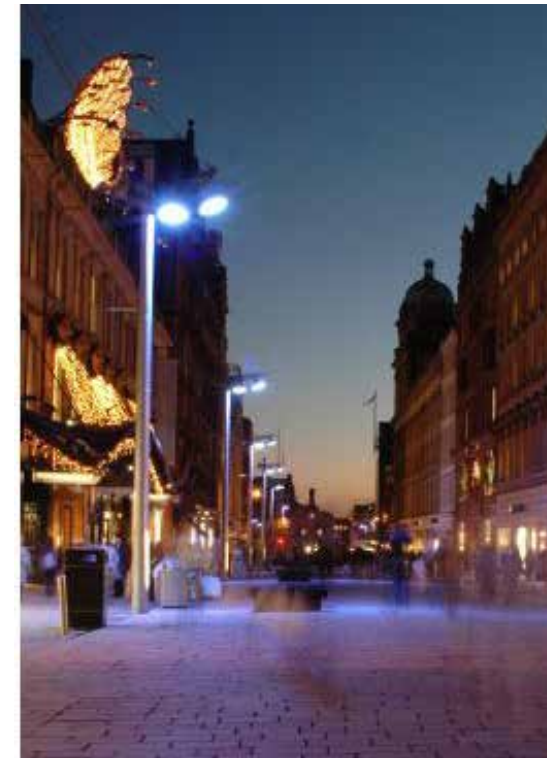
Lighting Precedent image 02
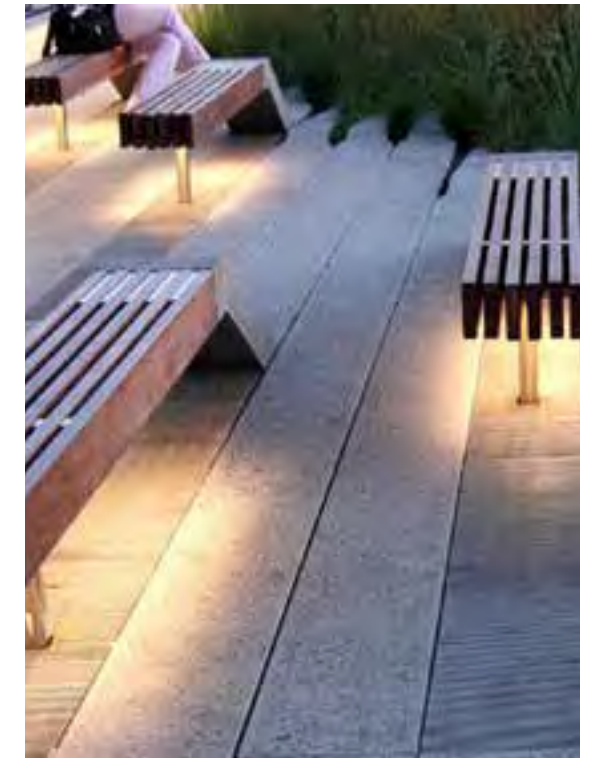
Lighting Precedent image 03

routes, as well as zones where people are likely to congregate at night.
The majority of illumination provided throughout the site will consist of:
o   column mounted street lighting at a typically intermediate level (6 - 8m);
o   building mounted lighting where building proximity and design or public space allows;
o   low level lighting in areas that require more light than can be provided through ambient levels, but less than would be required through streetlight installation;
o   creative and dynamic lighting in key spaces for events to include light and image projection;
o   creative feature lighting to highlight and enhance public artwork.

Lighting Precedent image 04

4.23 Lighting

Lighting Opportunities

It is envisaged that a street furniture suite will be determined to help define a character that promotes quality across the public realm of the University campus. Street lighting is a key part of this language and should be co-ordinated with other furniture elements to provide a synthesis across the suite. Consideration is to be taken choosing fittings to ensure they are complementary to both contemporary and historic settings, without unnecessary decoration or historic references. Existing historic lighting columns or fittings should be considered as part of a restoration programme in areas of the campus with significant heritage importance.

Vehicle routes

Lighting columns should be applied that respond to the all requirements of the street. Authority regulations required. Primary, Secondary, Tertiary and Service Road applications apply. Light columns should be rationalised to promote a clutter free environment and consideration taken within historic settings and views, primary spaces and alongside key buildings.

Pedestrian routes and corridors

- - - - Primary Routes – University Avenue

· · · · Secondary Routes – Church Street

—— Tertiary - Local Roads

·········· Service Roads – For deliveries to buildings

⇒ Landscape Corridors: Include the provision of low column lighting to define direction through a predominantly soft landscape route. Vehicle routes are there to service buildings only.

→ Urban Routes: Typically urban corridors are where buildings align routes, enabling lighting of the public realm to occur from fittings mounted on buildings. Routes are to be predominantly pedestrian orientated.

Public spaces

□ Primary Space: There is an opportunity in these spaces to incorporate high quality lighting that provides safe levels of light, but also includes features to help promote their use as key spaces. Lighting should be adaptable to both permanent and temporary and define the main access points.

○ Secondary Space: Lighting to these spaces should complement the uses within and around them, providing safe use within more intimate surroundings in evenings, whilst also enhancing key features.

—— Façade lighting: Key building façades and colonnades across the campus to be illuminated in a sophisticated manner to emphasise significant architectural quality, provide focal points and vistas, improve wayfinding, enhance quality and perceived safety at night.
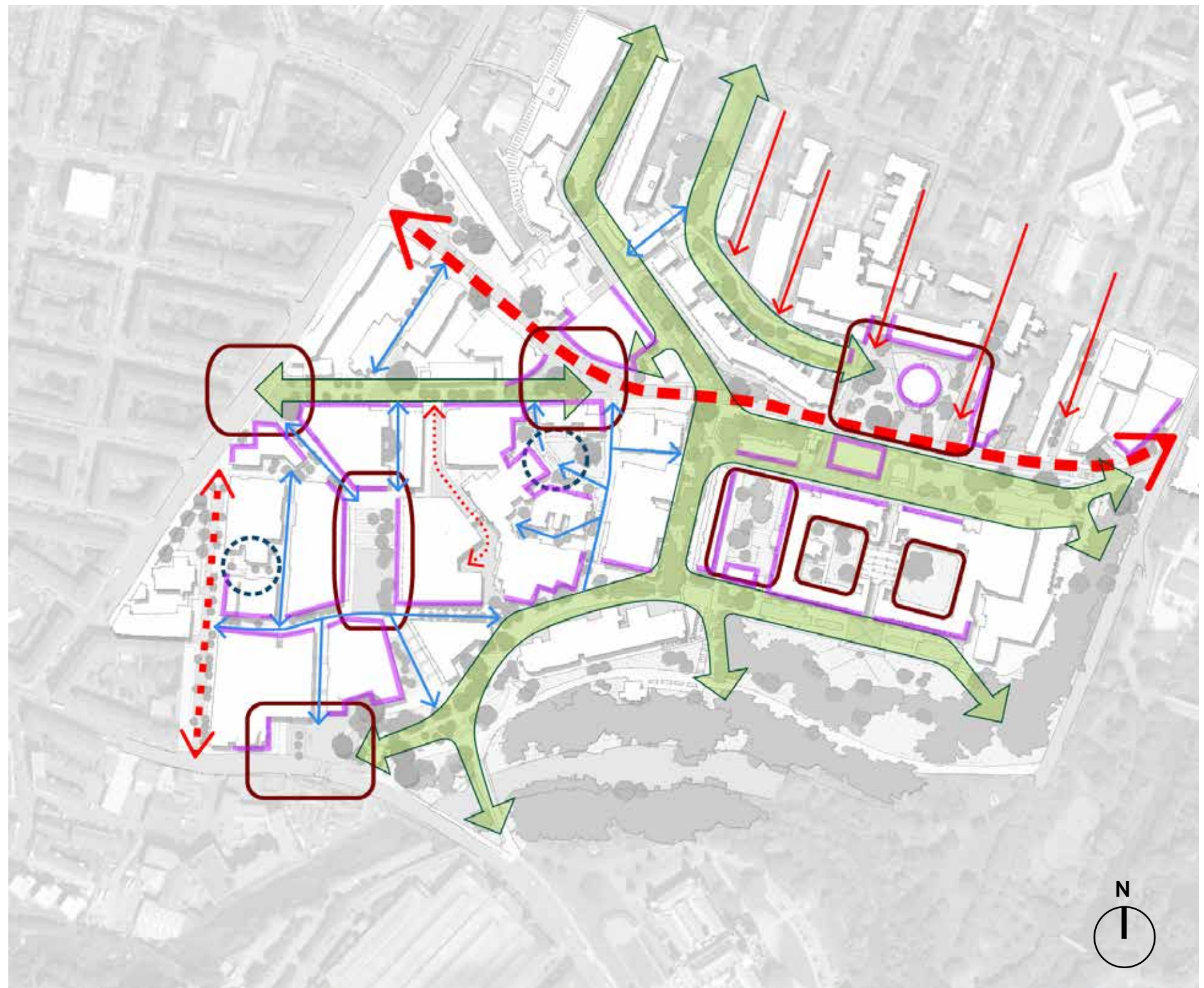
Diagram of Lighting Opportunities

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4.24 Materials Proposal

With significant redevelopment of the Gilmorehill Campus proposed there is an opportunity for a comprehensive unification of landscape materials across the campus. Materials selected should:

o   Respond to the hierarchy of public realm spaces and corridors proposed;
o   Establish a palette that responds sympathetically to the local vernacular;
o   Are aesthetically and functionally appropriate to their surroundings; and
o   Provide a unique and identifiable aesthetics to the Gilmorehill campus.

It is proposed that a palette of materials be created for use in Primary & Secondary Public Realm proposals.

Primary Spaces
High quality natural stone products, permeable paving

Secondary Spaces
A mixture of high quality natural stone, high quality concrete materials and flexible materials

KEY

◼ Primary Spaces

◼ Secondary Spaces

— Main Road

Diagram of Material Proposal

Primary Spaces

Example of Caithness stone paving

Example of Granite stone paving

Example of Whinstone paving

Secondary Spaces

Example of Concrete paving

Example of Natural stone paving
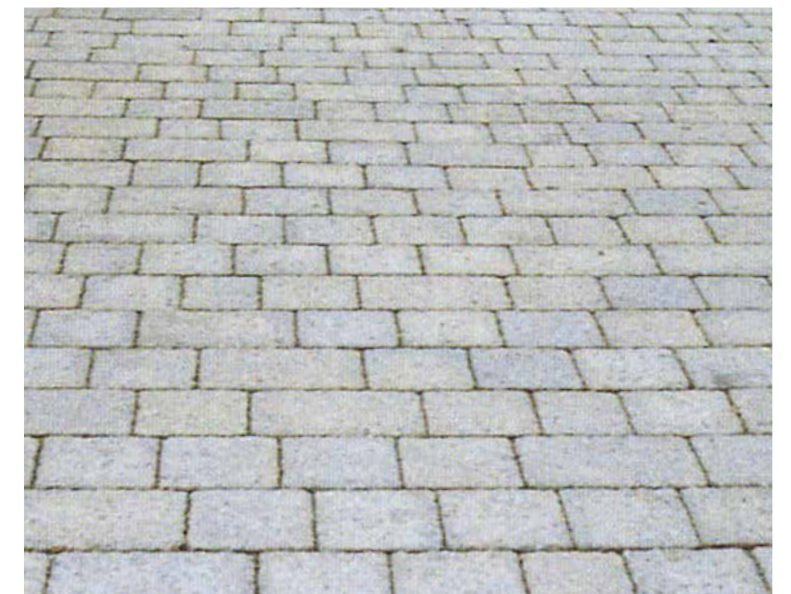
Example of Permeable paving

4.25 Railings

Railings are an established furniture element to the historic areas of the campus, but in some instances prevent accessibility within a new emerging public realm strategy and the sense that the University is a welcoming, permeable environment. The public realm strategy encourages:

o Removal of part of the existing historic railing to the front of the Gilbert Scott building to improve pedestrian connectivity and perceived accessibility between University Avenue and the Gilbert Scott Building;

o Removal of gates and railings to the front of the Bower Building to improve accessibility and release space for the creation of university cross;

o Retain historic gates to the front of the Gilbert Scott building.

Approach - Any historic railing removal shall be undertaken sensitively, with appropriate permissions in place and ensuring remaining railings are integrated with local context.

Images of Existing metal railings

KEY

△   Existing Gate

▲   Proposed Gate

——————   Existing heritage railings to be retained

· · · · · · ·   Existing heritage railings to be removed / relocated

——————   Existing standard railing to be retained / improved

· · · · · · ·   Existing standard railing

N
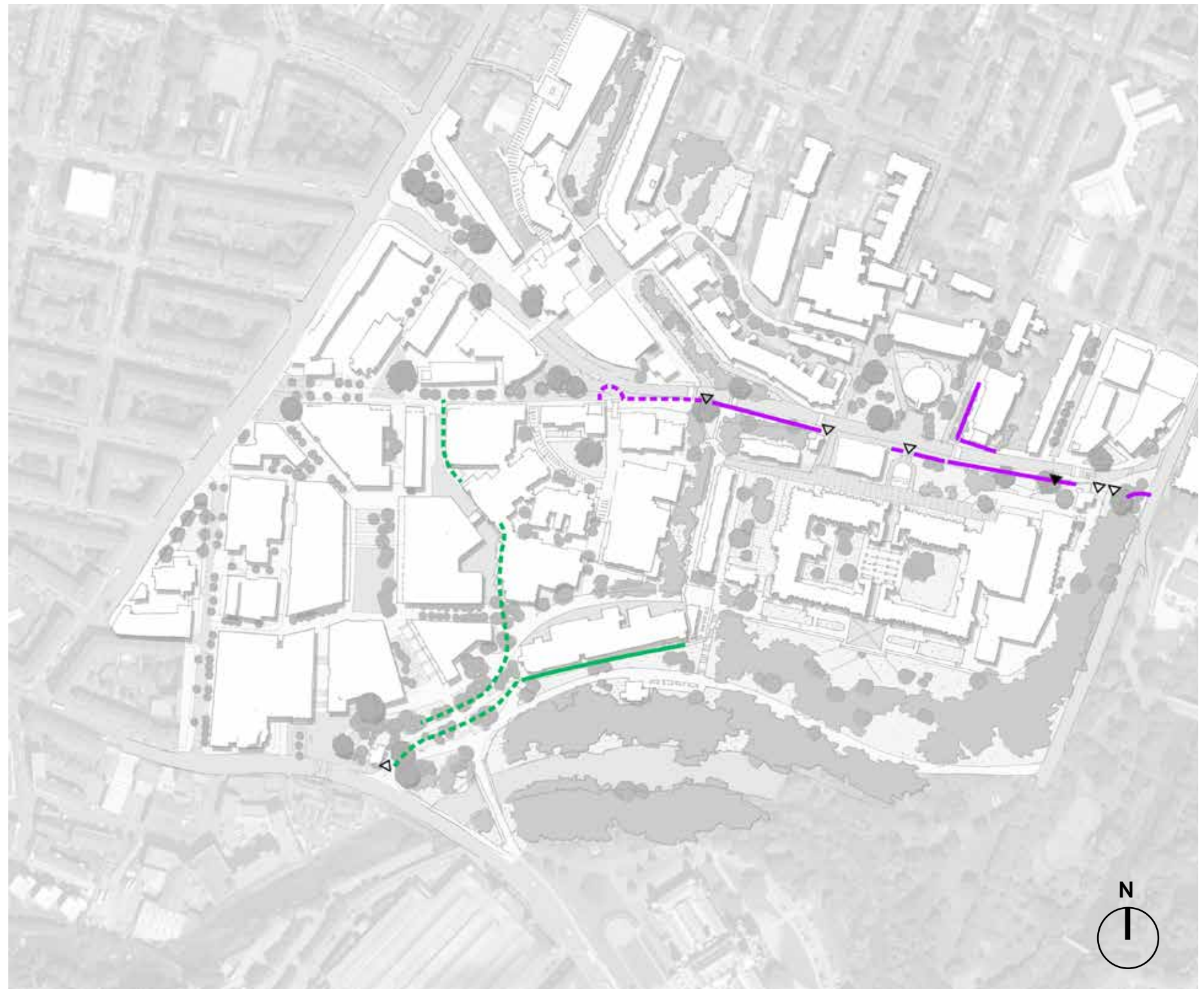
Diagram of Railings

Interim Landscape Treatment

Roof Space, Terraces and Living Walls

Green Assets

Precedent Images for Green Roofs, Living Walls & Green public social Spaces

An aesthetic view of vacant lots awaiting development, general view of demolition or construction is critical to ensure that the perception of the University of Glasgow and local area remain positive over what can be a long time. Temporary landscapes and public realm, innovatively themed temporary elements, art installations, promotional activity and even exciting hoarding, amongst others, are opportunities to consider early in the development of a construction programme and which through a co-ordinated strategy can help to maintain an attractive and expressive means of promoting the University and its exciting future that its completion brings.

