





Introduction

This document defines the Design Guidelines for the development of Phase 1 of Inverness Campus at Beechwood, Inverness. They provide a design framework to deliver coherence and quality in the the overall masterplan.

The Guidelines define the design principles and parameters that are requirements for the development of the Phase 1 Occupier plots and outline the quality and nature of the Estate landscape and infrastructure to be developed by Highlands and Islands Enterprise (HIE).

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Introduction

01

Inverness Campus masterplan

Inverness Campus is an initiative facilitated by Highlands and Islands Enterprise (HIE) to develop a regional centre for innovation and lifelong learning in the Highlands and Islands, providing a range of 'tertiary' education opportunities covering further, higher and postgraduate levels and encouraging school leavers and mature students to study in Inverness. The vision is for a campus that will encompass knowledge-building in its widest sense. It will be a place where academic and commercial research will go hand-in-hand with learning and entrepreneurship.

The Campus is located on land known as Beechwood Farm, which is situated on the eastern side of Inverness. The site occupies a highly prominent "gateway" position to Inverness and will be an important centre in the evolving eastward expansion of the city.

The masterplan for the Campus, designed by 7N Architects and Lisa MacKenzie Consultancy, has been developed in conjunction with the project stakeholders to create an environment which will facilitate and nurture their vision. The approach to the masterplan has been driven by their desire to create a gathering place that is connected into the social and physical fabric of Inverness. A place of learning, accessible to all, that is both a local and regional centre for people to come together to interact, communicate and learn.

The masterplan provides a development framework for the initial phases of Campus which is part of a long term strategy for the site. The plan will allow it to evolve in a flexible, phased, manner, responding to evolving Occupier requirements whilst providing a coherent, quality environment for the benefit of all.

The Design Guidelines form a detailed part of this overall framework by defining the design and quality parameters that will be required of Occupiers in the development of their individual plots and describing the concept design for the Estate infrastructure and landscape components.



Inverness Campus Masterplan Phase 1

Pedestrian and cycle
bridge over A9

North Park

Residential / Business
institutions

Beechwood Park

Campus Green

Sports facilities

Inverness College

Land reserved for future
phases and expansion

Campus Ancillary



The purpose of Design Guidelines

What they are:

Design Guidelines: A document providing guidance on how development should be carried out in accordance with good design practice. Provides a framework to establish quality standards and coherency. Should help the Campus feel as a complete entity but with flexibility to adapt to other demands.

What they are not:

Design Codes: A set of illustrated design rules and requirements which comprehensively prescribe the detailed physical development of a site as absolute rules. The graphic and written components of the code are detailed and precise, and build upon a design vision such as a masterplan or other design and development framework for a site or area.

Aims

The purpose of these Design Guidelines are to control the development of the overall visual quality of the Campus and to strengthen the respective character areas within the masterplan in order to create a coherent sense of place.

These Guidelines define the key principles behind the masterplan and a set of requirements for the development of individual plots and common estate areas. The requirements are intended to regulate and control the overall quality and coherency of the Campus whilst allowing a reasonable degree of variety and diversity in the development of each plot to give each Occupier their own identity within the greater whole.

What they are / What they are not

The Guidelines are not prescriptive rules like Design Codes, which govern every detail, but are an overall quality framework that is enshrined within the Planning and development frameworks for the Campus.

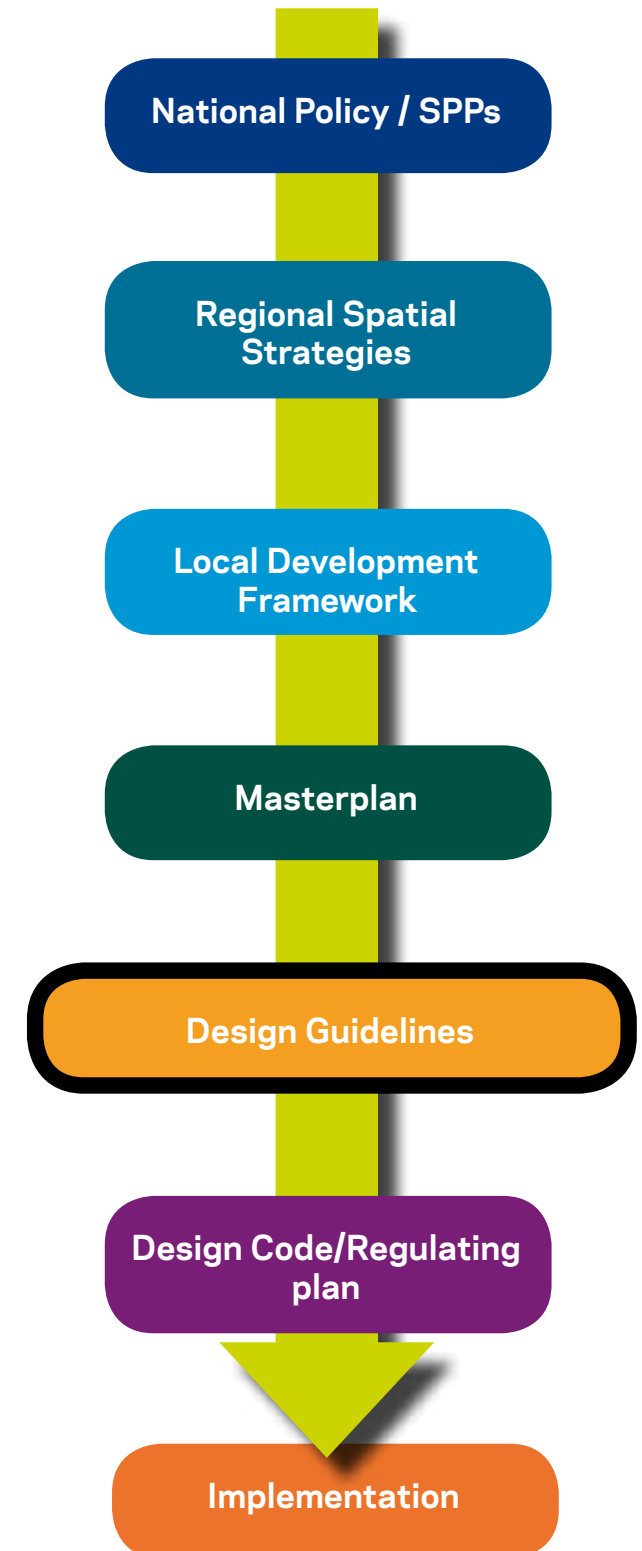
Structure

This document describes the general design principles behind the masterplan, the design concepts for common Estate areas; key boundaries and interfaces and the proposed Character Areas for the Occupier plots, to frame the context for the guidelines for the respective plots. A 'parameter' plan for each occupier plot then sets out specific guidance.

Control Mechanisms

The Character Areas are controlled by general requirements on the appearance of the buildings, landscape and palettes of materials. There is a particular emphasis on landscape as this has been used as the principal device to structure the masterplan and define the character of each area within it.

The requirements for the plots are specific and defined through a series of 'parameter' plans and sections which govern permissible build zones, building heights, and frontage and boundary treatments.



How to use this document

This document is structured as a series of guidance pages, both general and specific, which can be combined to form a bespoke package of information as required.

Chapter 1: Introduction

Sets out the overall aim and content of the Design Guidelines Document

Chapter 2: General Masterplan principles

Guidance and definitions which apply to all areas in the masterplan.

Chapter 3: Estate character areas

Specific information and guidance on the character areas defined for the common 'Estate' lands.

Chapter 4: Key Estate elements

Concept design and description of the infrastructure and landscape elements to be constructed by the Estate in Phase 1.

Chapter 5: Boundaries and Interfaces

Sections are the primary means of defining spaces, boundaries and treatments within the masterplan. They specify mandatory setbacks and dimensions to be adhered to in the planning and design of Occupier plots and setting out/configuration of estate elements.

Chapter 6: Character area guidance

Occupier Plots which have a similar character are grouped into character areas in order to define consistent building types, materials, colours, planting and hardscape.

Chapter 7: Occupier plot 'parameter' plans

A summary of the characteristics of each Occupier plot in terms of area, existing trees and watercourses is presented along with an illustrative plan showing how the specific guidance might be followed.

17 plots have been defined for Phase 1 of the Inverness Campus. For quick reference, the respective character areas and sections which apply are set out adjacent.



General Masterplan principles

02

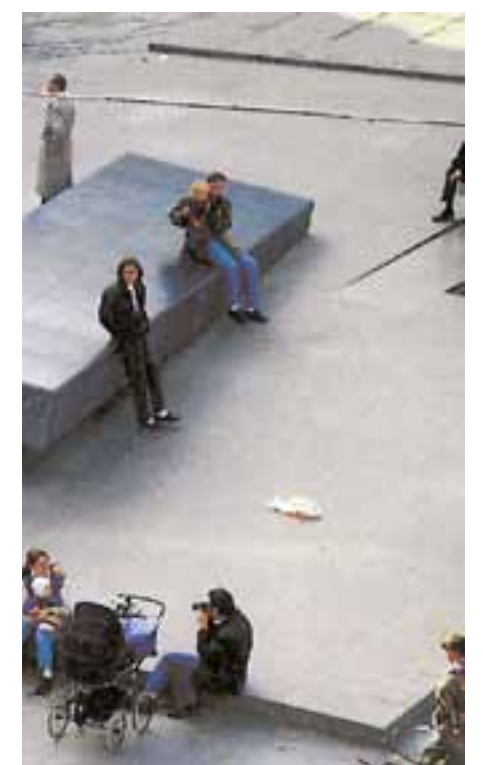
Design principles

The approach to the masterplan for the Inverness Campus project has been driven by a desire to create a gathering place that is integrated with the social, physical and cultural fabric of Inverness, on a site which is presently isolated by surrounding road and rail infrastructure. A Campus which will be accessible to all, a local and regional centre for lifelong learning where people will come together and exchange ideas, knowledge and friendship.

For some people, such as students from outwith Inverness, the Campus will be their home, for others it will be a place they visit regularly to work, learn, keep fit or just relax. For some it will simply be an inspiring place that they pass through as they move around the city.