Particular emphasis should be those parts of the development that:
o   Face onto local streets and spaces;
o   Are most visible from advantage points;
o   Are close to access routes and interfaces with existing University facilities; and
o   Overlook and interface with Kelvingrove Park.

With larger vacant areas awaiting development, short term landscape approaches can be considered. These, where possible, can be enjoyed by visitors to emphasise the inclusive nature of the University, inform others of progress and show the benefits and opportunities that the new campus will bring. The types of interim landscapes that may be considered include:

o   Lawn banks in sunny locations for students and visitors to experience the park setting and views;
o   Flower rich annual planting to provide colour, habitat and seed crops;
o   University demonstrations and activity space; and
o   Art and event space for student and community uses.

To increase aesthetic, social and habitat benefits to the University, and assist in BREEAM accreditation, further consideration should be given to the incorporation of roof gardens, terraces and living walls across all parts of the expanding University campus. These have the potential to bring:

o   Further opportunities for increasing biodiversity and wildlife habitat to the University;
o   Contribute to storm water management to complement ground level sustainable urban drainage systems;
o   Help moderate urban heat island effect;
o   Improve views and interface of new buildings into the park edge setting;
o   Contribute to improving air quality; and bring
o   Benefits to the students and others living and working in the area.
o   Provide additional study and activity space

Key Spaces   **5.0**

5.1 Illustrative Public Realm Masterplan

The illustrated public realm masterplan forms the
combination of evolving proposals for the Masterplan and
Public Realm and Landscape across the Campus.
The plan on the next page shows key open spaces that form
a part of the campus wide public realm strategy.

1. **Gilbert Scott Quads**
2. **South Front**
3. **Professor Square**
4. **Professor Gardens** (Project Name)
5. **University Avenue southern edge**
6. **Fraser Building & Reading Room Garden**
7. **University Gardens**
8. **Lilybank Gardens**
9. **Garden to rear of Lilybank Gardens**
10. **Lilybank House Gardens** (Project Name)
11. **Queen Margaret Square**
12. **University Cross** (Project Name)
13. **Science Precinct & Science Way**
14. **University Place**
15. **Byres Place** (Project Name)
16. **New University Square** (Project Name)
17. **South Gate**
18. **Elder Chapel Place**
19. **Byres Road Triangle**
20. **Ashton Road**
21. **East Gate**
22. **Moy Street**
23. **Rain Gardens** (Project Name)
24. **West Lane** (Project Name)
25. **Engineering Way** (Project Name)

Illustrative Masterplan

Great George St

Hillhead St

Southpark Ave

Oakfield Ave

Byres Rd

Church St

University Ave

Kelvin Way

Dumbarton Rd

River Kelvin

N

0m 10m 30m 50m 100m
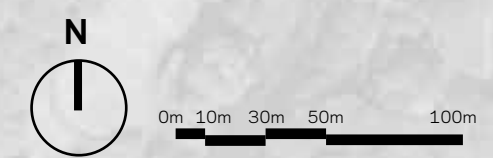
5.2 Primary Spaces : Gilbert Scott Quads

Protect and restore Quad space where required to:
o   Maintain as a simple, mature space that reflects historic qualities of Gilbert Scott Building;
o   Improve the activity and use of the Quads; and
o   Maintain typically quiet, reflective space with the opportunity to expand the use for events and ceremonial activity throughout the year.

Character:
o   A quiet, enclosed and social space.
o   Maintain mature and historic character.
o   Provide clear routes between entrances.
o   Materials and furniture reflect historic setting.
o   Maintain a predominantly lawn and mature trees.
o   Suitable for ceremonial events.

Precedent image 01 of Quads

Precedent image 02 of Quads

Precedent image 03 of Quads

Precedent image 04 of Quads

Primary Spaces: Professor Square

Restore the square to create an improved pedestrian oriented environment that reflects the quality and heritage significance of the Gilbert Scott Building and adjoining Professor's offices. Professor Square aims to:

o   Remove parking apart from disabled and limited visitor parking to the north of the square;
o   Extend hard space between the main entrance of the Gilbert Scott Building through Professor Square to provide landscape corridor connection with Professor Gardens;
o   Provide a pedestrian orientated and curtilage to the University Memorial Chapel for use by the Chapel as a space that can be used for wedding photography and brasserie use, for instance;
o   Expand lawn areas currently being used for car parking; and
o   Reinforce historic character and appearance of the square.

Character:
o   A quiet social space
o   Reflect on heritage setting
o   Maintain mature and historic character with emphasis on soft landscape, but fewer trees
o   Traditional seating and gathering space alongside building
o   Provide clear routes with stronger priority on pedestrian movement
o   Paving reflective of historic setting.

Precedent image of Central lawn area

Precedent image of event

Pedestrian, cycle and service vehicle connection

Event space to front of chapel

Enlarged green space

Remove surface car parking to integrate soft landscape

Lawn area

Disable car parking space

Professor Gardens

Illustration of Professor Square

Primary Spaces: University Cross

A new public realm focus is created in the form of University Cross. In association with the new Learning and Teaching Hub it will become a new pivotal space within the extended University. Its aim being to:

o   Provide a point of arrival for those visiting the University by public transport;
o   Become a place that reflects the creativity and ambition of the University;
o   Establish itself as a space for gathering, meeting and socialising;
o   Become a point of convergence for landscape corridors and urban routes through the campus;
o   Incorporate a landscape that will in time become a mature setting that is synonymous with the historic parts of the University;
o   Maintain views of significant buildings;
o   Incorporates cycle hubs and bus stops; and
o   Slow vehicles using University Avenue and create a pedestrian and cycle priority space.

Character:

o   A vibrant arrival and meeting space.
o   Create a shared surface across designated area.
o   Integrate further soft landscape and tree planting.
o   Ensure connectivity with landscape corridors and Science Precinct & Science Way.
o   Becomes focus of public realm activity as campus expands.

KEY

- - -→   View
·····→   Internal Link
—→   Movement
▬ ▬ ▬   University Avenue
▭   Hub
⬭   Bus Stops
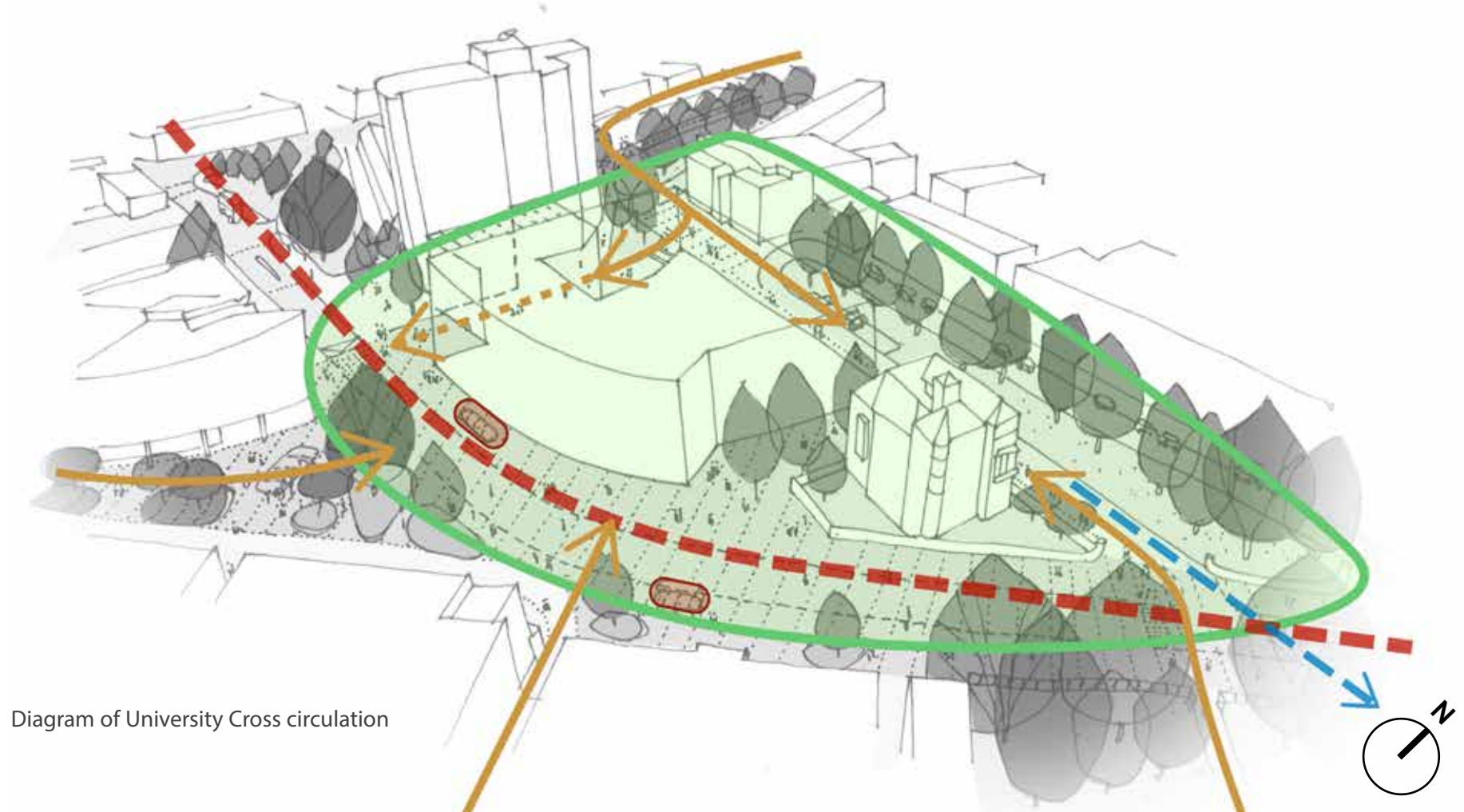
Diagram of University Cross circulation

Precedent Image of University Cross

Precedent Image of University Cross

Primary Spaces: University Cross

Internal pedestrian link

Landscape Corridor Lilybank Gardens

Learning & Teaching Hub

Cycle Hub

Visitor & disabled parking

Landscape Corridor University Gardens

Landscape Corridor to Professor Gardens

University Place rain gardens

Cycle Hub

Bus Stop

Shared surface

Bus Stop

Service access

Remove railing to increase permeability

Maintain existing railings
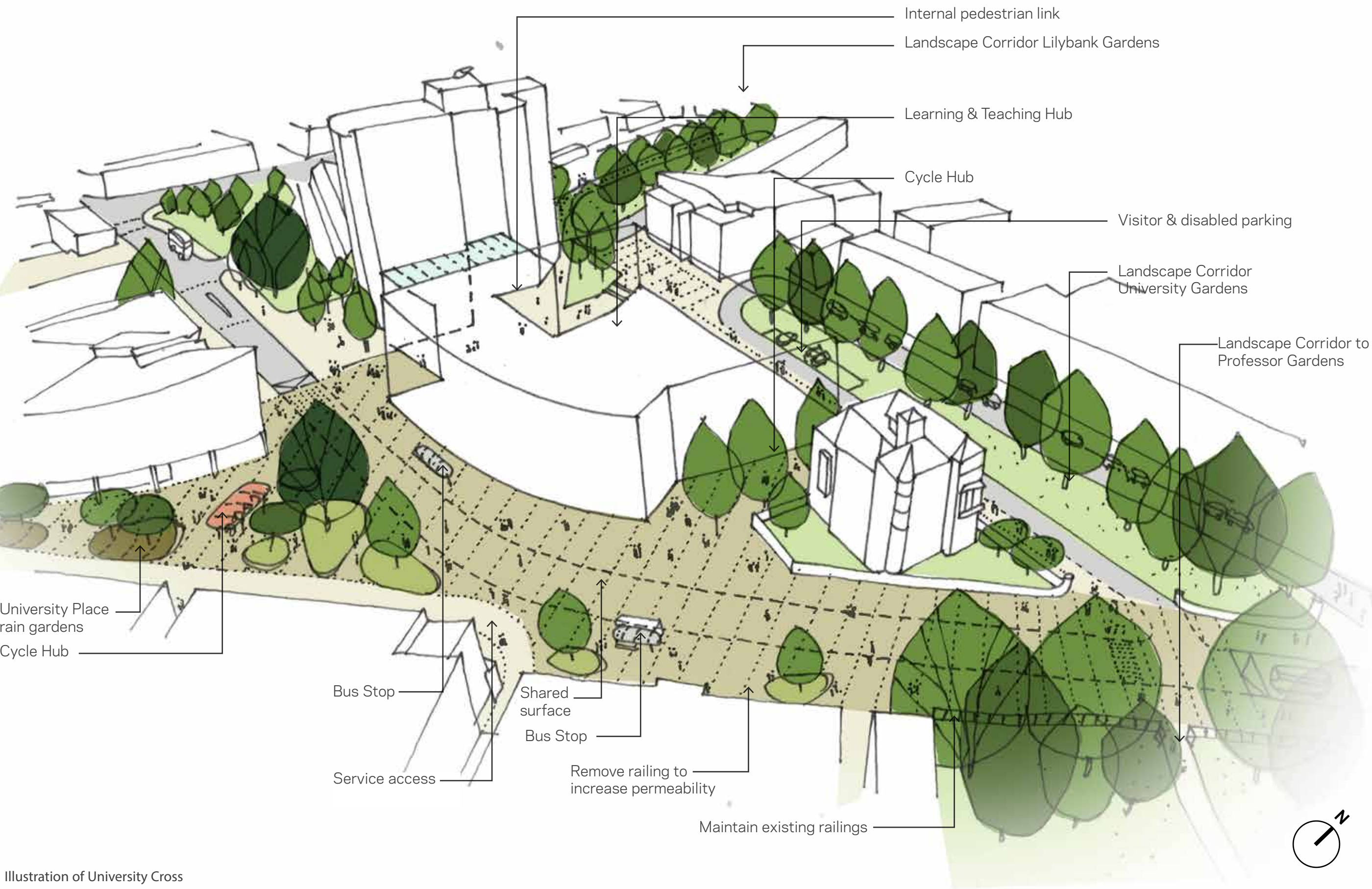
Illustration of University Cross

Primary Spaces: Fraser Building & Reading Room Garden

The Reading Room Garden forms one of the primary spaces at a convergence of popular routes, arrival space and historic setting. The strategy brings together these elements into a unique space that of all the spaces within the campus, currently represents the University the most. The proposal aims to:

o   Create a unified space linking the Fraser building, Library, Reading Room and entrance to Gilbert Scott Building together;

o   Integrate improved pedestrian and cycle priority routes across University Avenue;

o   Retain and improve environment around bus stops;

o   Introduce a new entrance space to the library along with modifications proposed for the Hunterian Art Gallery building, and allowing for a new landscape corridor linking development and hotel opportunities surrounding the Lilybank House;

o   Improve accessibility for pedestrians through the Reading Room Garden and increase use where possible.