The Inverness Campus masterplan is structured around a central parkland landscape which defines the high quality of the Campus environment and provides a cohesive framework within which the diverse group of occupiers can establish their own identities. This green spine is focused on the views to Ben Wyvis and the mountains to the north, drawing the distant Highland landscape deep into the site through a variety of special, interpretative spaces such as the Campus Green which will be the social heart of the first phase of the project. In future phases the axis will culminate in a prospect building and vantage point on the northern promontory acting as a highly visible gateway to the city and the Highlands and Islands. This will also be the landing point for a new pedestrian-cycle bridge which will open up connections between the Campus, the city to the west and the future expansion of Inverness to the east.

Landscape will unify and order the Campus masterplan whilst rooting it to the site through the retention and enhancement of existing tree lines, watercourses and habitats. The central parkland, which flows from the North Park to the wooded hillside to the south, is composed of a layered sequence of spaces characterised by interpretations of different Highland landscapes which will define the essence of the place.



Campus Masterplan key principles: Phase 1

The guiding principles of the masterplan are to:

- establish and strengthen connections to the city centre and beyond
- create a strong identity for the campus through distinctive masterplan elements and character areas
- strengthen and incorporate existing mature landscape structure
- provide significant public open space that can become a resource for campus users and surrounding residents
- assign densities which are appropriate to location and character
- provide a flexible access strategy that ensures Campus access from the outset, but does not prevent the construction of the Inverness Trunk Link Road in the future
- plan flexible plots which can accommodate expansion
- design a high quality place for living, working and playing
- provide high quality services and recreational facilities for the local area
- allow for flexible economic and business growth
- provide opportunities for innovation, commercial and co-location within the masterplan



Estate land and Occupier plots

Phase 1 of Inverness Campus consists of 17 plots to be developed by individual Occupiers. Common Campus infrastructure and landscape areas are referred to as 'Estate' land and will be implemented in the first instance by HIE.



Estate key principles

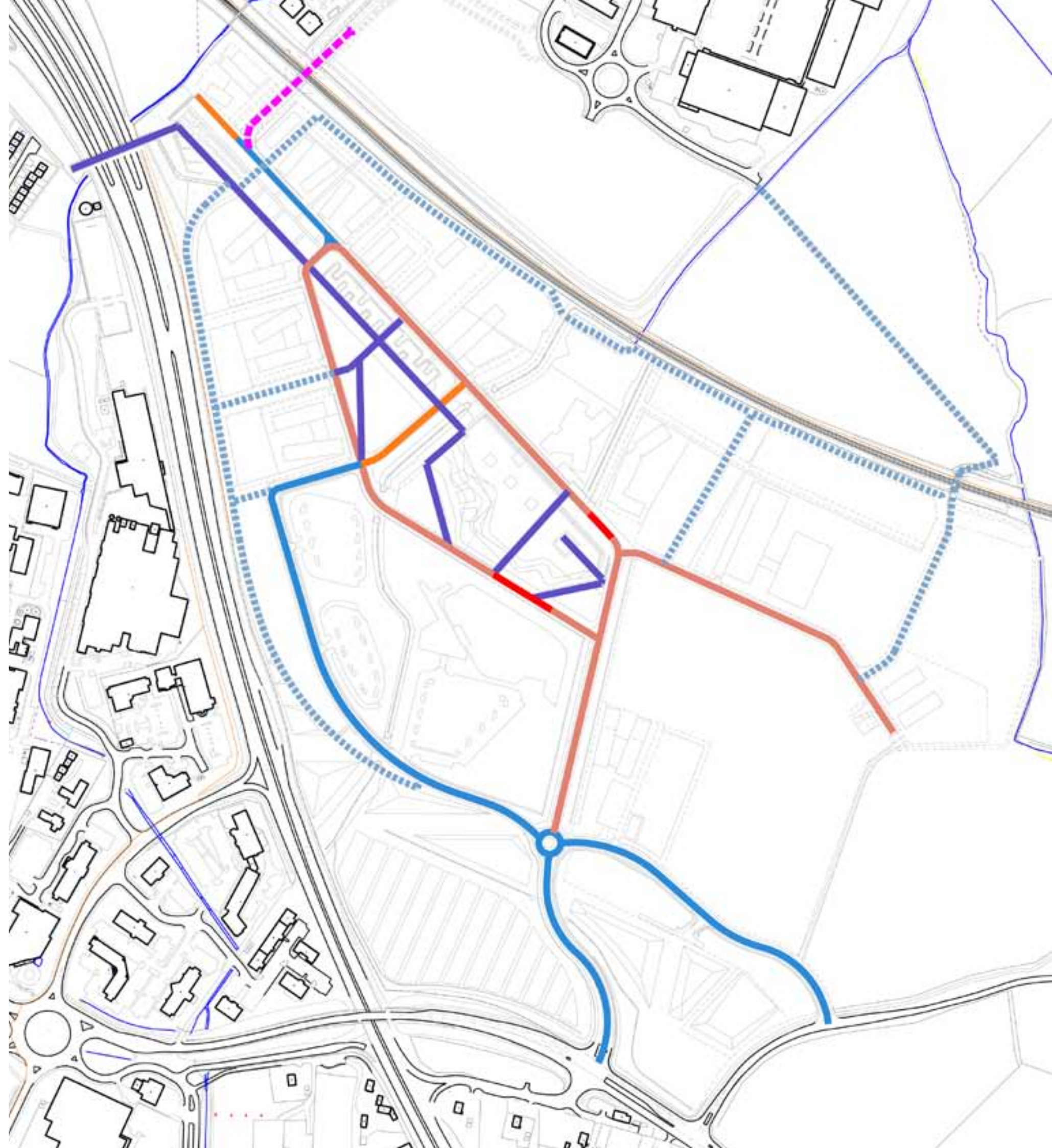
The Estate areas of Inverness Campus must:



- create a quality environment which responds to the unique location
- communicate a strong identity and coherent framework through consistent Estate elements and landscape treatments
- protect and enhance existing landscape elements
- provide a legible and safe pedestrian and cycle network
- create a range of public open spaces for active engagement and contemplation for all Campus users



Design principles for roads and public routes

A clear hierarchy of roads and associated public routes are to be established in Phase 1. The masterplan and guidance within this document safeguard future public routes which will be implemented as Phase 1 is established.



-  red asphalt
-  standard asphalt
-  granite sett
-  grey block surface
-  key ped/cycle route
-  future ped/cycle route
-  future railway crossing options

Sustainable design considerations

The built environment makes a major contribution to the world's carbon dioxide emissions; it is therefore essential that new developments work harder and perform better in order to minimise environmental impact and optimise energy efficiency.

Inverness Campus will build upon the experience and precedents set by recent sustainable buildings in Inverness, such as Scottish Natural Heritage HQ and the new Forestry Commission offices at Smithton which have both set high sustainability standards. Strong green credentials will provide Inverness Campus with a unique selling point, enabling it to set a sustainable exemplar for Scotland and Northern Europe.

The Inverness Campus masterplan itself aims to make maximum sustainability gains in relation to: proximity to public transport links, walkability, use of existing landscape features, and building form and orientation. This is achieved through careful arrangement and layout of buildings and as such the masterplan itself is a strong factor in the overall sustainability and the design principles should be adhered to as far as possible.

Design Guidance

- Ensure masterplan sustainability gains are reflected in building design
- Improve upon Building Regulations as minimum standard
- Comply with the standards set out in the Highland Council's 'Designing for Sustainability in the Highlands'



Specific materials are suggested within this Design Guidance through Material Palettes. Within these specifications there is scope for significant sustainability gains which should be considered in any development. There is an opportunity to reduce greenhouse gas production through the selection and specification of less energy demanding materials.

Timber (particularly local) is identified as a key construction material with low environmental impact and efficient local production systems for other materials should be considered from the outset. Reference should be made to BRE guidance on material specification. The Green Guide to Specification gives the relative environmental performance of materials and components so that their use may be assessed by designers and specifiers with regards to low environmental impact.

Based on specific Life Cycle Assessments, the Green Guide provides a clear ranking system by which materials can be evaluated against each other and particular weightings allowed for Occupier preferences.



WHY THIS MATTERS THE CONTEXT FOR SUSTAINABLE DEVELOPMENT



MAKING IT HAPPEN GOVERNANCE AND DELIVERY

Extract from "Choosing our Future"
Scotland's Sustainable Development Strategy 2005

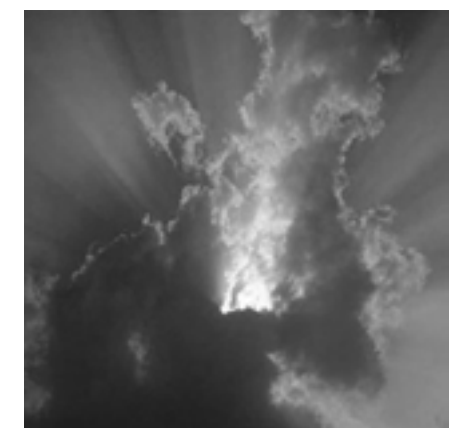
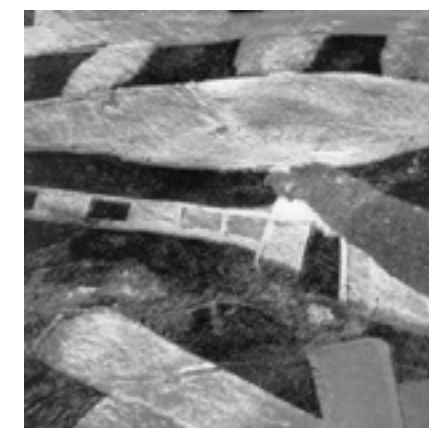
Landscape framework: A Green Infrastructure

The landscape defines the essential structure and character of the Campus. The Highland landscape of the Inverness Campus site is distinct, diverse and unique in both character and identity. Landscape is integral to the cultural, social, economic and ecological processes of The Highlands and Islands; as such it was a key driving force in the design process which produced the masterplan and has a similar level of priority within the Design Guidelines. The site has a series of interrelated landscape characters which have informed the definition of the respective character areas. The new landscape will have a texture and grain which is embedded in the existing terrain and defines the Highland character of the Campus.

Wherever possible existing site vegetation and features are to be retained and enhanced to initiate a strong identity and new personality for the landscape of the site. A wide range of species benefit from having a variety of sites and habitats physically linked and expanded. The landscape framework ensures that all new development avoids damage to the existing landscape resource of the site and enhance it where possible.

Wildlife conservation principals have been integrated into the masterplan at all scales from a relationship to context through site planning design and management and the proposed materiality of both soft and hard detailing. The plans and sections within these guidelines define interrelationships and integrate the key repeated landscape elements, namely walls, trees, hedges, access surfaces, SUDS and planting that will create a cohesive identity for the site.

For further detail on the principles, please refer to the Landscape Framework document.






Parkland, watercourses and existing trees to be retained

The landscape structure for the Campus has been defined by a principle of retaining existing features wherever possible, to build on the existing character of the land. The Design Guidelines require these features to be retained.

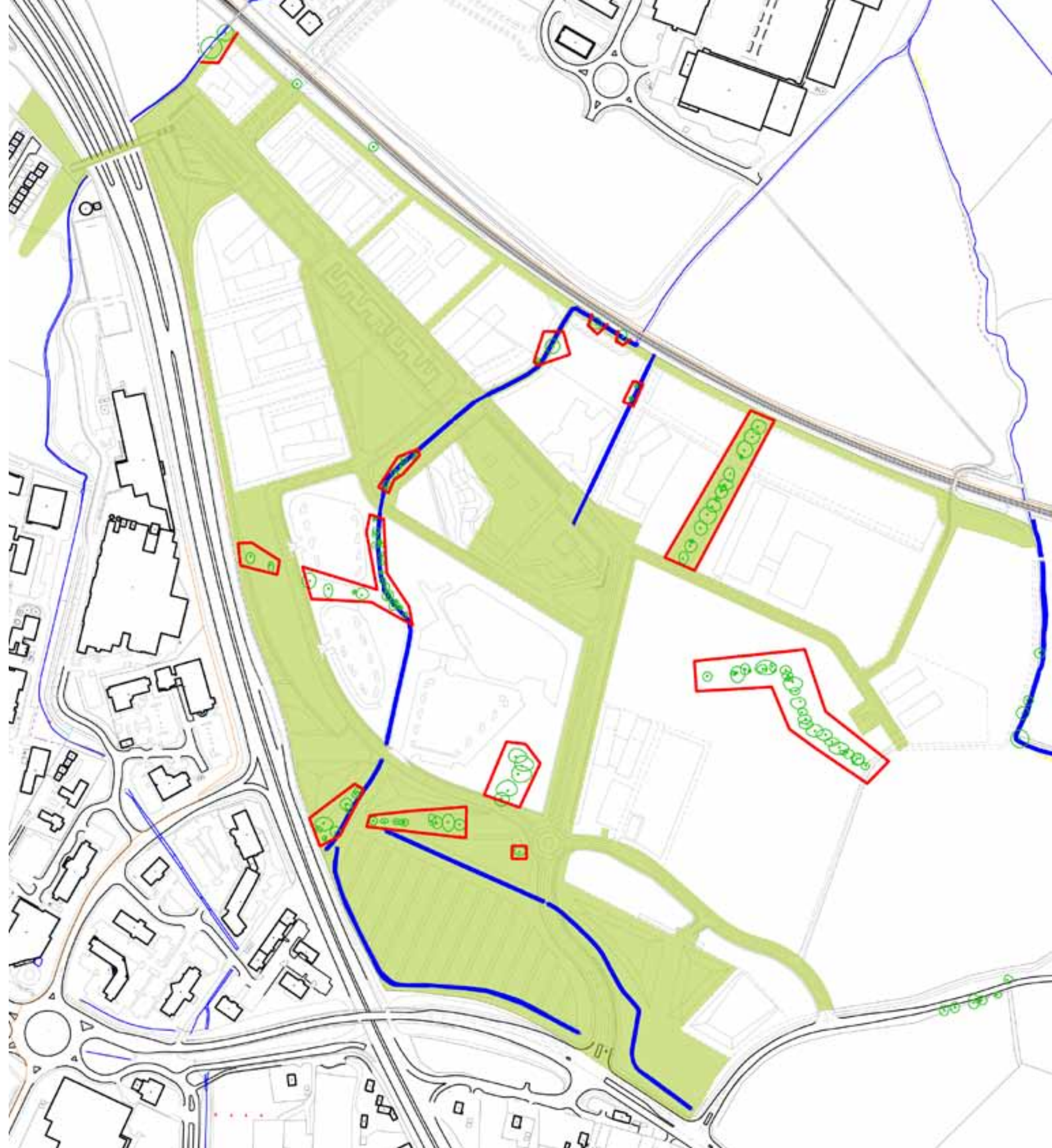
An existing watercourse runs through the site and careful consideration should be given to any construction close to this existing feature. The Northern perimeter of the site is delineated by an existing watercourse that transects the eastern railway line by means of an aqueduct.

A number of tree belts run across the site and tend to follow existing streams, ditches or field boundaries. These existing structural landscape features have proven pivotal in shaping the spaces and places of the masterplan and have been retained wherever possible throughout the development area. The particular trees and areas are identified in the respective Occupier plot guidance along with appropriate construction buffers.



-  existing tree area
-  existing watercourse
-  Landscaped Area

This plan is for design information purposes only and all questions relating to maintenance obligations should be referred to the detailed Development Management Scheme





Watercourses and SUDS

Water connects and unites public space and encourages user interaction with the landscape. Articulated reflective spaces, naturalised pools, channels and wetland areas all play a significant role in shaping the new landscape.

A surface water management plan has been prepared and a SUDS network for the whole site has been designed. There are significant pond areas within the Estate land and there will be a requirement for source control by all the Occupiers to implement SUDS features within their plots in a manner that is co-ordinated with the site strategy.



-  existing watercourse
-  SUDs pond area

Lighting

A Campus Lighting Design strategy has been developed with Arup and HarrisonStevens. It is based on response which takes into account the Highland landscape setting of the Campus and promotes the use of managed darkness. The concept of managed darkness is at the core of the strategy; the Campus is located in an area where fairly low ambient lighting levels may be expected and any new lighting should respect that condition whilst ensuring a safe and secure environment is created outwith daylight hours.

The general principles for the Campus lighting are:

- Managed darkness appropriate to the Highland landscape: the least light of the highest quality
- Highest colour rendering to achieve the best information levels through low light
- High standards of optical control to minimise light pollution and minimise disruption to wildlife
- Lighting to strengthen and enhance the hierarchy of spaces and routes within the Campus and the buildings themselves
- An emphasis on reducing and removing lighting which is contradictory or misapplied

The lighting strategy clearly defines specific elements which have particular lighting approaches and attributes. These elements combine to define the identity and non-daylight character of the Campus and provide a hierarchy for users and visitors to navigate and experience the place. The key lighting elements are:

- Campus loop road
- Other roadway lighting
- Site axis pathway
- Art gallery island
- Campus Green area
- A9 bridge
- Low light corridors along watercourses

In addition, specific Occupier plot guidelines on lighting are set out which should be achieved by developers.

Managed darkness appropriate to the Highland landscape

Whilst a minimum level of lighting for security is required and expected, the argument for the use of as little light of the highest quality is strong in terms of context, character, sustainability and energy.

Highest colour rendering

The higher the quality of the colour rendering, the more information can be obtained from a scene. Lower levels of light are needed when such rendering is used to achieve the perception of better lighting.

High standards of optical control

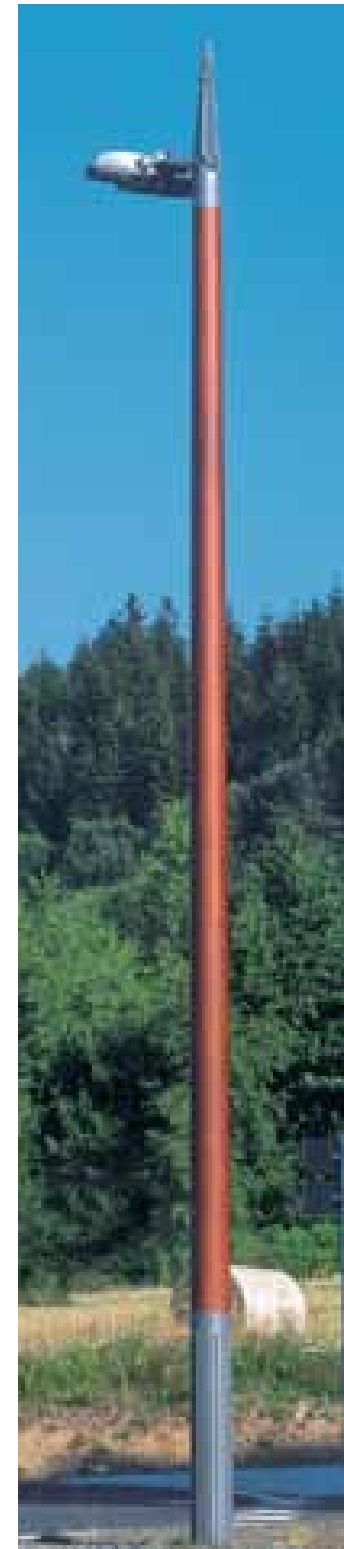
In order to direct light only where it is required, lighting fixtures should utilise high standards of optical control. This will reduce light pollution and reduce the overall impact of the development within the landscape.

Lighting to enhance the hierarchy of spaces and routes

The Campus lighting complements the wayfinding strategy to ensure that a legible and clear hierarchy is in place which is valuable for users and visitors of the Campus.

Reducing contradictory lighting

The aim of any lighting placed within the Campus should be to strengthen the overall strategy and anything which does not fit with the principles should be avoided.