Character:

o   A social, meeting space and arrival space.

o   Maintain mature and historic character with emphasis on soft landscape.

o   Create further opportunities for meeting and gathering.

Illustration of Fraser Building & Reading Room Gardens

Hillhead Street

Improved Library entrance

Links to West & Lilybank House

Fraser Building

Cycle Hub

Mcmillan Reading Room

Reading Room

Wellington Church

Shared surface

University Avenue

Bus Stop

Gilbert Scott Building Gate

Gilbert Scott Building

Primary Spaces: new university square

The new university square forms the primary new public realm space within the west campus development area.
The Square is a uniquely designed space to promote the innovative and exciting face of the University.
It is approximately 100 x 40m of external space with lawn provision to the north end to provide a sunny spot for seating and take up any level difference between north and south of the square.

It will aim to provide a:
o   Public Realm focus of social and University activities;
o   Space connected well through a network of urban routes, Landscape corridor and links with Byres Road and Kelvingrove Park;
o   Range of active building frontage opening out and interfacing with the square;
o   Active programme of use by the University but with easy and encouraging access for the local community;
o   Covered public realm beneath building frontage to east and west of square to provide protected circulation space; and
o   Building envelope to help control poor climate conditions within the square.
o   Tree routes linking with University space to Kelvingrove Park along the east side of the square form a strong part of the landscape corridor network from University Place through the rain gardens to Kelvingrove Park.
o   A simple decorative hard space for active, flexible use to complement local identity is provided.

Character:
o   A vibrant, social and enclosed civic space.
o   A dynamic design reflective of the Universities innovation and future.
o   Flexible for events and University ceremony.
o   Maintain as predominantly hardscape with formal lawns
o   Public realm to be covered on east and west sides.
o   Integrate landscape corridor of trees.
o   Ensure connectivity to local streets and park.
o   Important view through to Kelvingrove Art Gallery.

To Byres Place

Lawn terraces

Outdoor seating

Seating & covered walkway

Moy Street West

Public Realm furniture

Moy Street East

Events space

Rain gardens & access to Kelvingrove park
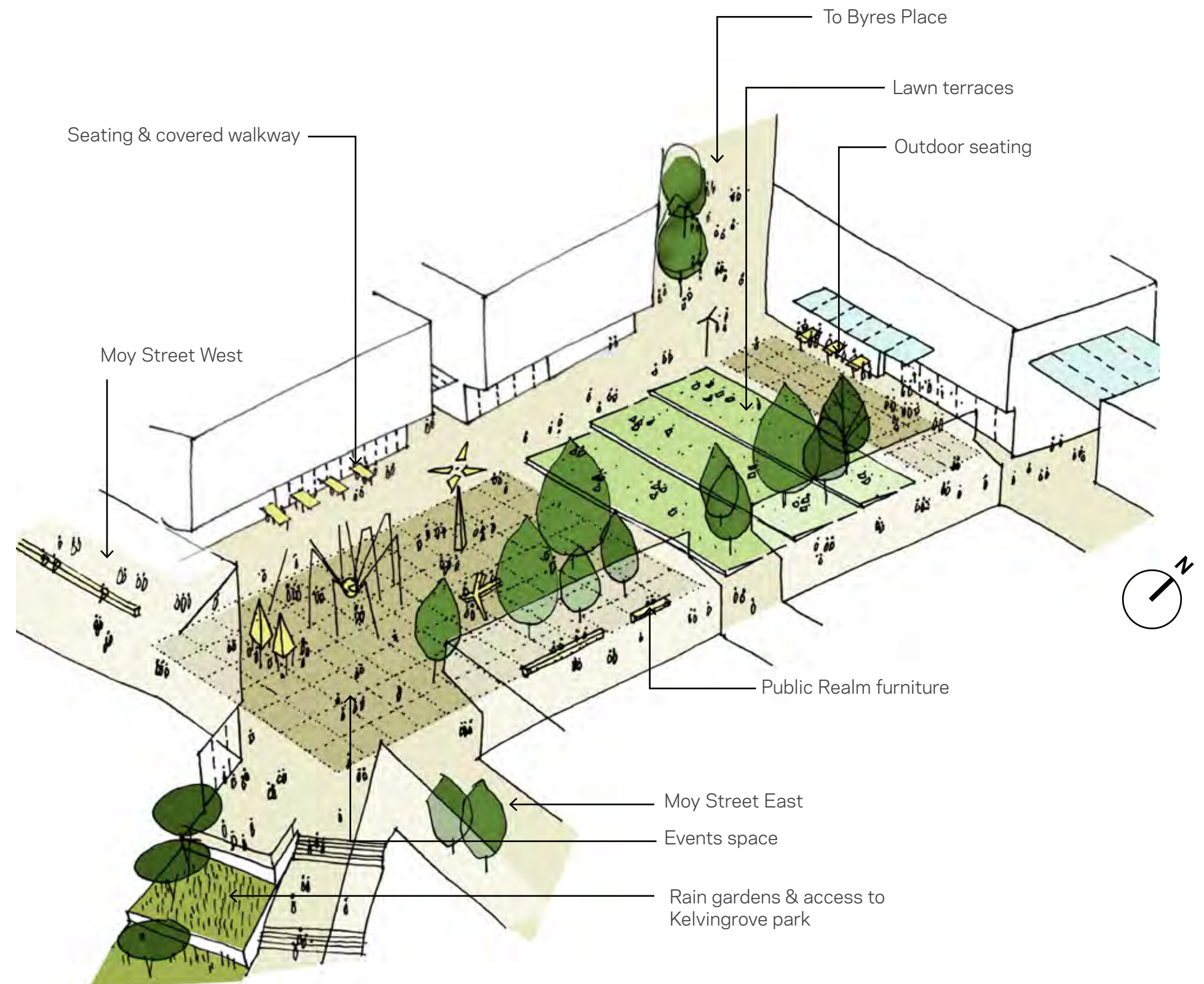
Illustration of new university square

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Primary Spaces: Byres Place

The Byres Place forms an important interface between the expanded University campus, Byres Road and the local community. Its pivotal location also allows for connections with University Place and future routes to new university square and on to Kelvingrove Park. Its aim is to:

o   Announce and encourage passage through the University campus;

o   Provide a destination in its own right along Byres Road to accompany the vibrant street, its retail and community activity;

o   Provide a destination for local bus services, a cycle hub, gathering and social space;

o   To complement the historic nature of the street with the contemporary architecture of new University buildings;

o   Potentially to introduce traffic calming to Byres Road and include road crossings for better accessibility into the campus.

Character:

o   An arrival, meeting and social space.

o   Space for flexible use and activity.

o   Predominantly hardscape.

o   Strong connection with new university square.

o   Integrate individual trees as part of landscape corridors.

o   Merging of Byres Road and new University vernacular.

Precedent Image for Feature seating

Precedent Image for Library adjacent to public space

Route to new university square

Byres Road

Seating

Bus stop

Improved pedestrian crossing facility

Cycle Hub

Parking

Gateway signage & art

University Place

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Illustration of Byres Place
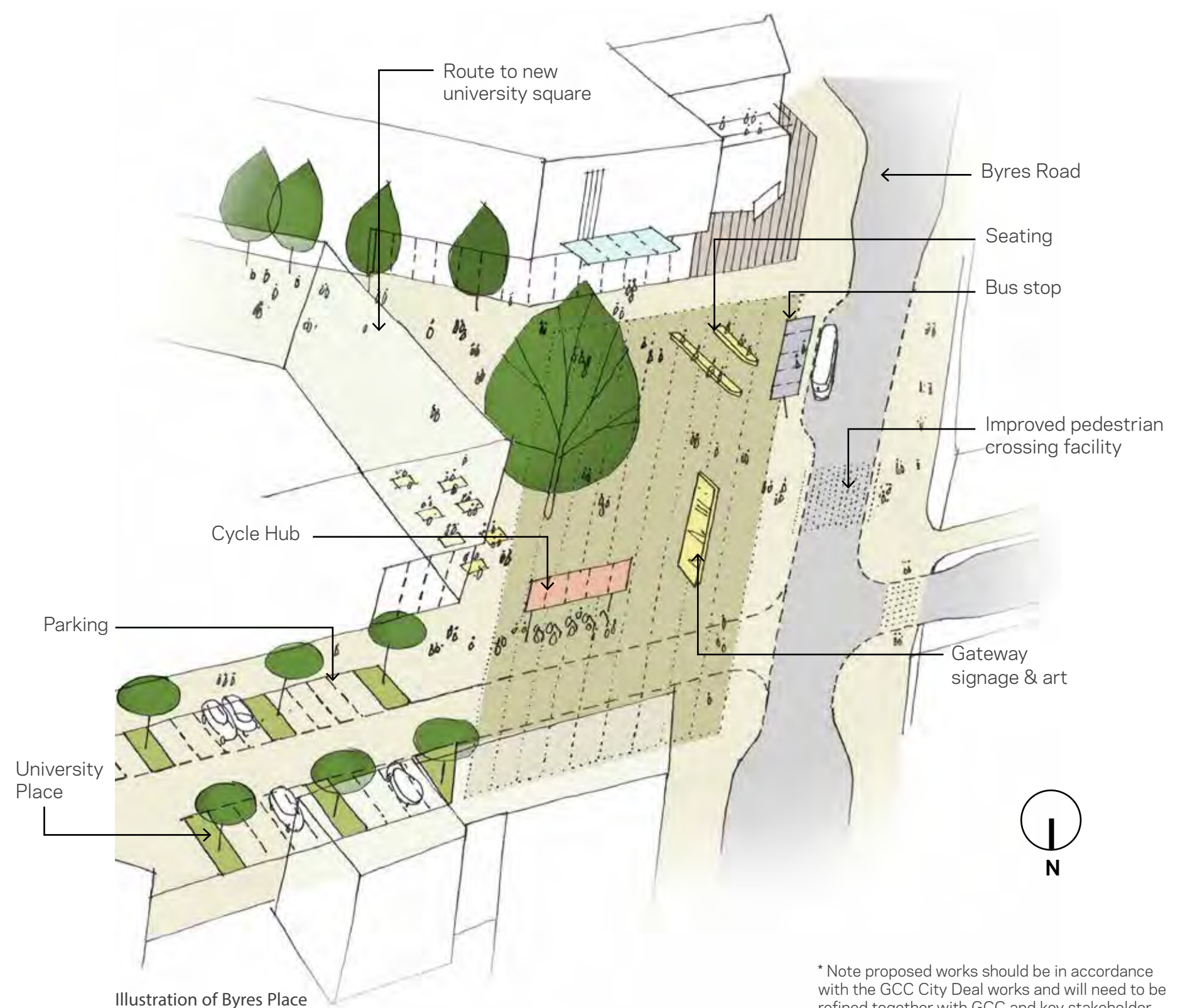
* Note proposed works should be in accordance with the GCC City Deal works and will need to be refined together with GCC and key stakeholder.

Primary Spaces: South Gate

The Dumbarton Road entrance promotes the University to its southern edge with Kelvingrove Park. The entrance has a number of influences including the Park, its South Gate Lodge entrance setting and listed buildings nearby. The South Gate aims to:

o   Create a clearly defined arrival space/plaza between Dumbarton Road and entrances into proposed building lots;

o   Establish vehicular/taxi drop off alongside access into undercroft parking;

o   Integrate a cycle hub and bus stop at South Gate.

o   Provide a flexible space for University activity, art and display that can potentially promote the University from the South;

o   Provide a mature park setting to extend in front of new buildings to create setting for the Gate House, associated gardens and integration of sustainable urban drainage system;

o   Create views through the park from new buildings;

o   Provide group seating and spaces to meet and gather at entrance; and

o   From the main space, routes connect with the front of buildings facing onto the park, whilst a route between buildings links the South Gate with the new university square.
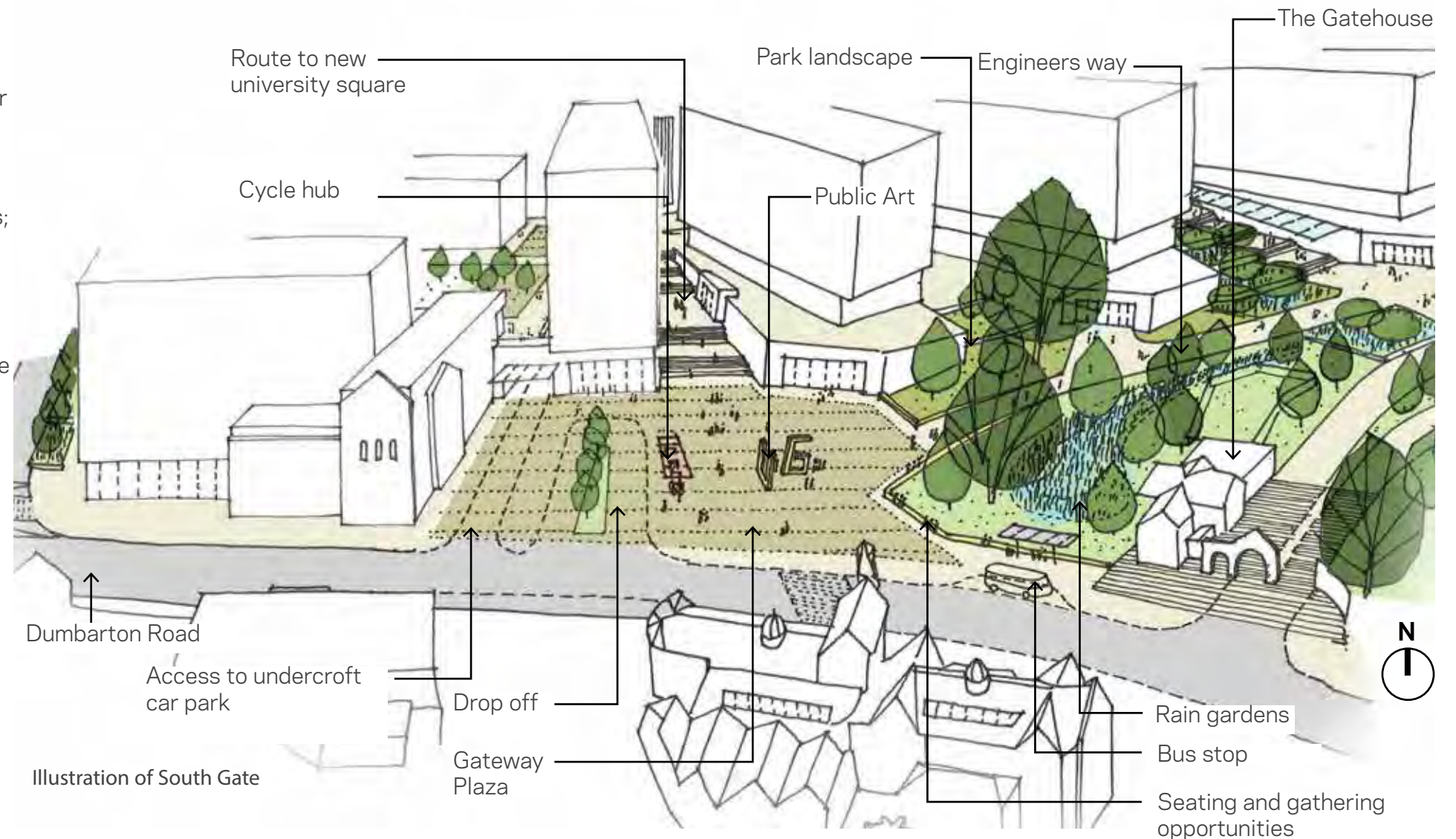
Character:

o   A passing through, meeting and arrival space.

o   Focused arrival and entry hard landscape space with clear routes through to new university square.

o   Mature park setting to envelope development and extend Kelvingrove Park.

o   Opportunity to display University's work.

o   Integrate Lodge, gate and garden into soft landscape setting.

o   Integrate seating within interface between hard and soft landscape.