Timber tapered column



Thorn Dyana



Bega Bollard

Key estate lighting elements

Campus loop road

The loop road should be differentiated from other roads to establish and identify the heart of the campus. Timber post mounted lighting is proposed for the outside of the loop road. The aim is to keep the general height of the posts to a minimum and avoid a typical 'highway' appearance of very tall poles.

Other roadway lighting

Where the roadway bisects the campus loop road low level fixtures designed for streets should be utilised. These should be positioned where possible on one side of the road only. All other roadways should have lights with high metal poles.

Site axis pathway

The site axis pathway provides an opportunity to introduce a special lighting treatment which clearly identifies the route as a major element of the design. Low level fixtures are proposed to light users with reflected light from the path. Additionally, small solar-powered indicator lights are proposed at regular spacings along the length of the path and continue across the roadway to indicate the continuous linear route.

Art gallery island

The gallery island offers a chance to create a unique reflecting feature within the SUDs water feature. The gallery space should be lit so as to be usable during darkness, but also should have second lighting scenario where the gallery is closed to users and itself becomes the artwork.

Campus Green area

General lighting is required at key public areas within the Campus Green: outside the entrance of the Inverness Campus and at the plaza in front of the Social Enterprise Hotel. This general lighting should be supplied at low level and may be integrated into street furniture and the boardway crossing point,

A9 bridge

Lighting of the A9 bridge is designed to enhance the 'blade' concept and ensure the Campus is marked with an appropriate and distinctive gateway feature during darkness.

Low light corridors along watercourses

In order to minimise the impact of light on the wildlife corridor that is the existing watercourse, where it is crossed by roadways the spacing of the fittings should be maximised and light levels reduced.



Wayfinding

Wayfinding is an important element in defining the identity of Inverness Campus; wayfinding elements should work internally within the Campus to aid visitor orientation and outside the Campus into the city and the region. The strategy for site orientation should relate to the Thematic Approach for the Campus described within the Public Realm and Public Art Strategy. A comprehensive Wayfinding strategy is a priority commission which should tie together strands of site orientation, branding and Campus identity into a coherent and positive whole which can evolve and grow with the Campus. This strategy should include:

- Consideration of entry points at regional and city scale
- 'Whole journey' wayfinding to include web and other sources of information
- Graphic identity and branding
- Accessibility guides
- Building and plot signage standards

An outline of general principles and aims for the Campus is set out here as an initial brief. This includes guidance on arrival points and orientation information, general directional signage on Campus and principles for positioning of signage and interpretation points. Guidance for Occupiers is given on positioning of identity signage within the individual plots.

A full Wayfinding strategy should be commissioned once there is a clear view on the Occupiers who will be part of the initial phase. At this stage, an appropriate level of wayfinding would be to ensure that visitors and users of the Campus are able to find key buildings, routes and spaces within the common landscape spaces. The general principles for wayfinding on the Campus are:

- Develop the hierarchy of routes and spaces established by the Campus masterplan as the basis for a clear and legible network for journeys around the site. These routes should be clearly signposted with a graphic language specific to the Campus.
- Establish the central landscape spaces and the site axis as orienting devices
- Reveal useable public space and encourage discovery and exploration of artworks and landmarks within the Campus.
- Cater for all users: pedestrian, cycle and vehicular.
- Use the strategy as a tool to improve pedestrian linkages and connections to the surrounding area
- Develop a coherent identity for welcome/interpretation points and consider the placement of navigation points

Commissioned designers should demonstrate a positive track record of projects that are successful in guiding people around sites and between buildings. The commission does not require the installation of overly large-scale, cumbersome and expensive features but rather a sensitivity to sustainability, materiality and place.



- Arrival signage
- General directional signage
- Orientation and welcome
- Central landscape spaces
- Occupier identity

Key wayfinding elements

Wayfinding can be delivered in a number of ways: through print (maps), signage and through people acting as guides and information points. These Guidelines focus on signage only at this time and suggest the location and general qualities that should be provided. The plan identifies indicative positions for specific wayfinding devices:

Arrival signage

These are indicatively positioned at the three main entry points to the Campus:

1. Off Culloden Road
2. Off Caulfield Road North
3. New A9 pedestrian/cycle bridge

These should be simple signs with minimal text which signify the entrance to the Campus. Branding and identity should be integrated. Internal signage should begin where arrival signage access ends and offer a change in scale from visibility from public transport to visibility from foot, wheelchair or on bicycle.

General directional signage

These are primarily for vehicular users and should direct drivers at a glance to the main buildings and common spaces within the Campus. These are generally positioned at key road junctions. This signage should be integrated as far as possible with statutory street furniture.

Orientation and welcome

These are for pedestrian and cycle users and provide detailed information on the location and routes to all occupiers on the Campus. There may also be a certain amount of interpretive content which outlines the background to the development and the unique environment which has been shaped. They are positioned at points in the Campus where pedestrians and cyclists naturally would pause and adjacent to temporary parking spaces for vehicle users who require further information. It is proposed that one of the boards is located adjacent to a marketing/information suite at the Campus Green.

Central landscape spaces

The landscape spaces around which the Campus buildings are arranged are important features in themselves to which there should be directional and interpretational signage. This includes the site axis (Wyvis Walk), the SUDs water features and key public art pieces. Path signs should have a high quality material presence on the site, be consistent and offer clarity

Occupier identity

The Wayfinding Strategy commission will compose guidance on a common and consistent language for signage to individual plots. Although it is appreciated that individual plot holders will have their own signage requirements it is important that certain parameters are defined and adhered to in order to maintain an understandable language and aid circulation. A indicative location for consistently identifying occupier plots is identified on the plan.



Combing art and identity. Gordon Young, Blackpool



Orientation and site information. City ID, Southampton



Multiple institutions at the South Bank. Strong, unfussy identity signage

Wayfinding materials, scale and character

Full guidance on the manufacture, size and character of wayfinding signage is best set out through a separate dedicated commission, however the following pages show examples which demonstrate the character and nature of the types of signage which would be appropriate to the Campus.

Arrival, directional and orientation signage should be consistent and drawn from a coherent family. Examples here show contemporary signage utilising bright colours and modern materials which are hard wearing and robust. Signage should have visual impact, but should not be scaled to dominate the public realm or dwarf pedestrians. The exception to this may be the main Campus arrival signage which may more appropriately be significant in size and scaled to adequately act as markers which are visible from the A9. These arrival elements may form part of the public art component of the Campus, see for example the Blackpool piece by Gordon Young.



Thomas.Matthews - Graphic Communicators



Wayfinding and interpretation signage within common landscape areas should be of a 'softer' nature, utilising natural materials and finishes. The following examples demonstrate subtle or traditional techniques such as routes marked on trees to encourage landscape investigation. This may be appropriate as the landscape establishes and allows for changes as the common Campus grounds evolve and become more complex.



Estate Character areas

03

Estate character areas

Specific character areas are defined within the overall masterplan to regulate building types, materials, colours, planting and hardscape. In the case of the Estate areas, a particular character with specific design aims and objectives is set out by area.

1. Approach Avenue South
2. Approach Avenue North
3. Campus Green
4. Beechwood Park
5. North Park
6. A9 Bridge
7. Boundary treatment
8. Other Campus roads

The following pages set out the key design aims for these estate areas and concept plans which have been developed by the Phase 1 design team for tender.



Overview

Approach Avenue South



Approach Avenue North



Campus Green



Beechwood Park



North Park



A9 Bridge



Approach avenue South: Key design aims

This is the first area that the visitor experiences on entering the Campus. The design aim is to establish a strong character and identity immediately. One of the challenges of this area is that the access road will pass through undeveloped farmland and land reserved for the potential TLR. As such, the detailed design for this area must consider a balance between low-cost landscape treatments and high impact elements which provide a strong short-term entrance approach. A clear and safe pedestrian/cycle pathway runs on the west of the access road.

The key estate elements within this area are:

- fence to the east
- hedge to the west
- pedestrian/cycle path to the west

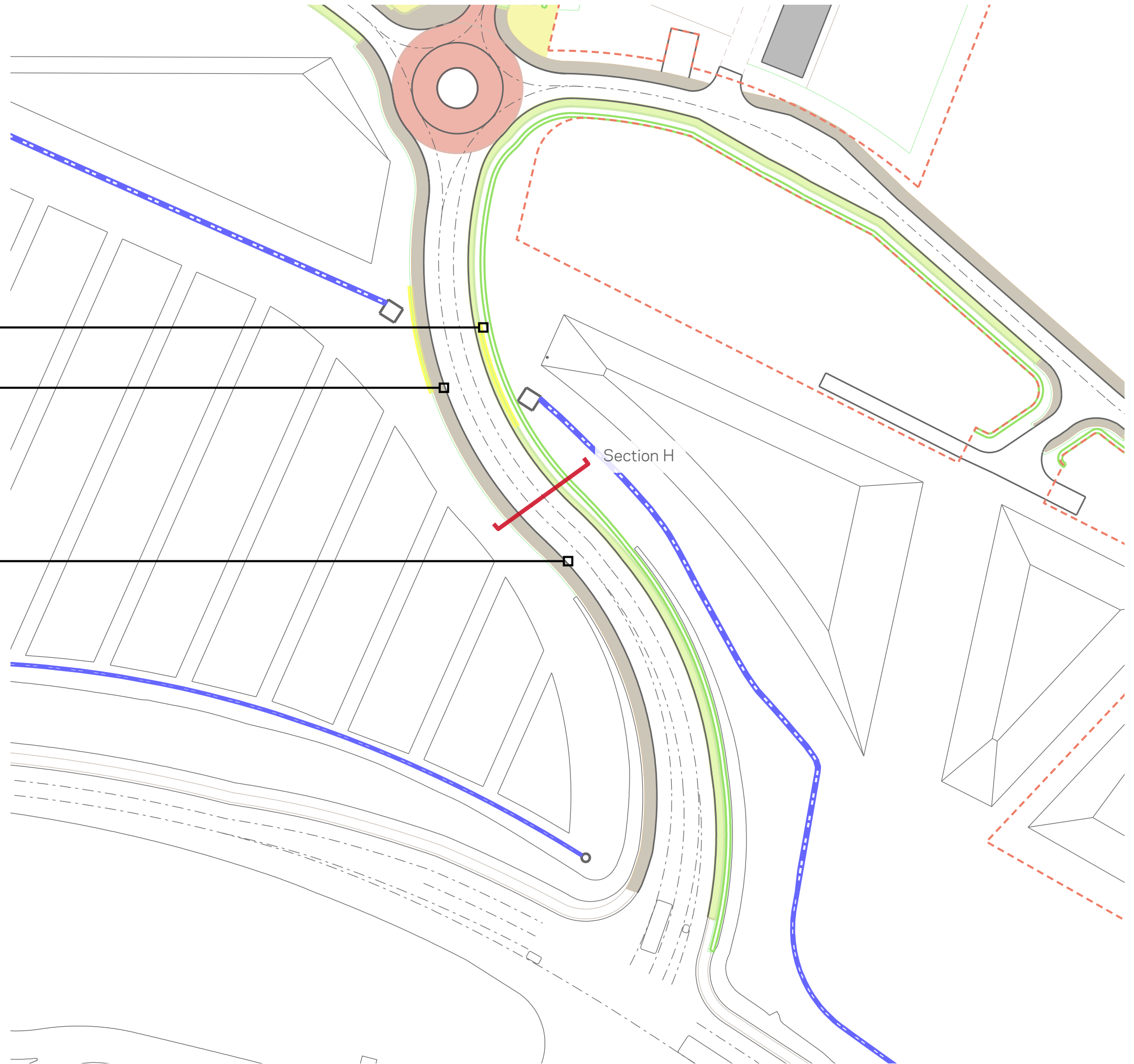


Approach avenue
South:
Concept plan

Estate hedge

Estate fence

Main pedestrian/cycle path



Approach avenue North

Key design aims

This is the first formal Estate area with permanent elements and planting that the visitor experiences. A dramatic entrance artwork is likely to be located at the southern end of the avenue and the coloured asphalt of the Campus loop road also begins at this point. Mature trees line both sides of the avenue and lead the visitor into the Campus Green.

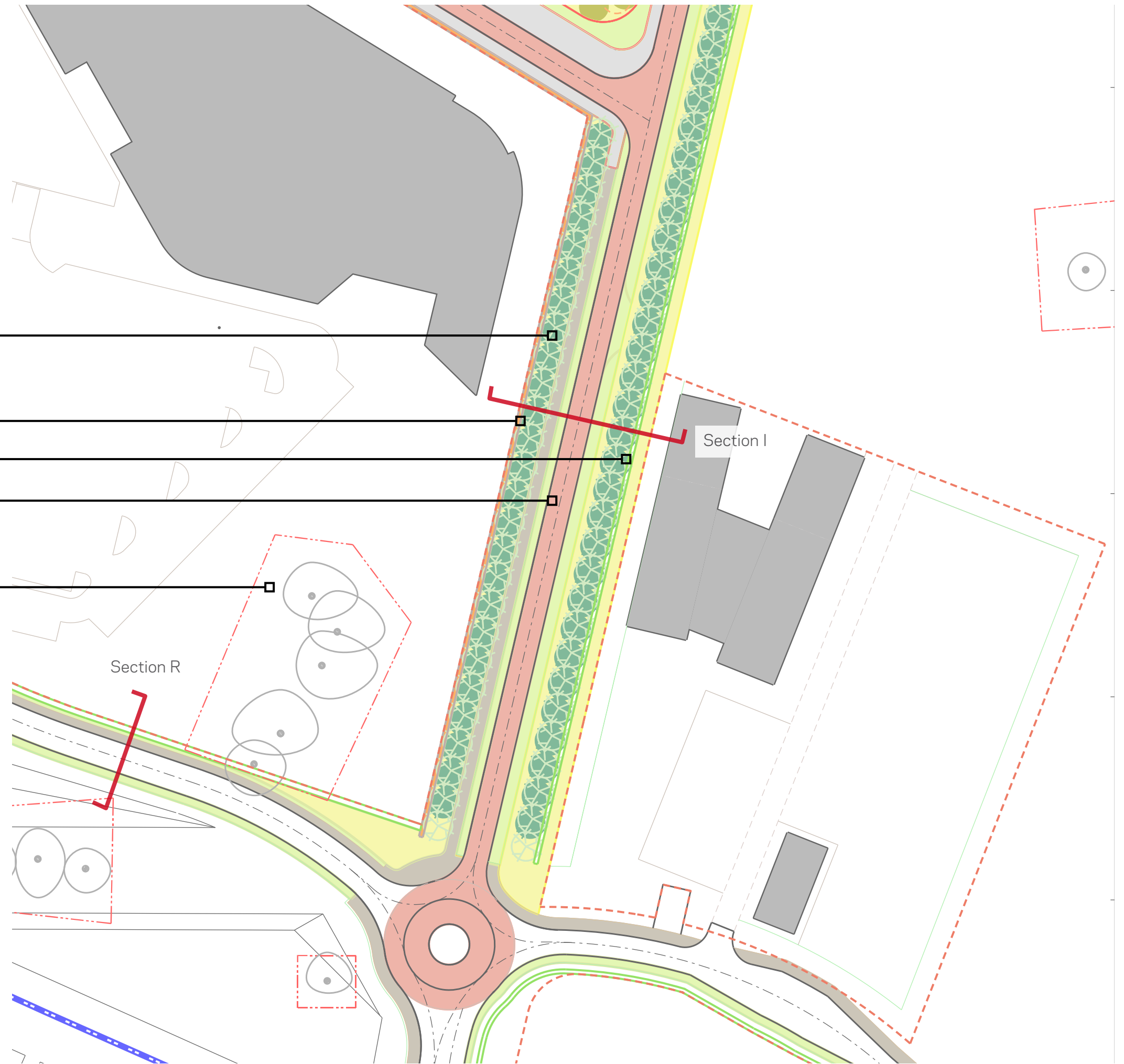
The key estate elements within this area are:

- dry stone wall along west side of avenue
- mature tree planting on both sides
- pedestrian/cycle path to the west
- coloured asphalt road



Approach avenue North Concept plan

- Estate avenue trees
- Estate wall
- Estate hedge
- Estate coloured asphalt
- Existing tree locations to be confirmed and protective measures put in place



Campus Green

Key design aims

The Campus Green is the heart of the development and the where the the highest quality of finishes and materials possible are concentrated. The area combines the main lawn and water features to form an appropriate landscape setting to the main campus buildings and satellites. The site axis on Ben Wyvis is readily apparent through the specific siting of axis structures and the general alignment of roads and paths. The existing watercourse defines the northern edge and the access loop road wraps the other sides. A timber boardwalk links north and south sides of the Campus across a weir structure between the two SUDs ponds.

The key estate elements within this area are:

- dry stone wall defines edges of Occupier plots
- two open water SUDs features separated by weir structure
- "Island Gallery" around specimen tree
- coloured asphalt road



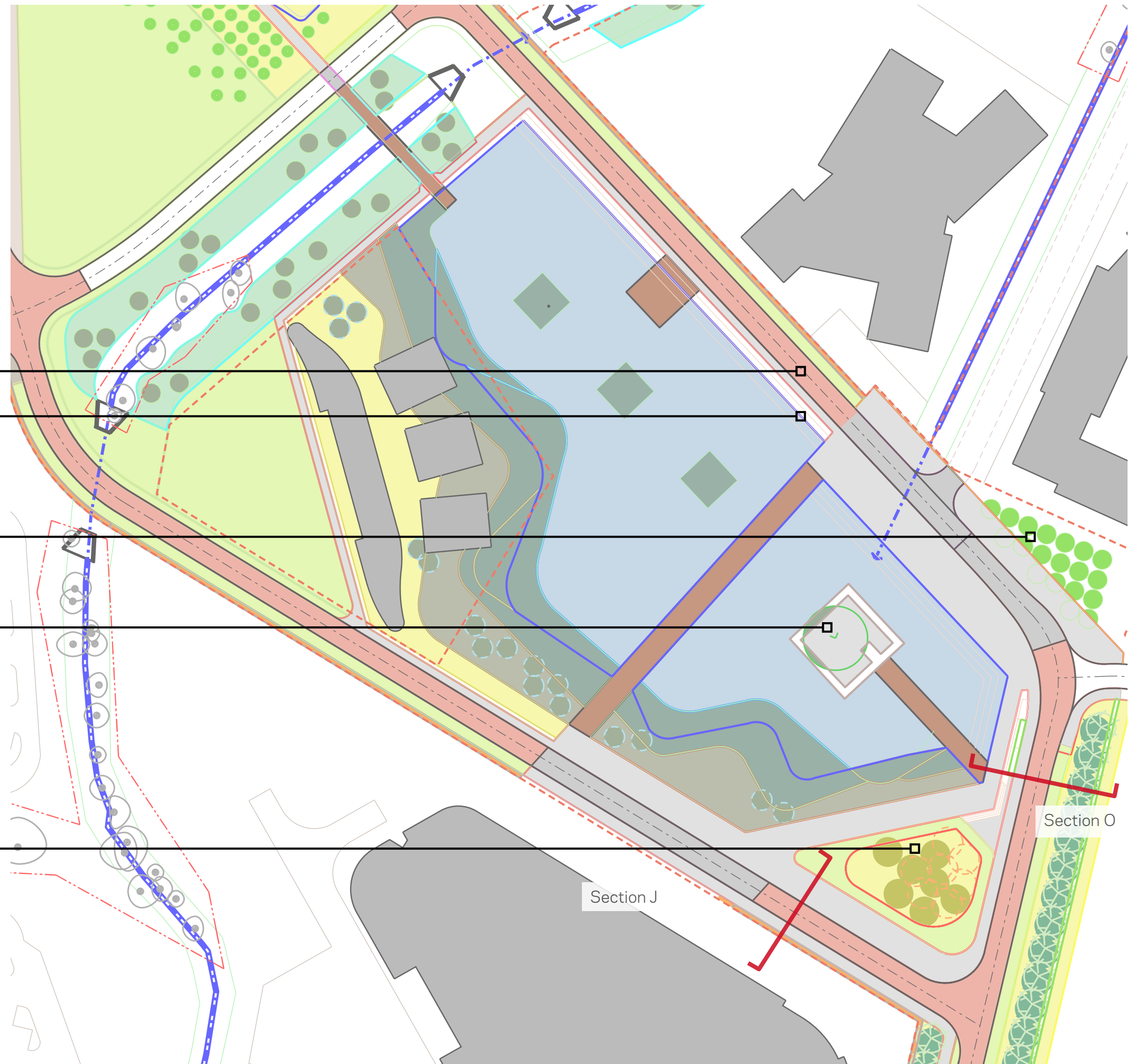
Campus Green Concept plan

Estate red asphalt
Hard north edge to SUDS

Feature tree planting
in future phases.