Illustration of South Gate

Precedent Image of Steps to new university square

Precedent Image of Steps to Gateway plaza

5.3 Secondary Spaces : Science Precinct & Science Way

Provide a pedestrian and cycle friendly route and gardens linking Engineering Way with University Cross that:
o   Create a new quad with a garden space providing an improved setting for the Joseph Black building;
o   Is created through the removal of part of the Officers Training Corps building;
o   Include active frontage to remaining listed buildings facing into the new quad and complementary public realm adjacent;
o   Is a new space at the convergence with Science Way, route through to Professor Gardens and provides a double route through to University Cross;
o   Provides for flexible future use, gardens and a range of space for students to meet in; and
o   Has the potential to reflect the art deco design of the Joseph Black building.
Alternatively the University wishes to maintain the option of providing future buildings within this space.

Character:
o   An enclosed, passing through, meeting and social space.
o   Introduction of a lawn space and flower rich gardens.
o   Interpretive display of planting.
o   Clear routes for pedestrians and cyclists.
o   Seating and gathering spaces.
o   Opportunity to reflect historic architectural quality.
o   Strong and visible connections.

Precedent Image for Ground level planters

Precedent Image for lawn areas

Cycle hub
Active frontage
Bus stops
Cycle hub
Gardens
Lawn area with seating opportunity
Pedestrian & cycle friendly routes
Route through to Professor Gardens
Science Way
Engineering Way

N

Illustration of Science Precinct & Science Way

Secondary Spaces: Elder Chapel Place

The revealing of the Alexander Elder Memorial Chapel building to Church Street from its once enclosed situation has provided an opportunity to bring a vibrant, uniquely different social space to the Campus, one which:

o   Is predominantly urban and hardscape that reflects local characteristics;

o   Aims to be simple, to allow for artisan, social and cultural influences that over time create a uniquely distinctive urban space;

o   Allows ground floor uses to spill out into the place to make it a lively, animated space where everyone wants to go.

o   Integrates subtle level changes as a curtilage between Elder Chapel Place and Church Street.

o   Announces an alternative route between Church Street and new university square.

Character:

o   A passing through, meeting and social space.

o   Predominantly hard landscape with historic references that complement contemporary elements.

o   A place for outside eating.

o   Cultural, art and local influences reflected within public realm.

o   Tree and container planting.

Precedent Image for Chapel planters

Precedent Image for Chapel area

Route to new university square

Alexander Elder Memorial Chapel

Outdoor social and eating space

Building entrance

Containerised planting

Rain gardens

Church street

Bus stop
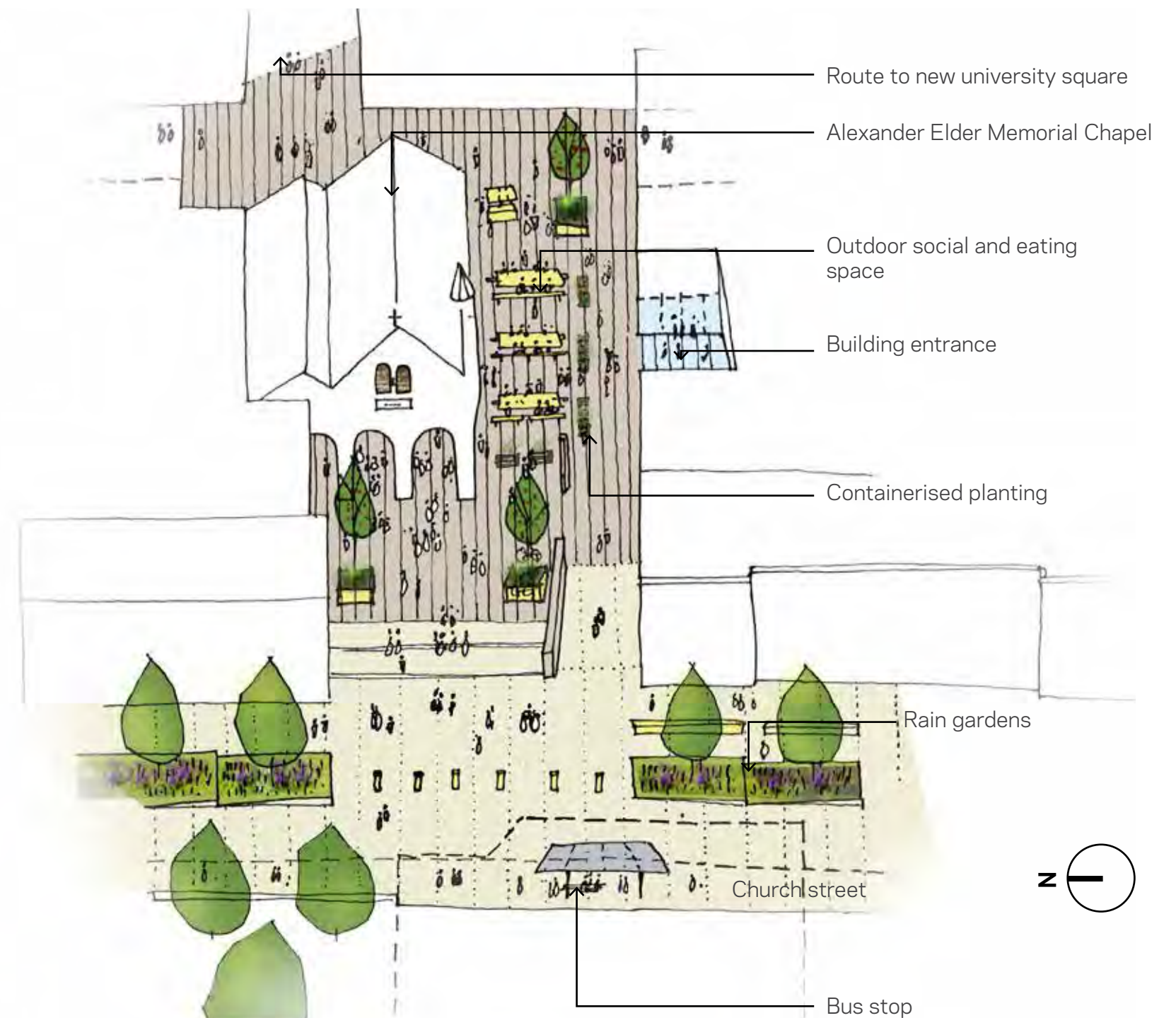
Illustration of Elder Chapel Place

Secondary Spaces: Moy Street

Moy Street links the new university square with the existing campus to the east and through the new development and Church Street to the west. As a natural divide, the two parts of the street are influenced by adjoining public realm which has resulted in the:

o   East side reflecting the tree lined routes of Engineering Way and interface with Kelvingrove Park; with the
o   West side more about urban routes, environments knitting into the local streets and spaces and responding to the uses put forward in the Gilmorehill West Campus study area.

The aim of the street is to provide:

o   A Pedestrian, cycle and service vehicle route between Church Street to the west and engineering way to the east via new university square;
o   As the route rises up from west to east, create subtle platforms alongside retail and dining uses to encourage outside dining and related use;
o   Provide a tree lined route with increases in vegetation to the east side of new university square;
o   Provide gathering and seating clusters along the length of the Street; and
o   Highlight the entrance to Moy Street on Church Street.

Tree planting within new university square

Tree planting along Moy street

Service access to new university square

Active frontage along Moy street

Platforms alongside retail and dining outlets

Seating Areas

Cycle Support Facilities

Seating Areas
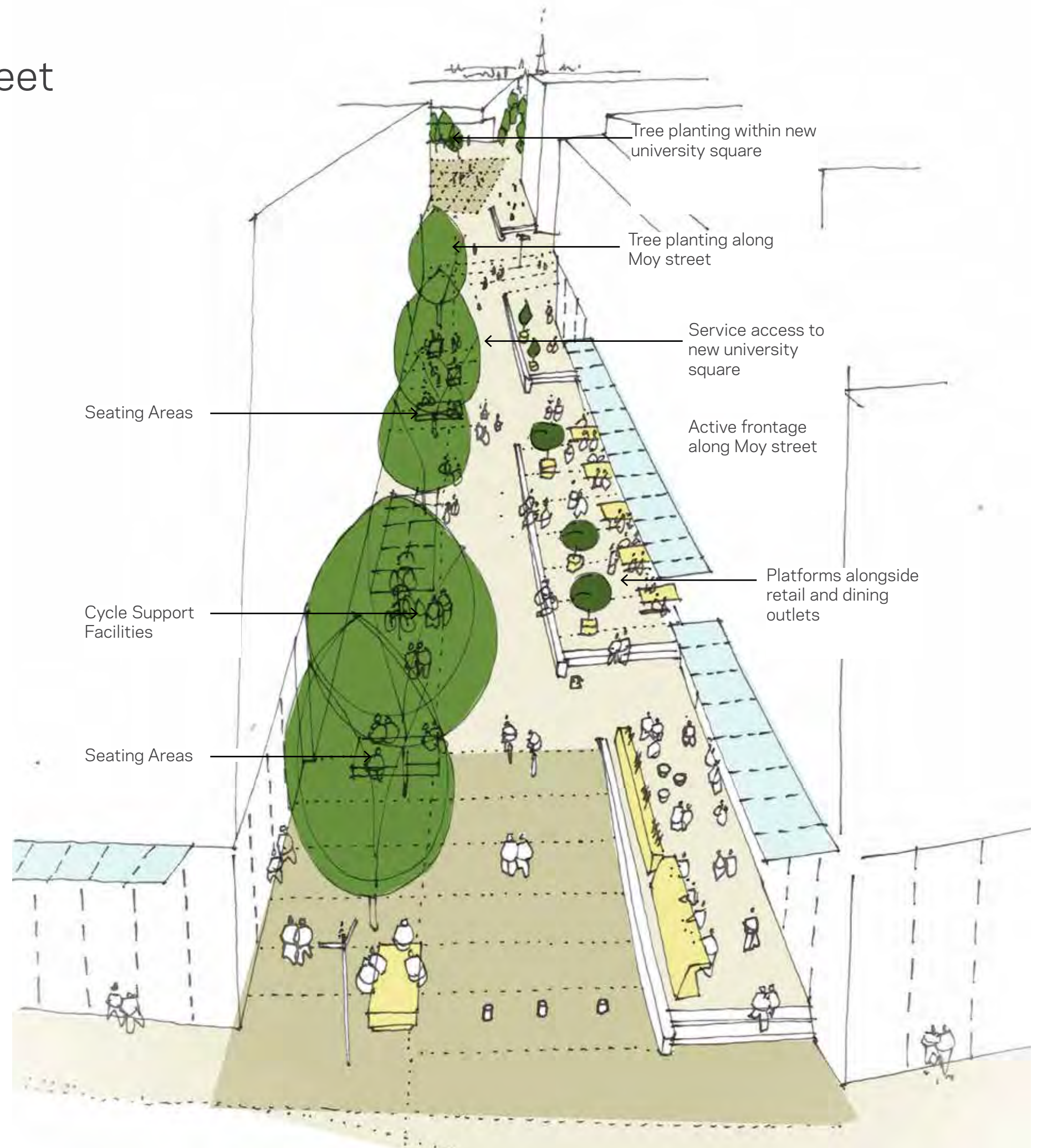
Illustration of Moy Street

Character:

o   A passing through, meeting and social space.

o   Predominantly shared, hard landscape with the west side becoming greener.

o   Flat platforms create spaces for outside eating on an otherwise sloping street.

o   Cultural, art and local influences reflected within public realm.

o   Container planting.

o   Merging of Church Street and new University vernacular.

o   Street tree planting.

o   Controlled service vehicle access.

Precedent Image, 01 Moy Street

Precedent Image, 02 Moy Street

Precedent Image, 03 Moy Street

Precedent Image, 04 Moy Street

107

Secondary Spaces: Church Street

Byres Place

Service route

Chapel

Moy Street

Rain gardens

Bus stop

Entrance to Elder Chapel Place

Byres Road

Bus stop

Drop off/additional parking

Bus stop

Shared surface

Traffic calming to slow traffic and maximize rain garden areas

on street parking

N

Illustration for Church Street
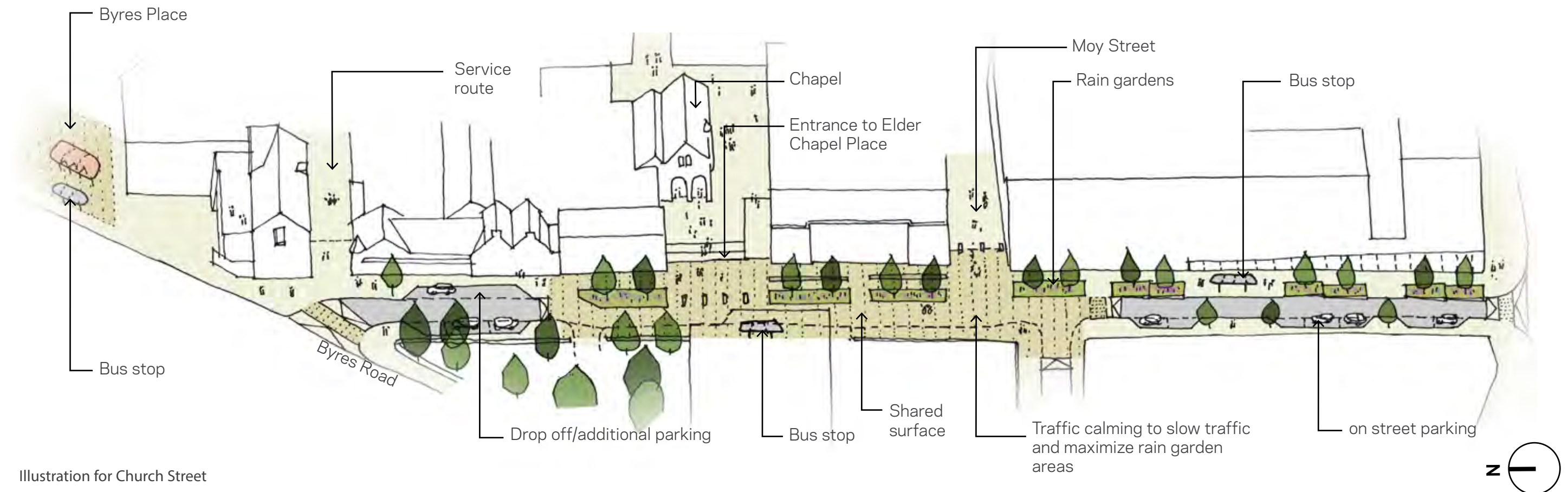
Church Street has the opportunity to become a unique and distinctive street that is attractive and inviting. The proposal to the west study area has the potential to elevate the use from a quiet to a potentially vibrant destination. The mixed use development, University uses and remaining historic context proposed combine to create a potentially character filled street that is in keeping with some of the distinctive businesses and places found within the local area. Proposals include:

o Road narrowing to increase public realm, along with reduction in roadside parking;
o Integration of traffic calming and narrowing, with distinct platforms announcing entry into the University;
o Integration of existing public transport stops;
o Creation of a uniquely urban space around Elder Chapel that is reflected into Church street;

o The potential to include suds, tree and groundcover planting to increase streets attractiveness; and
o Maintain distinctly urban and complementary aesthetic adjacent to retained listed buildings.

Character:

o A passing through, arrival and meeting space.
o Rain gardens with planting to be an influencing character of the street.
o Merging of Church Street and new University vernacular.
o Tree planting within rain gardens.
o Elder Chapel Place to be announced across Chapel Street
o Street narrowing and traffic calming measures.

Precedent Image for Integrated SuDS and Streetscape

Secondary Spaces: East Gate

The East Gate is an established gateway into the University but has the potential to serve as a much more refined arrival into the University by:

o   Reducing the impact of the road and simplifying its movements to increase the public realm environment;

o   Improve pedestrian connections across University Avenue and Kelvin Way into Kelvingrove Park; and

o   Improve the public realm context for the Pearce Lodge.

Character:

o   A passing through and arrival space.

o   Reflects on the historic character and importance of the University.

o   Maintain mature presence of the landscape.

o   Reduce impact of road junction.

o   Improve pedestrian and cycle connectivity.

Secondary Spaces: Ashton Road Gateway

o   Maintain access for residents and service access to Boyd Orr building.

o   Establish improved pedestrian routes with Byres Road.

o   Create flexible space for community activity and events.

o   Reconfigure space to improve public realm appearance and functionality.

Character:

o   A passing through and social space.

o   Retain and develop further the mature landscape setting.

o   Flexible use of hard landscape areas.

o   Sympathetic aesthetic with University campus.

o   Urban route connection between Byres Road and University.

Existing railings

Path to Gilbert Scott Building

Additional opening within historic railing to improve accessibility

University Avenue

New crossing to Gilbert Scott Building

Pearce Lodge

Engineering Way

Pearce Lodge Gate to be retained

University of Glasgow Union

Improved junction with Kelvin Way

Kelvin Way

Illustration for East Gate

5.4 Landscape Corridor

The opportunity is there to create a sequence of easily navigable routes to connect University facilities using both existing and new landscape spaces. These will enable students to walk or cycle safely through the campus with limited interference from parked or moving vehicles. By maintaining the existing mature landscape and extending their emphasis on soft landscape they will become both pleasant routes to move through, become habitat corridors for wildlife and develop further the character of parts of the University already established. By also co-ordinating their surface materials and furniture they can become a coherent means of navigating through the campus.

Enhance pedestrian and cycle network experience with well lit, clearly connected routes

Create areas with individual characters that are flexible for a variety of activities, social and cultural uses.

Lilybank Gardens

Lilybank House Gardens

Queen Margaret Square

University Place

University Gardens

University Avenue South Edge

New university square & Rain Gardens

Professor Gardens

Engineering Way

Gilbert Scott South Front

N
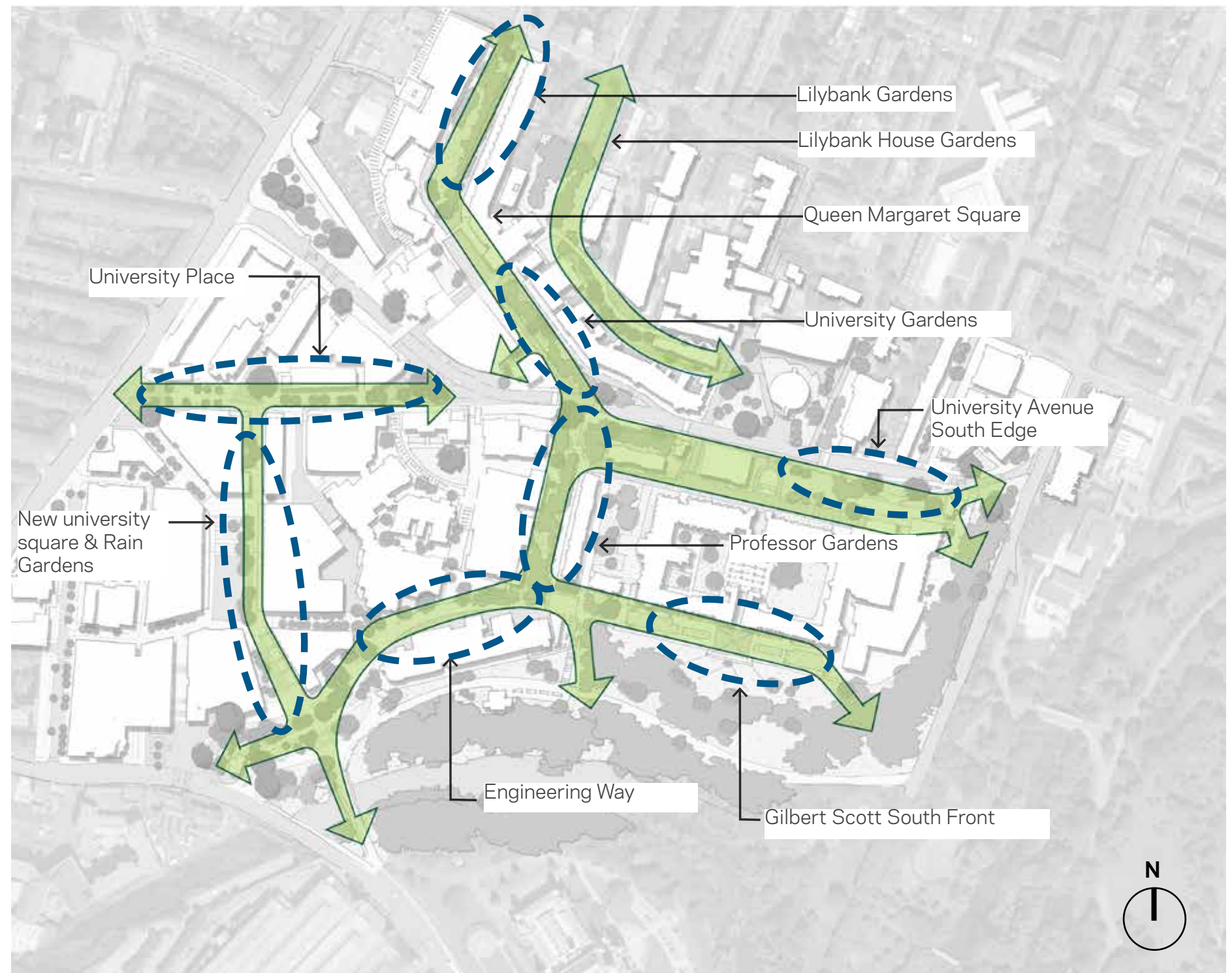
Diagram of Landscape Corridor Area

Landscape Corridor: Lilybank Gardens

o To remove car parking along the western vehicle access and provide wide shared pedestrian cycle routes.

o Retain car movements to one way and narrow road.

o Maintain character and maturity of landscape.

o Create unified character identifiable as University of Glasgow Campus.

o Provide subtle gateway features to identify entry into University campus.

o Continue route through University Gardens with improved cycle and pedestrian environment.

Character:

o A passing through space.

o Maintain mature and historic character with emphasis on soft landscape and trees.

o Provide clear routes for pedestrians and cyclists using sympathetic materials continuous through landscape corridor.

o Reflect on local vernacular materials, historic elements and key views.

Existing conditions

Existing mature landscape

One way vehicle route

Cycle & pedestrian friendly route

Gateway feature
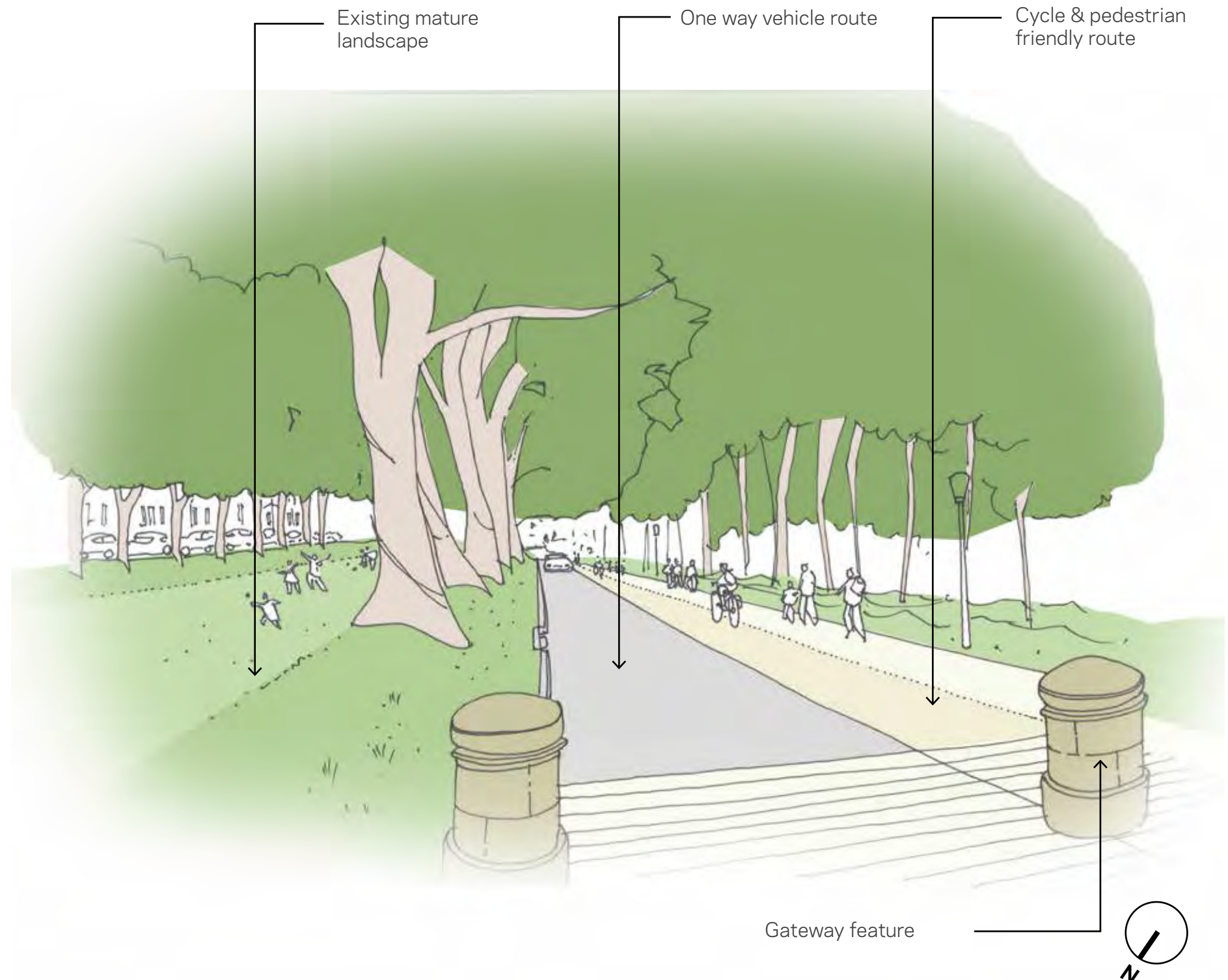
Illustration of Lilybank Gardens

Landscape Corridor: University Gardens

o Remove perpendicular parking beneath trees and replace with soft landscape;
o Maintain character and maturity of landscape;
o Develop access opportunities with University Cross;
o Define clearly routes for pedestrians and cyclists passing through;
o Establish one way demarcated route for cars; and
o Provide a pedestrian crossing over University Avenue and adjust gate to Professor Gardens to ensure safe, but fluid route as part of landscape corridor.

Character:

o A passing through space.
o Maintain mature and historic character with emphasis on soft landscape and trees.
o Provide clear routes for pedestrians and cyclists using sympathetic materials continuous through landscape corridor.
o Reflect on local vernacular materials, historic elements and key views.

Landscape Corridor: Queen Margaret Square

o Becomes integrated into the landscape corridor network;
o Integrate improved public realm links with the Learning and Teaching Hub;
o Develop further access opportunities into University Cross; and
o Define clearly routes for pedestrians and cyclists passing through between Lilybank Gardens and University Gardens.

Character:

o A passing through and meeting space.
o Provide clear routes for pedestrians and cyclists using sympathetic materials continuous through landscape corridor.
o Improved connectivity with University Cross

One way vehicle route

Cycle & pedestrian friendly route

View corridor to Gilbert Scott Building

Connection to University Cross

Illustration of University Gardens

Landscape Corridor: Professor Gardens

- o Make footpath into a shared pedestrian and cycle route linking with Engineering Way, University Avenue, University Cross and University Gardens;
- o Add cross connections between Professor Square and Science Precinct & Science Way;
- o Manage tree coverage to improve sunlight penetration.
- o Provide quiet student gathering spaces within the gardens so not to clutter circulation route; and
- o Opportunity to introduce further flower rich planting through garden.

Character:

- o Passing through and meeting space.
- o Maintain mature and historic character with emphasis on soft landscape and trees.
- o Provide clear routes for pedestrians and cyclists using sympathetic materials continuous through landscape corridor.
- o Reflect on local vernacular materials, historic elements and key views.
- o Opportunity to introduce additional flower rich planting.

Image - Existing Conditions

Social meeting area

Cycle & pedestrian friendly route

Gardens / flower rich planting

Illustration of Professor Gardens

Landscape Corridor: Gilbert Scott South Front

o   To remove car parking to restore vision of Gilbert Scott Building as a simple lawn setting on top of the hill;

o   Create simple lawn for use by the University for Events and use by students;

o   Improve views across Kelvingrove Park by managing trees to open up key views; and

o   Provide pedestrian and cycle routes to Engineering Way.

Character:

o   Passing through, meeting relaxation and events space.

o   Maintain mature and historic character with emphasis on simple soft landscape.

o   Provide clear routes for pedestrians and cyclists using sympathetic materials continuous through landscape corridor.

o   Maintain simple paths and steps to the Gilbert Scott Building with central route to monument.

o   Retain historic features and use materials appropriate to historic setting;

o   Reflect on local vernacular materials, historic elements and key views; and

o   Improve gradient to existing paths.