"Island Gallery"

Feature tree planting



Section O

Section J

Beechwood Park

Key design aims

Beechwood Park has a different character to Campus Green and will develop as later stage Occupiers fill the northern plots. The park has strong links for pedestrians and cyclists between north and south and the site axis is readily apparent in the design and layout of the park. The SUDs feature is an attenuation 'Dry pond' with wet meadow grass mix and does not contain permanent standing water. It is integrated with tree planting based on a grid originating from the site axis.

The key estate elements within this area are:

- dry stone wall defines edges of Occupier plots
- attenuation SUDs 'Dry pond'
- coloured asphalt road



Beechwood Park Concept plan

Birch, Oak and Alder tree grove

Attenuation 'Dry pond' with wet meadow grass mix

Timber decks and bridge



North Park

Key design aims

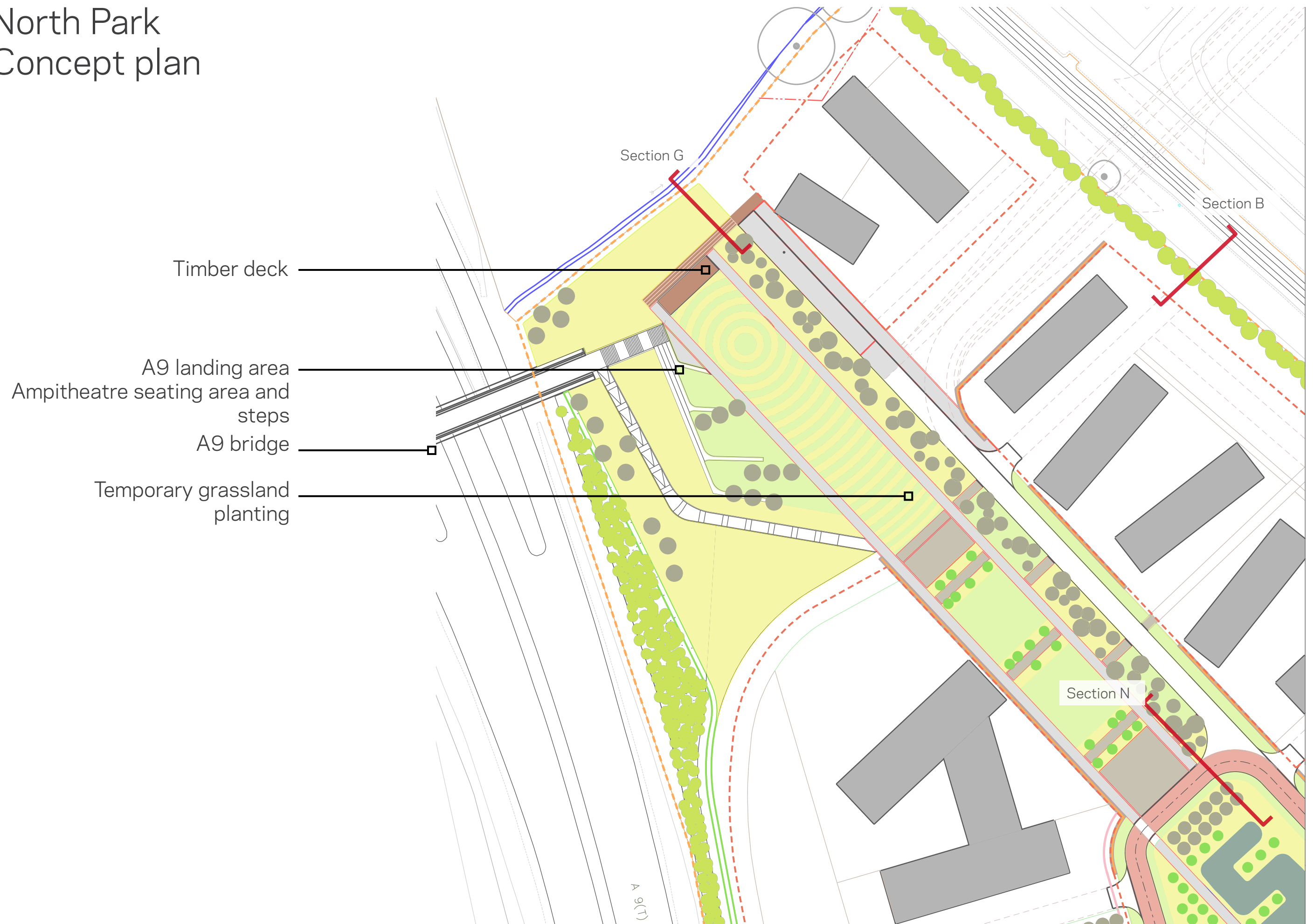
North Park sets up a dramatic view north to Ben Wyvis and is the landing point for the new pedestrian and cycle bridge which crosses the A9 to the north of the Campus. The prospect to Ben Wyvis is the culmination of the site axis and should be the focus of North Park. This Estate area will develop to become the most urban of the main public open spaces in recognition of the developing links to the city. Potential future links to the East over the railway bridge are reserved. Significant mature trees existing on the Campus edge are to be protected and enhanced. A stream demarcates the northern site boundary.

The key estate elements within this area are:

- dry stone wall defines edges of Occupier plots
- axis pathway terminated with timber deck and steps to north boundary



North Park Concept plan



A 9(1)

A9 Bridge

Key design aims

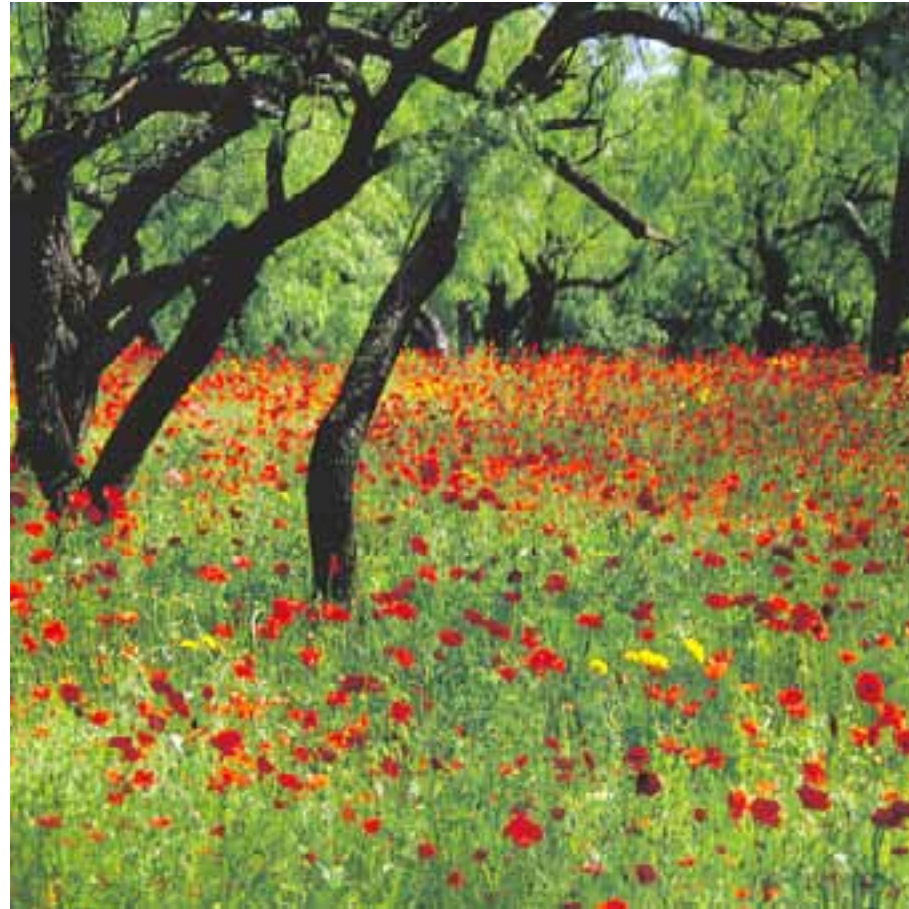
The pedestrian/cycle bridge over the A9 presents a specific image and identity of the Campus. The bridge will be one of the most prominent and visually significant aspects of the construction and must balance practical and economic issues with the quality design intent.



Temporary landscape

Key design aims

There are significant areas of temporary landscape in the Phase 1 masterplan which should not be overlooked. The area to the east of the main access road in particular will be a highly visible area of ground which may require some form of economical landscape temporary treatment.



Key Estate Elements

04

Key estate elements

Several specific elements of the Estate landscape and infrastructure, constructed and maintained by the Estate, form the basis of the Inverness Campus identity and character. By defining these key elements, a common language is established which gives a strong visual coherence to the Campus thereby allowing the individual Occupier plots to be less prescriptively regulated. The key elements are:

Coloured asphalt

In keeping with the established practice of using coloured road surfaces within estate parkland, the use of coloured asphalt on the key 'loop road' around the park creates a distinctive and specific heart to the Campus.

Stone walls

Estate dry stone walls mark primary routes and form the boundaries to plots against the central parkland. The type and construction of the wall becomes part of the identity of the Campus and allows orientation and legibility within the landscape.