Step connection between Kelvingrove Park & Professor Garden

Improve gradient to existing paths

Route to monument

Lawn terraces

Improve gradient to existing paths
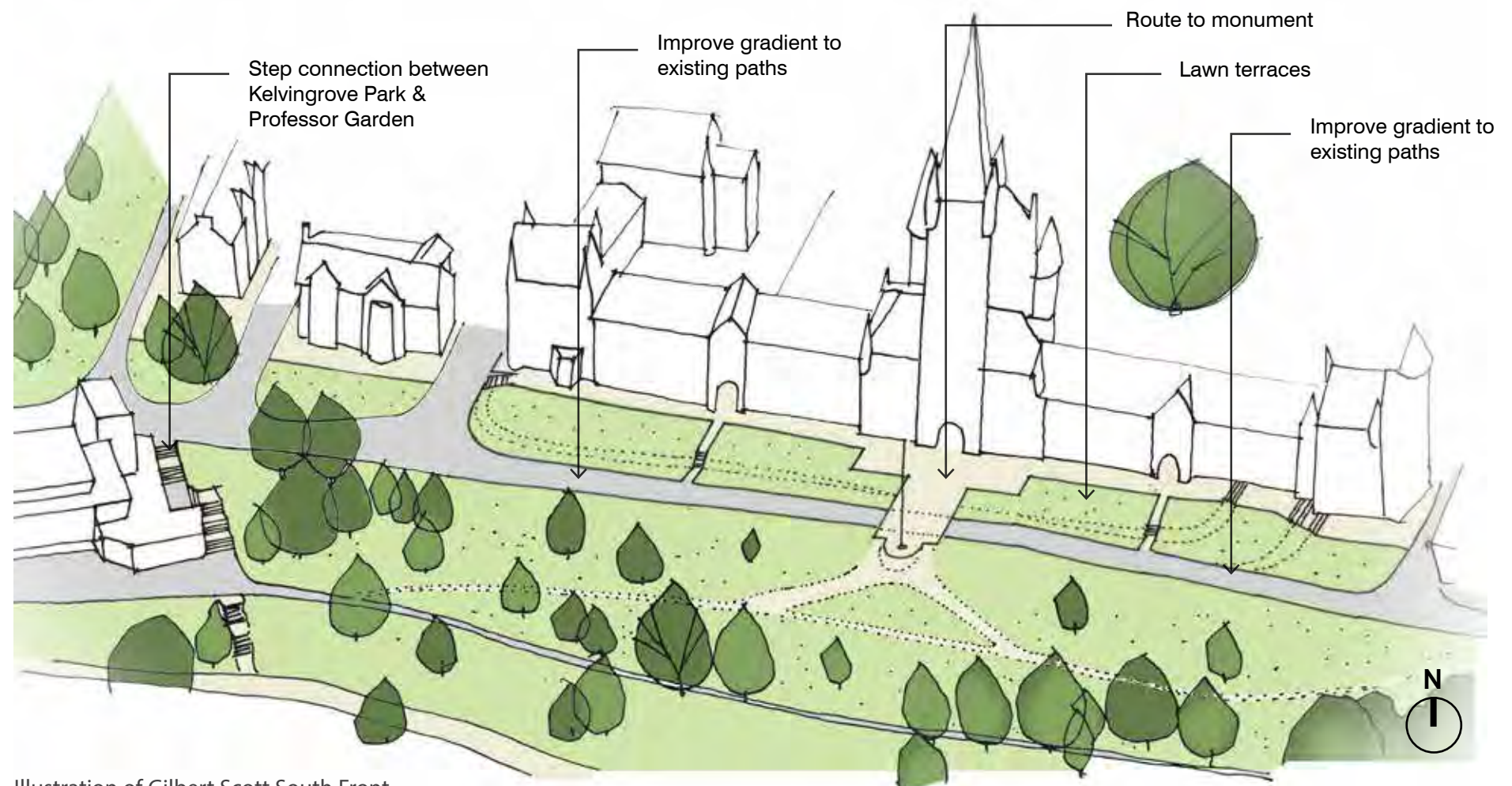
Illustration of Gilbert Scott South Front

Image of stunning views from Gilbert Scott south terrace

Precedent Image - Remove the dominance of cars and re-establish the landscape lawn to Gilbert Scott Building

Precedent Image - A south terrace lawn with views over Kelvingrove park creates a new social focus point.

Landscape Corridor:
University Avenue Southern Edge
with Gilbert Scott building north

o   To become part of the landscape corridor network alongside widening of footpaths next to University Avenue;
o   Paved corridor linking Gilbert Scott Building with Professor Square and Professor Gardens with continuing routes to Science Precinct & Science Way; and
o   Provide additional pedestrian path across grounds from East Gate pedestrian crossing to Gilbert Scott Building entrance.

Character:

o   Passing through, meeting and arrival space.
o   Maintain mature and historic character with emphasis on simple soft landscape.
o   Retain historic features and use hard materials appropriate to historic setting.
o   Establish better connections with the East Gate.

Gilbert Scott building

Parking removed from front of building

Accessible parking spaces

Raised table / shared surface

Narrowed road 2 way traffic

Remove on street parking from both side of the avenue

Footpath to Gilbert Scott Building with new gate.

Connecting pedestrian path to Gilbert Scott Building

East Gate

Pearce lodge and gate

Illustration of University Avenue Southern Edge

5.5 University Place

Plan

- o Provide a pedestrian and cycle focused route linking University Cross with Byres Road.
- o Rain gardens for local paving, Learning and Teaching Hub surface water run-off.
- o Controlled service access to adjoining sites.
- o Limited parking to west end of University Place.
- o Introduction of larger trees to rain garden environment to become part of landscape corridor.
- o Provide seating and gathering opportunities for students.

Character:

- o Passing through and meeting space.
- o Provide clear routes for pedestrians and cyclists using sympathetic materials continuous through landscape corridor.
- o Integration of appropriate planting to rain gardens to reflect strongly on the overall character of the route.
- o Integration of seating and spaces for students to meet.
- o Integration of controlled service vehicle access.
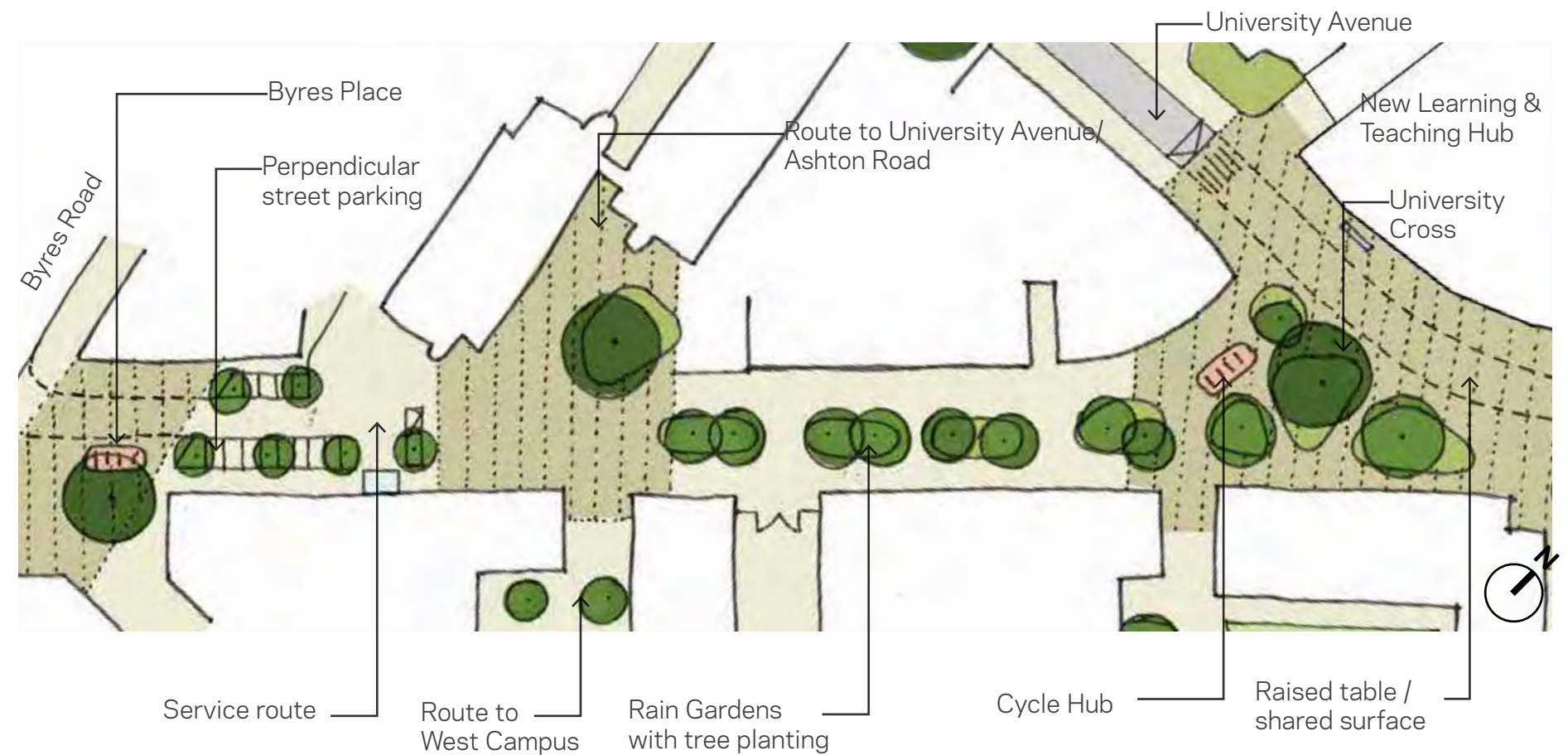
Plan Illustration of University Place

A new green urban space

Meeting space

Precedent Image of integrated SuDS

A raised pavement emphasise the pedestrian

University Place
Sketch view looking South

new university square

Lawn terraces

Covered connection to new
university square

Service access

Science Precinct

Route to new university square

Bus Stop

Byres Place

Cycle Hub

Parking

Service access

Rain Gardens with tree planting

Cycle Hub

Route to University Avenue/
Ashton Road
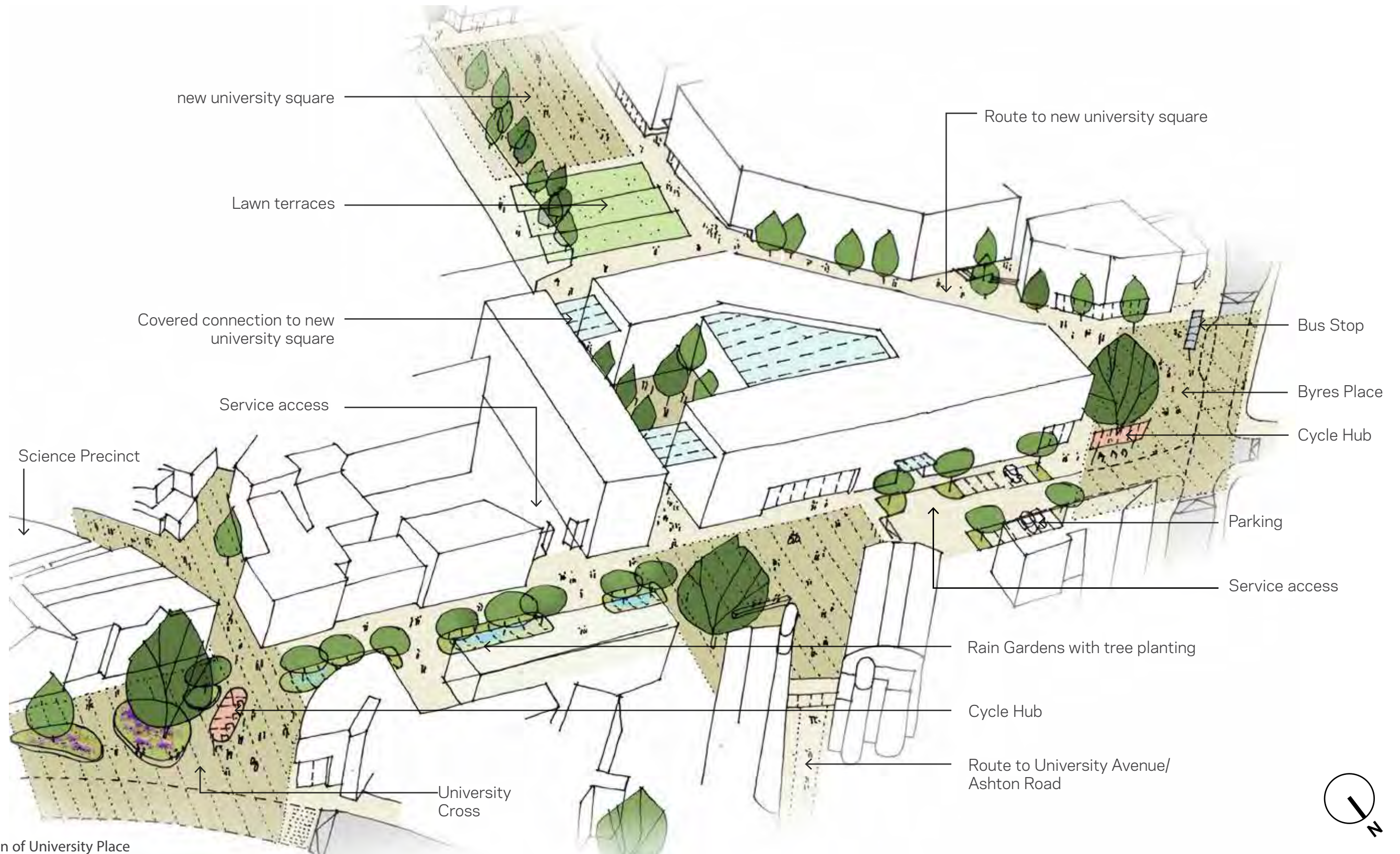
University
Cross

Illustration of University Place

University Place
Sections

Section Key plan

University Place Existing Conditions
Section - University Place Existing Conditions

Footway	Parking	Carriageway	Parking	Footway
3.5m	4m	7.5m	4m	3m
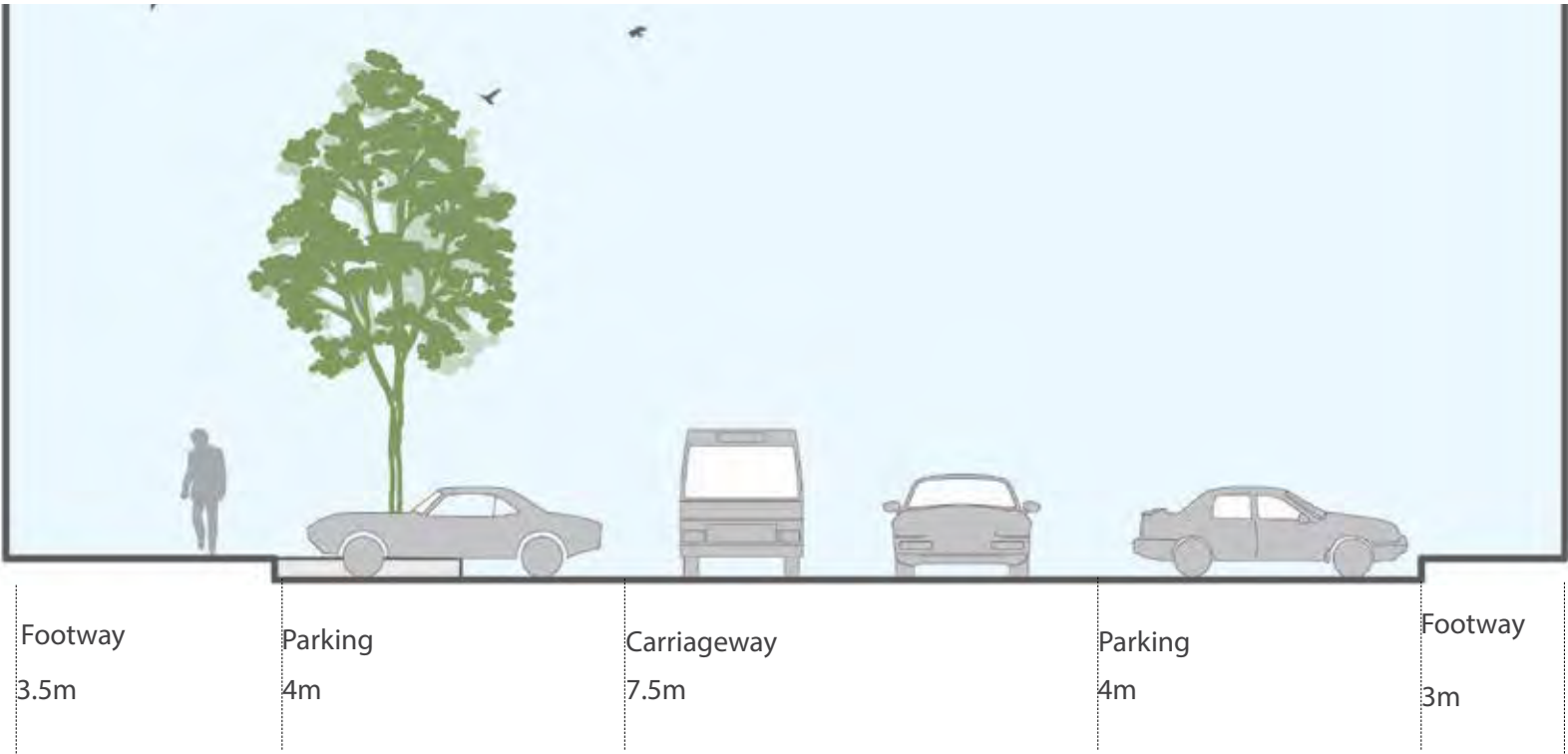
Building frontage →

Pedestrian lighting →

Cycle and managed service route
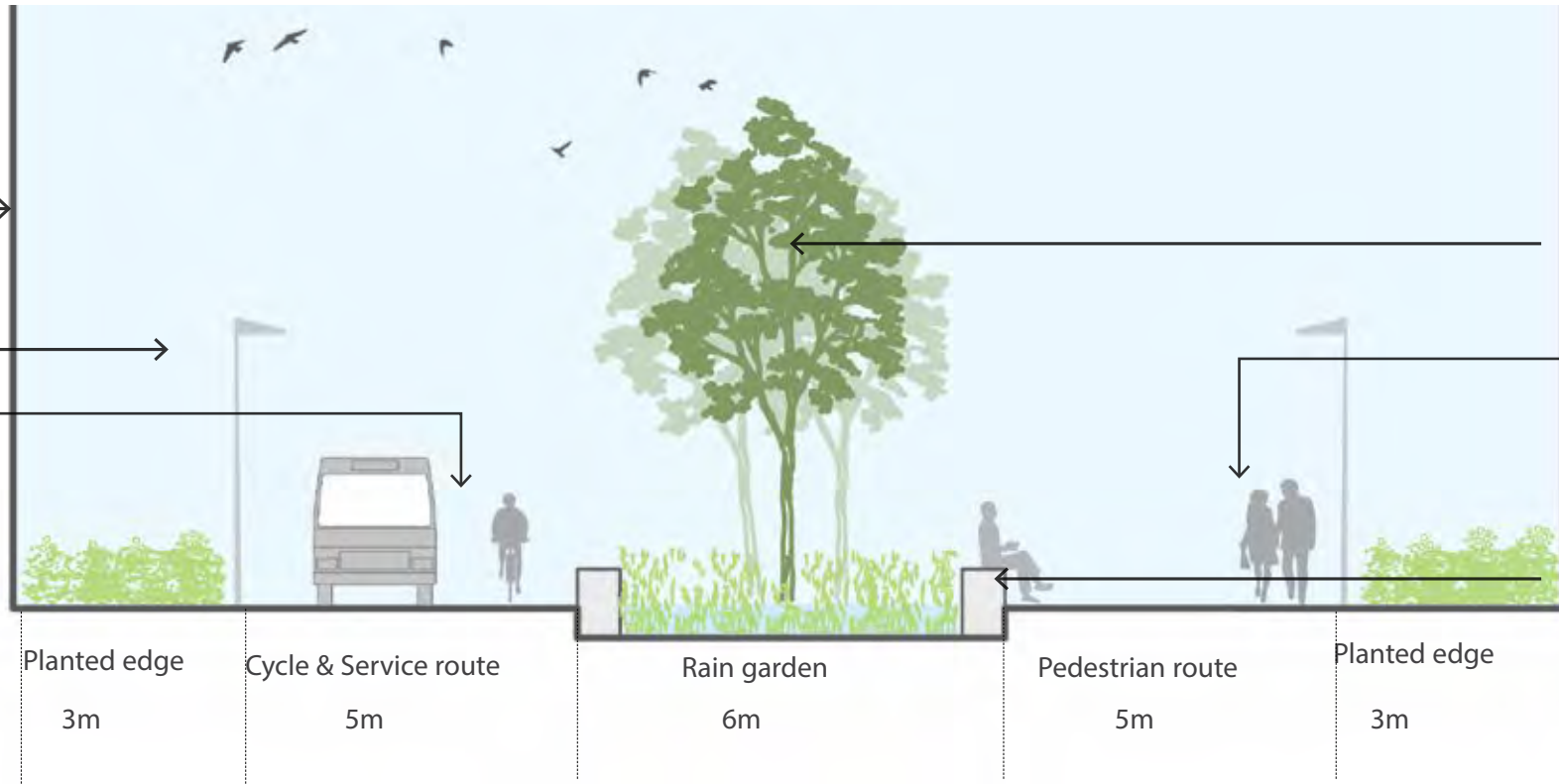
Terraced rain garden with tree planting

Pedestrian

Seating opportunities

University Place Proposed
Section - University Place Proposed

Planted edge	Cycle & Service route	Rain garden	Pedestrian route	Planted edge
3m	5m	6m	5m	3m

New University Square & Rain Gardens

o   Continuity of soft landscape link between University Place / Byres Road and Kelvingrove Park;

o   Introduce tree planting to provide continuity along this link;

o   Lawn and hard landscape spaces to include trees to demarcate route, connect with park and provide shelter;

o   Rain gardens and trees to southeast link between new university square and Kelvingrove Park; and

o   Placement of trees important to retain views to distant buildings.

Character:

o   Passing through, social and meeting space.

o   Predominantly hard landscape with urban tree planting. Allowing for growth to complement mature landscape settings of the historic areas of the campus.

o   Tree planting and public realm to be clearly part of landscape corridor network.

o   Integration of appropriate planting to rain gardens to reflect strongly on the overall character of the route and connection with Kelvingrove Park.

Precedent Image of Rain Gardens

Tree planting within new university square

Rain gardens & stepped access to Kelvingrove park

Continuation of park setting in front of development

Dumbarton road

Kelvin

Rain Garden with steps

Rain Garden with steps

Tree planting within new university square

Rain gardens & Accessible access to Kelvingrove park

Dumbarton road

Kelvin

Rain Garden with accessible ramp

Rain Garden with accessible ramp

Lilybank House Gardens

Engineering Way

Considerable change is proposed by the University in this area. The new landscape corridor across the top of the hill would connect a newly proposed hotel in Lilybank Gardens with Lilybank House, development of Adam Smith Building through to the public realm associated with the Fraser Building and Reading Room Gardens, providing improved connectivity with the Library. It is envisaged that the public realm would aim to:

o   Establish a mature landscape setting influenced by Lilybank Gardens and University Gardens;

o   To provide a variety of spaces throughout this part of the landscape corridor that responds to proposed building use; and

o   Include improved links with University Gardens, local streets, University facilities and spaces.

Character:

o   Passing through and meeting space.

o   Predominantly soft landscape with connecting paths. Allowing for growth to complement mature landscape settings of the historic areas of the campus.

o   Forms connections with the University Gardens to the south and the Fraser Building & Reading Room Gardens to the east.

o   Provide a landscape and public realm complementary to the Kelvingrove park setting;

o   Remove car parking to improve setting, cycle and pedestrian accessibility;

o   Provide clearer definition of entrances to buildings.

o   Allow for a pedestrian and cycle priority route linking the east and west parts of the campus;

o   Maintain character and maturity of landscape; and

o   Establish new link between Engineering Way and Kelvingrove Park alongside Davidson Building.

Character:

o   Passing through space.

o   Maintain mature and historic character with emphasis on soft landscape and trees.

o   Provide clear routes for pedestrians and cyclists using sympathetic materials continuous through landscape corridor.

o   Define entrances spaces to buildings and improve circulation between them.

o   Reflect on local vernacular materials, historic elements and key views.

5.5 University Avenue

Bus stop

Improved cycle and pedestrian access

Learning & Teaching Hub

Road narrowed the length of University Avenue.

Raised table with shared surface to slow traffic. Pedestrian & cycle priority zone

Byres Road

Gateway

Landscape Corridor University Gardens improved pedestrian & cycle access

Pedestrian crossing

East Gate

Service Access

University Place

Improved permeability to Gilbert Scott Building

Bus Stops

Option to increase further traffic calming with chicanes

Cycle Hub

Gilbert Scott Building

University Place

University Cross Landscape space Arrival / meeting / socialising

Bus stop

Primary space between Gilbert Scott & McMillan Reading room

Science Precinct & Science Way

Raised table with shared surface to slow traffic. Pedestrian & cycle priority zone

N

Illustrated Plan of University Avenue

As the main vehicular route through the campus, University Avenue is a convenient and popular route. The objective of the Public Realm & Landscape Strategy is to promote a reduction of vehicle influence on the route, make it more harmonious to its surroundings and more attractive and safe to use by pedestrians and cyclists, by considering:

o Removing designated cycle routes, parking and bus lay-bys and reduce road width to create a slower and less

prominent carriageway through the campus;

o Integrating traffic calming where possible to help reduce vehicular speeds;

o Increasing public realm widths to provide shared pedestrian and cycle routes;

o Integration of gateway moments at entry points from adjoining roads;

o Creating pedestrian and cycle priority zones at the entrance

with the Gilbert Scott Building and at University Cross; and

o Increasing pedestrian and cycle crossing opportunities to align with landscape corridors and desire lines.

University Avenue
Reference Scheme

Character:

o Passing through route.

o Provide clear routes for pedestrians and cyclists using sympathetic materials to historic route and setting.

o Ensure furniture and signage elements are kept to a minimum to reduce street clutter.

o Avoid avenues of trees but arrange randomly and infrequent to reflect historic landscape setting of University and maintain views to significant buildings.

o Provide shared surfacing to focused areas in front of the Gilbert Scott Building and at University Cross to help establish pedestrian and cycle priority areas.

o Integrate traffic calming measures.

Precedent Image 01, for University Avenue

Precedent Image 02 - The introduction of selectively placed large tree planting to University Avenue will reinforcing the park-like quality without emphasizing the roadway

A raised pavement emphasise the pedestrian connection across the Avenue facilitating movement between the two sides of the campus and improves north/south connections.
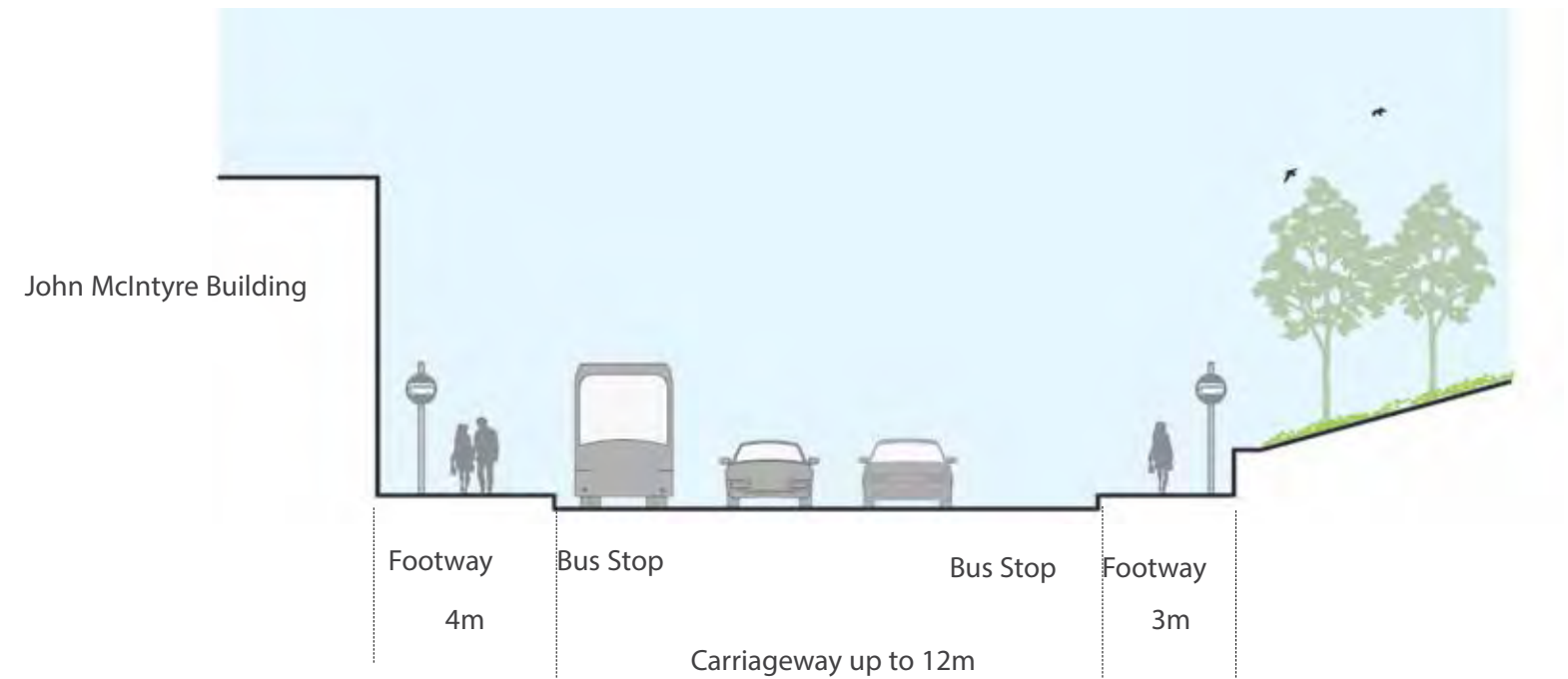

Priority to pedestrians overall and enhancing the quality of the pedestrian & cyclist experience by removing the on-street parking other than for buses & drop-off.