Hedges






A particular specification of hedge is defined as an Estate hedge and is used between plots and to define secondary routes.

Fences

An Estate fence defines the western edge of the approach avenue, allowing views into the site whilst providing a boundary to the undeveloped land reserved for the potential TLR route.

Temporary access deterrent

A temporary security earth bund is proposed along the main estate roads prior to each plot being built-out.

-  Coloured asphalt
-  Dry stone walls
-  Hedges
-  Fences
-  Temporary Access Deterrent



Estate elements: Coloured asphalt, fences



A common feature of historic (and contemporary estates) is the use of a coloured asphalt to demarcate a change in identity. The masterplan concept adopts this use on the main Campus loop road which is also the area of highest pedestrian/cycle use. The design of the loop road includes this coloured surface concept and follows the principles of "Designing Streets" in order to encourage the road to be shared by multiple users.

An Estate designed dry stone wall defines the boundary between the Occupier plots and the main loop road. It begins at the main entrance avenue and defines both sides of the central landscape leading to the A9 pedestrian/cycle bridge.

The design and construction of the dry stone walls should reflect the type and size of stone in the locality, as well as particular walling techniques, both local and more widely adopted.

Dry Stone Wall with through stones and feature 'step' detail



Estate elements: Walls, hedges

An Estate constructed and maintained hedge defines the boundary between two conditions: different Occupier plots; and land reserved for future expansion to the east.



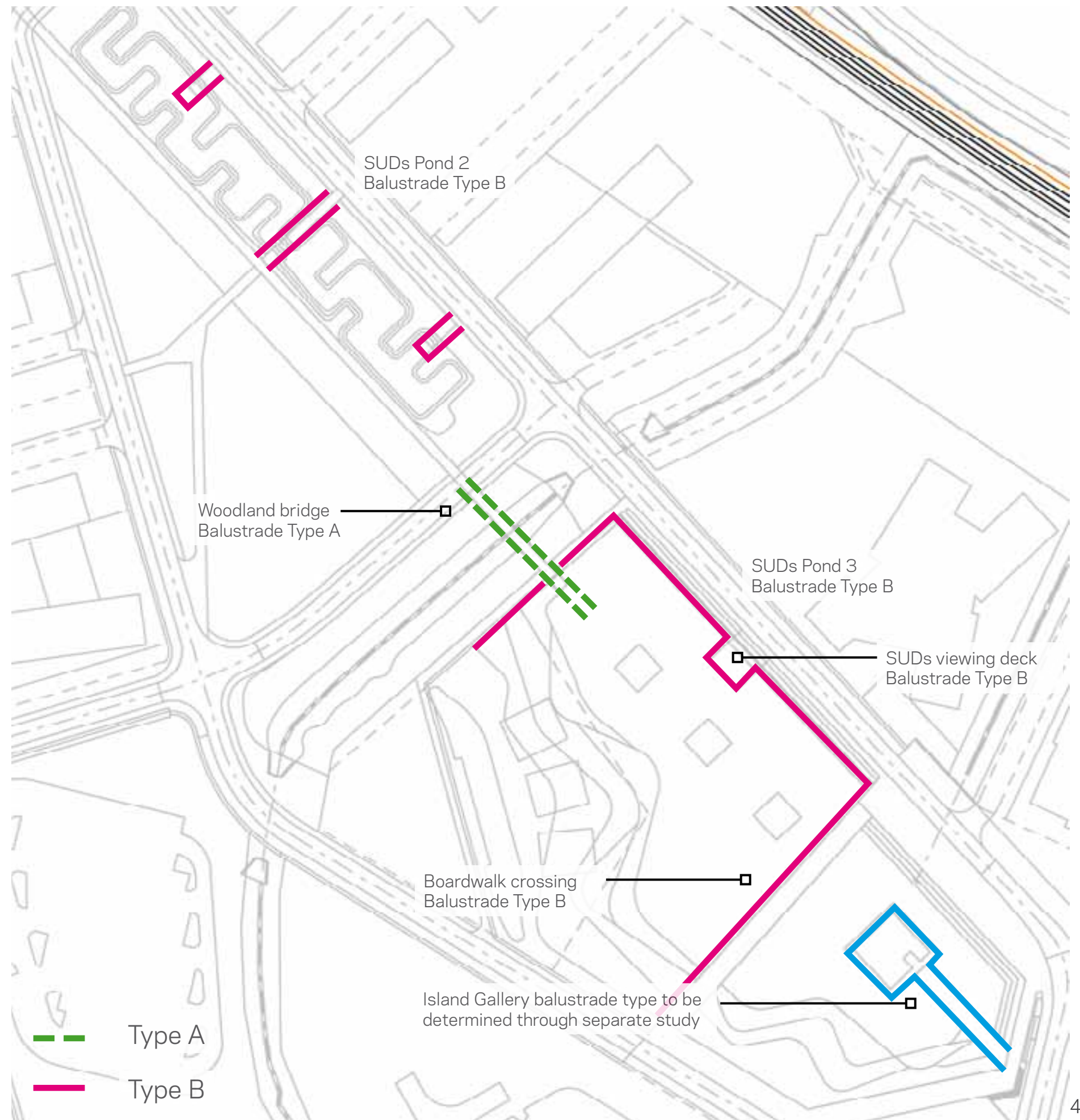
There is a requirement for simple Estate fences to define boundaries between Phase 1 development and future construction. The Concept design is to use standard timbers and wire at close centres in order to convey a specific identity rather than a standard post and wire agricultural fence.



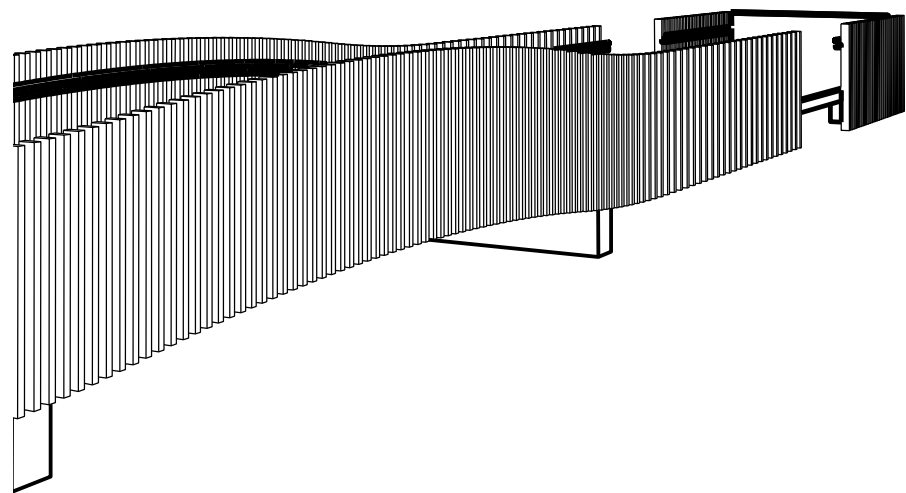
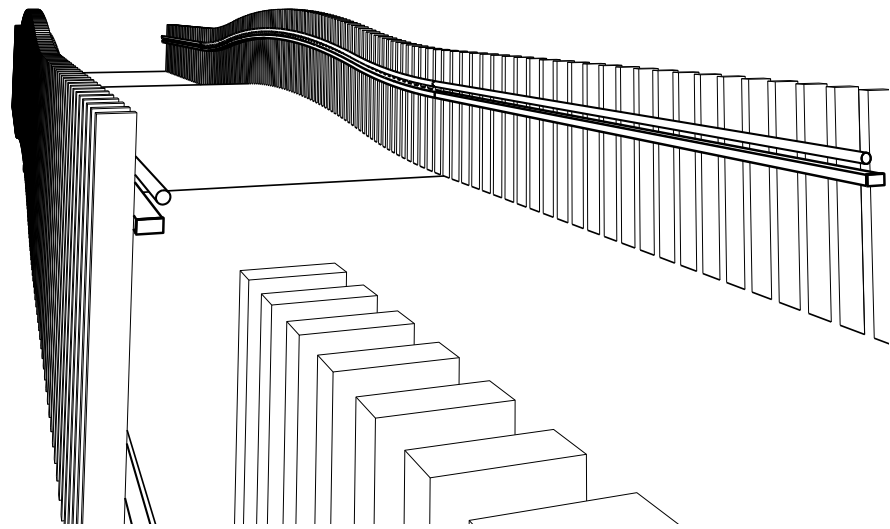
Bridges and deck balustrades

It is important for the Campus concept that the various bridges, decks and boardways have a consistent and coherent balustrade design. There are two distinct types of balustrade which should be used, depending on the positioning of the element relative to the site axis.

The following pages set out guidance the detail design of these elements.



Woodland bridge Sketches



Concept design for Woodland bridge and associated viewing platform

Woodland bridge Concept

The design concept for the pedestrian/cycle bridge over the existing watercourse is for a hardwood timber structure with cladding to match the timber forms concept proposed for the Estate fencing. The cladding should also match the road bridge cladding and is consistent with balustrade Type A (see previous pages).

The cost allowance for this element dictates the use of an 'off-the-shelf' product with bespoke cladding and details. Dodson Macrae produce a number of hardwood timber bridge designs which could be adapted and customised to fit with the Campus concept and aesthetic. Their "Type 2 Bridge" has been used as a basis for the concept drawings, with the timber cladding arranged in the place of the standard balustrade and railings.

The woodland bridge is intended to link with one of the SUDs viewing decks and the balustrade should use the same system as the bridge. The concept for the end of the viewing platform on the site axis is a glass balustrade to allow unimpeded views onto the water.