University Avenue
Sections

This section through University Avenue illustrates the potential to:

o   Narrow the existing road;
o   Increase width of footway zone for pedestrians and cyclists;
o   Have a consistent surface finish across a unified space; and
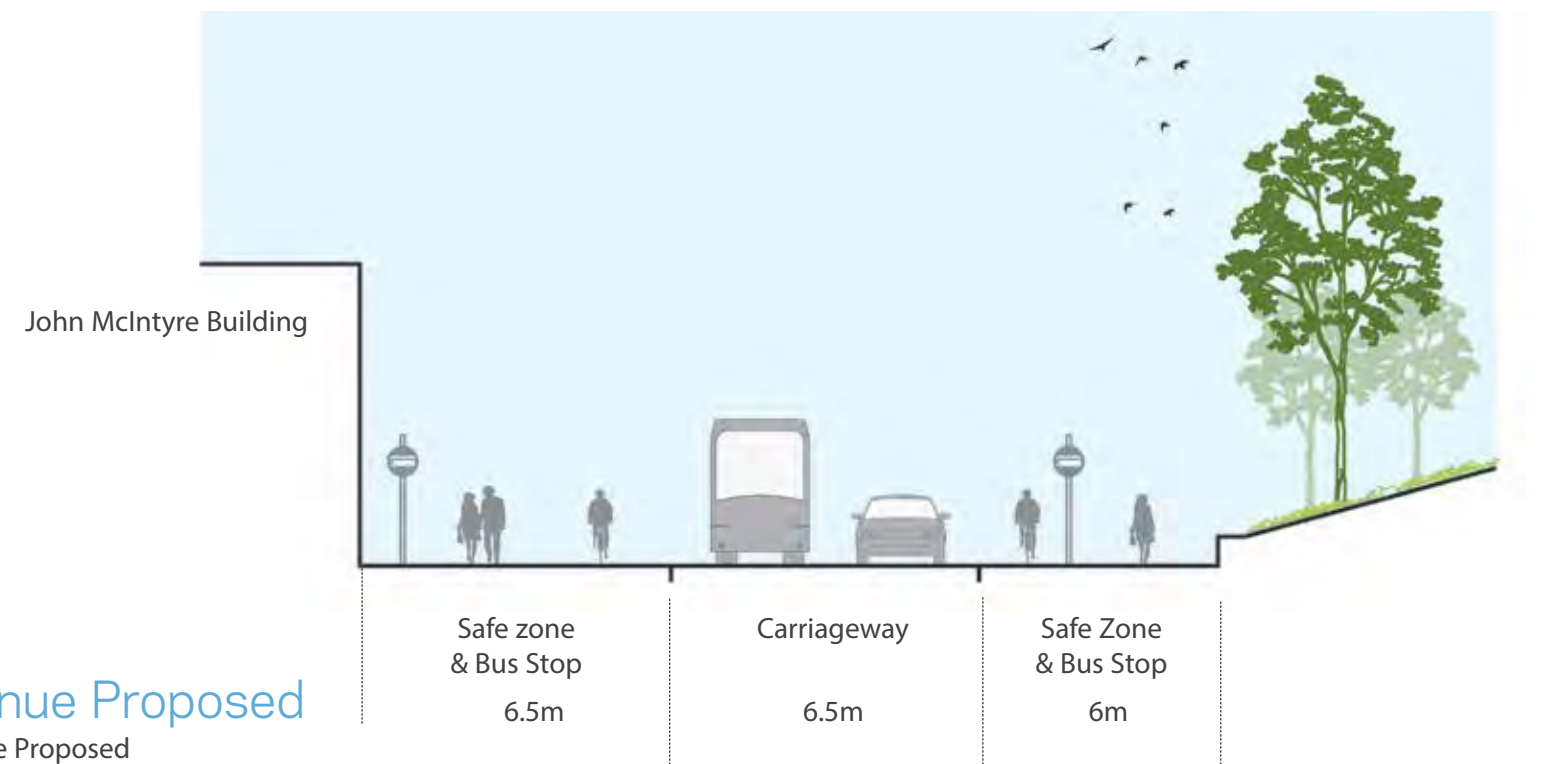o   Maximise pedestrian and cycle priority crossing opportunities.

John McIntyre Building

| Footway | Bus Stop | | Bus Stop | Footway |
| 4m | Carriageway up to 12m | | | 3m |

Section A
University Avenue Existing Conditions
Section - University Avenue Existing Conditions

John McIntyre Building

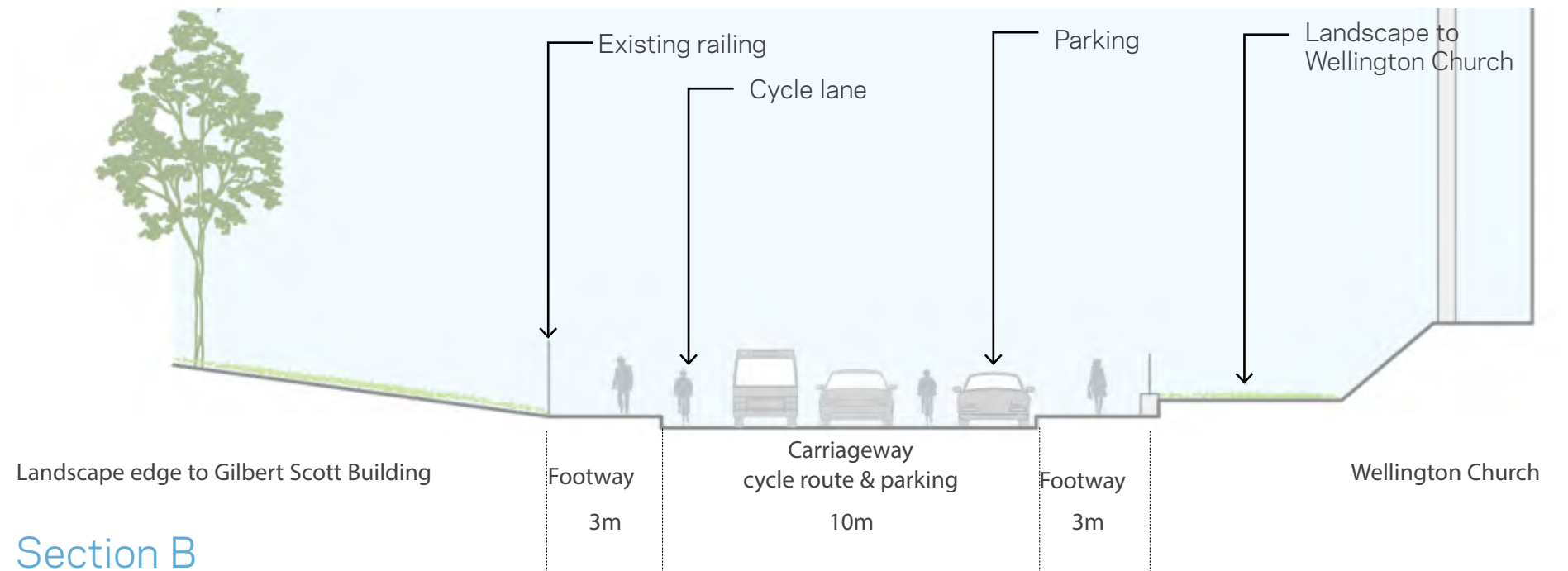| Safe zone & Bus Stop | Carriageway | Safe Zone & Bus Stop |
| 6.5m | 6.5m | 6m |

Section A key

University Avenue Proposed
Section - University Avenue Proposed

123

University Avenue
Sections

This section through University Avenue illustrates the potential to:
o   Narrow the existing road and retain as road;
o   Increase width of footway zone for pedestrians and cyclists; and
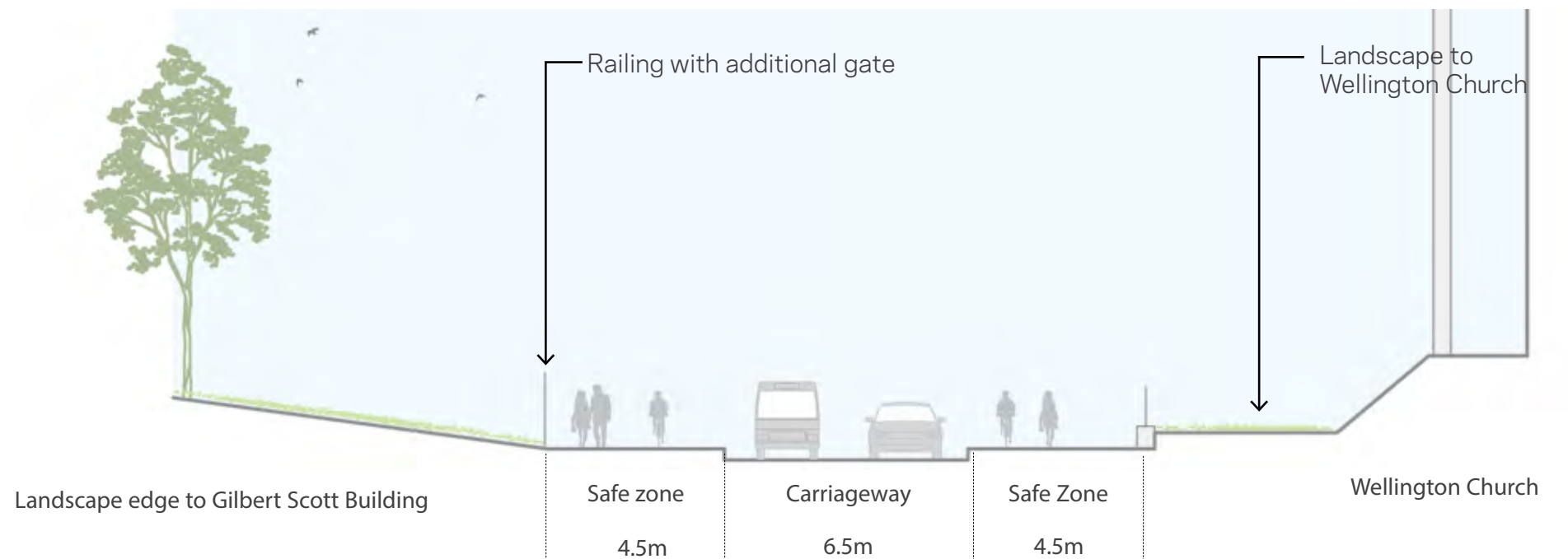o   Improve permeability into the Gilbert Scott Building.

Existing railing

Cycle lane

Parking

Landscape to Wellington Church

Landscape edge to Gilbert Scott Building

Footway	Carriageway cycle route & parking	Footway
3m	10m	3m

Wellington Church

Section B
University Avenue Existing Conditions
Section - University Avenue Existing Conditions

Railing with additional gate

Landscape to Wellington Church

Landscape edge to Gilbert Scott Building

Safe zone	Carriageway	Safe Zone
4.5m	6.5m	4.5m

Wellington Church

University Avenue Proposed
Section - University Avenue Proposed
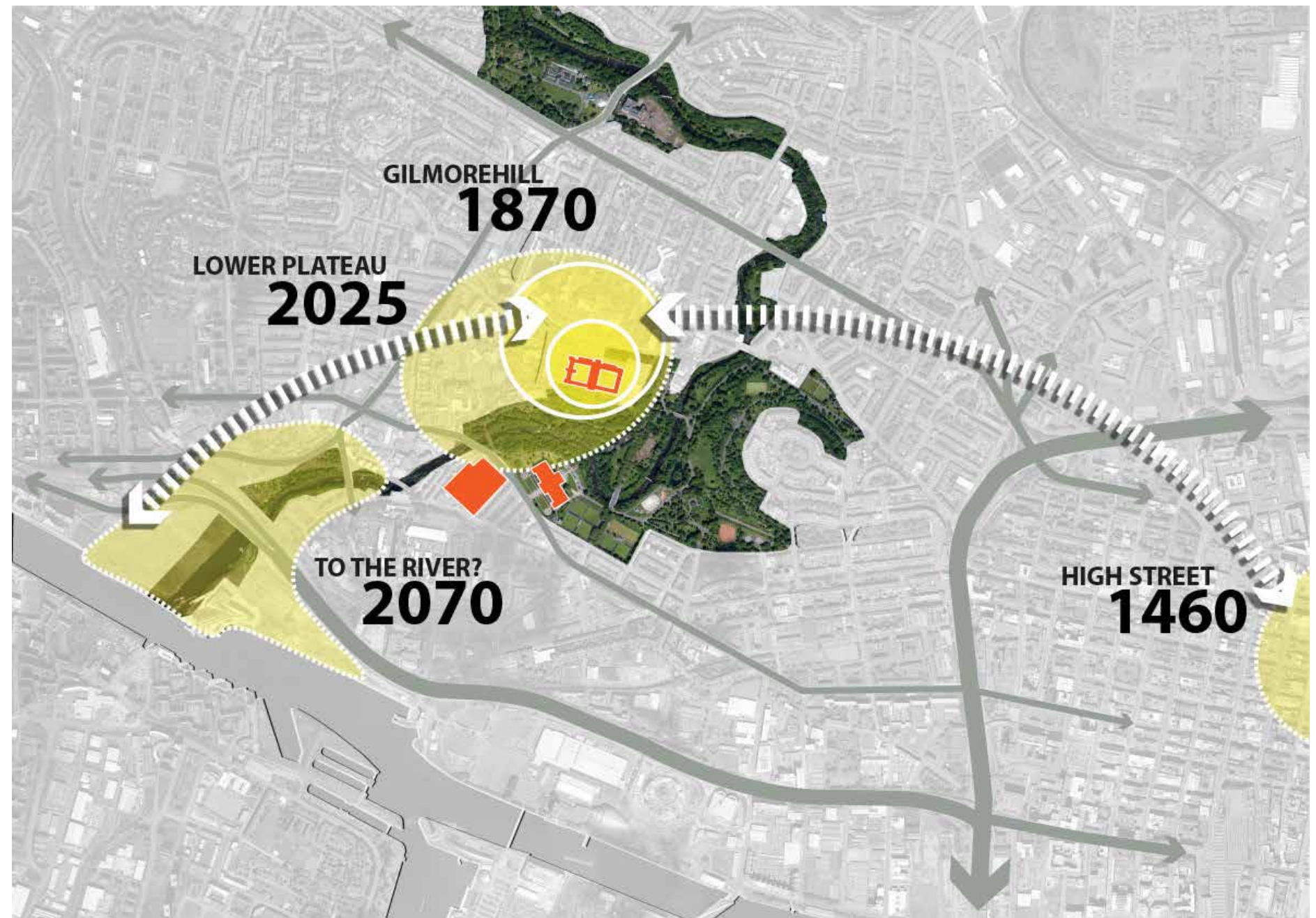

Section B Key

5.6 Steps Ahead

This document forms part of the material for the Planning Permission in Principle Application for the former Western Infirmary Site. Once approved, it is the intention that this document will form a material consideration for all future planning applications within the Campus. In addition to this a detailed planning application for the Learning and Teaching Hub will be submitted in the coming months.

Once Planning Permission in Principle is gained for the Western Site, the University will seek to develop a set of detailed building briefs for individual developments, which will serve to guide development and ensure coherence throughout the masterplan area. The locations for these development have been identified by the University Strategy and have been tested as part of the development of these proposals.

Both these detailed building briefs and subsequent building design will need to take into account the principles held within this document.

The University has also commissioned a landscape design team to further develop the design of the public realm, following the principles set out in this document.

GILMOREHILL
1870

LOWER PLATEAU
2025

TO THE RIVER?
2070

HIGH STREET
1460