Dodson Macrae timber bridge, Knowes Farm, Dunbar



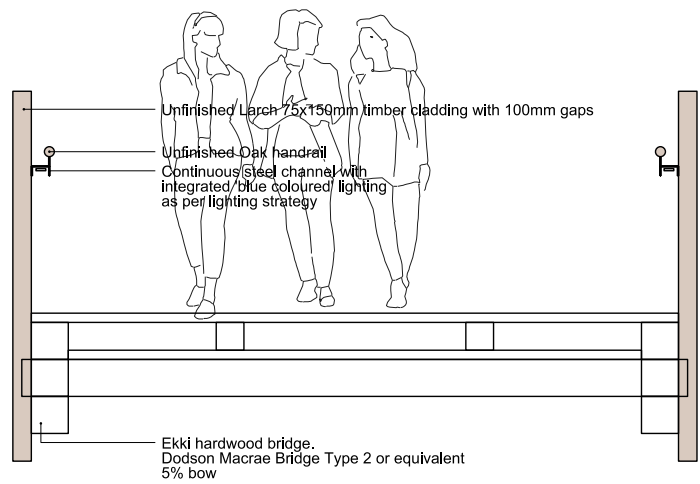
Timber post cladding



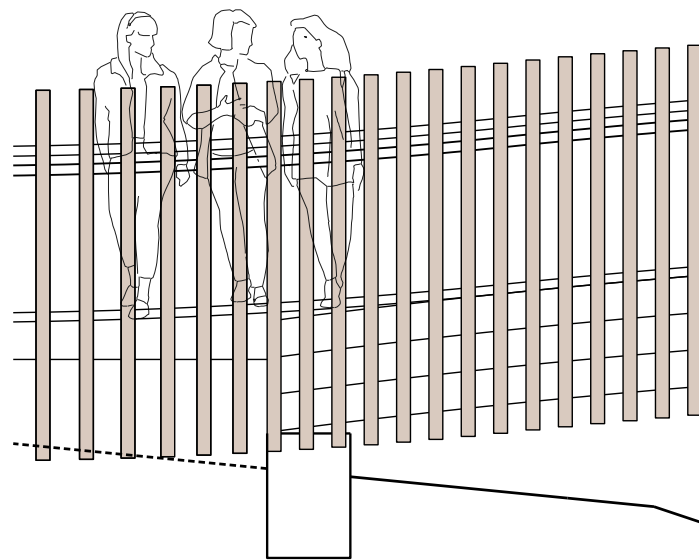
Dodson Macrae timber bridge, Grangemouth



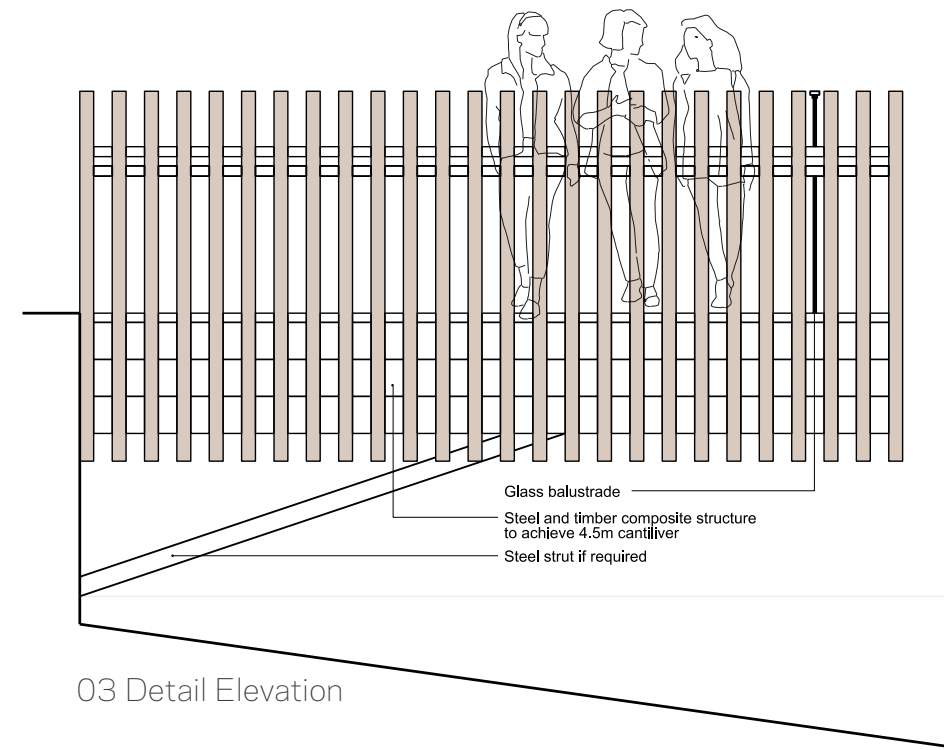
Example of glazed balustrade at end of deck structure



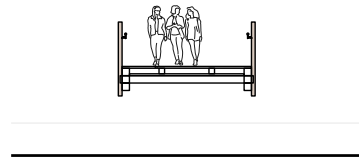
01 Detail Section



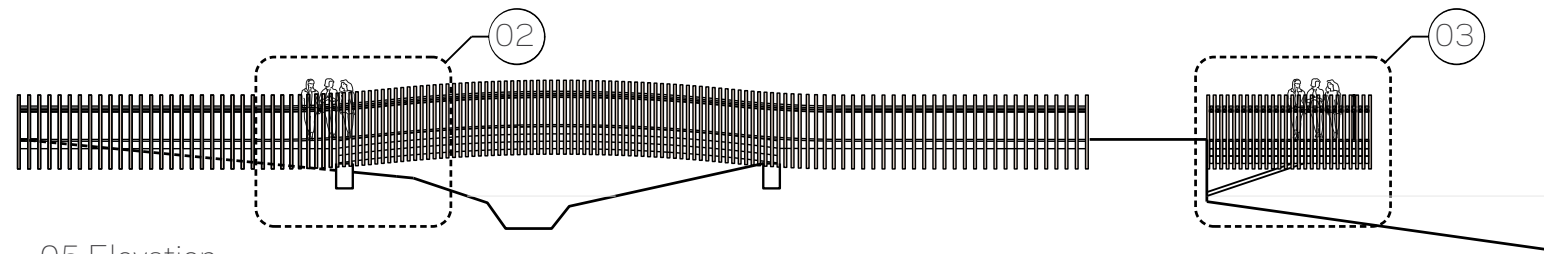
02 Detail Elevation



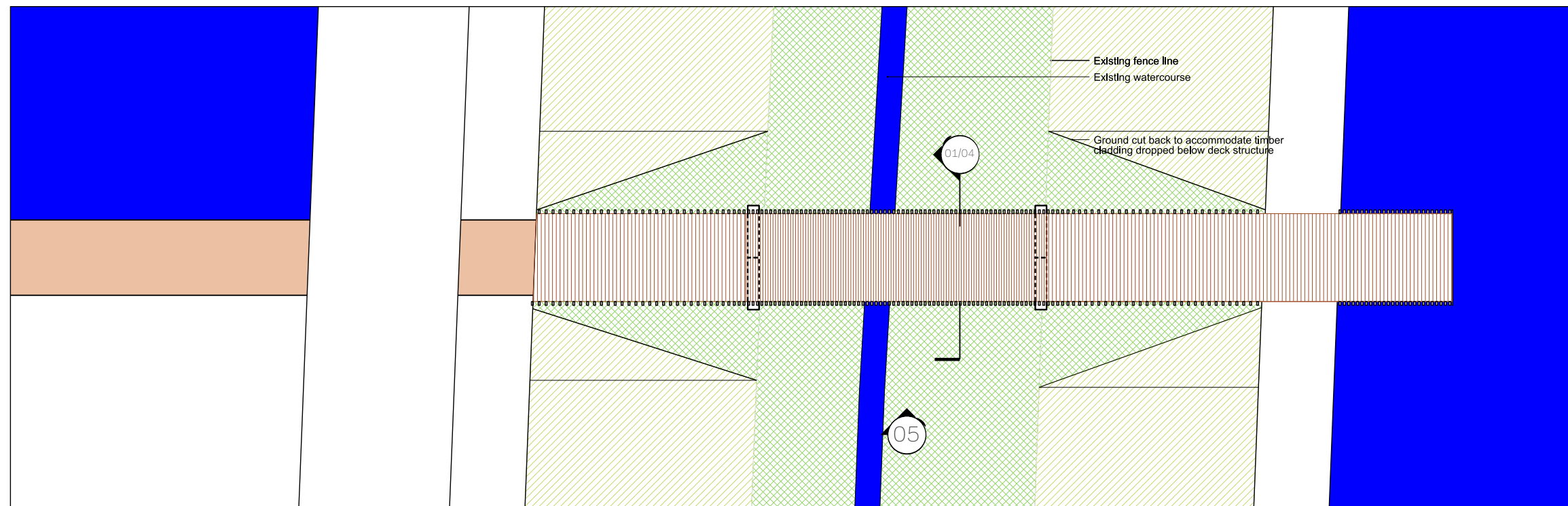
03 Detail Elevation



04 Section



05 Elevation

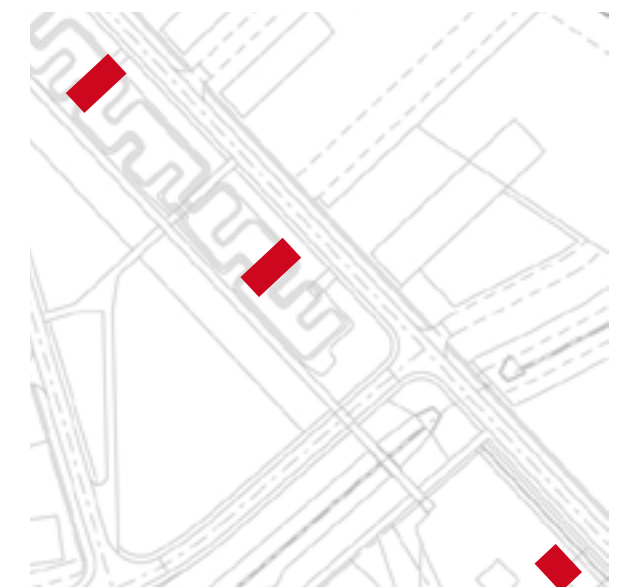


06 Context Plan

Boardwalk crossing



Typical SUDs decks

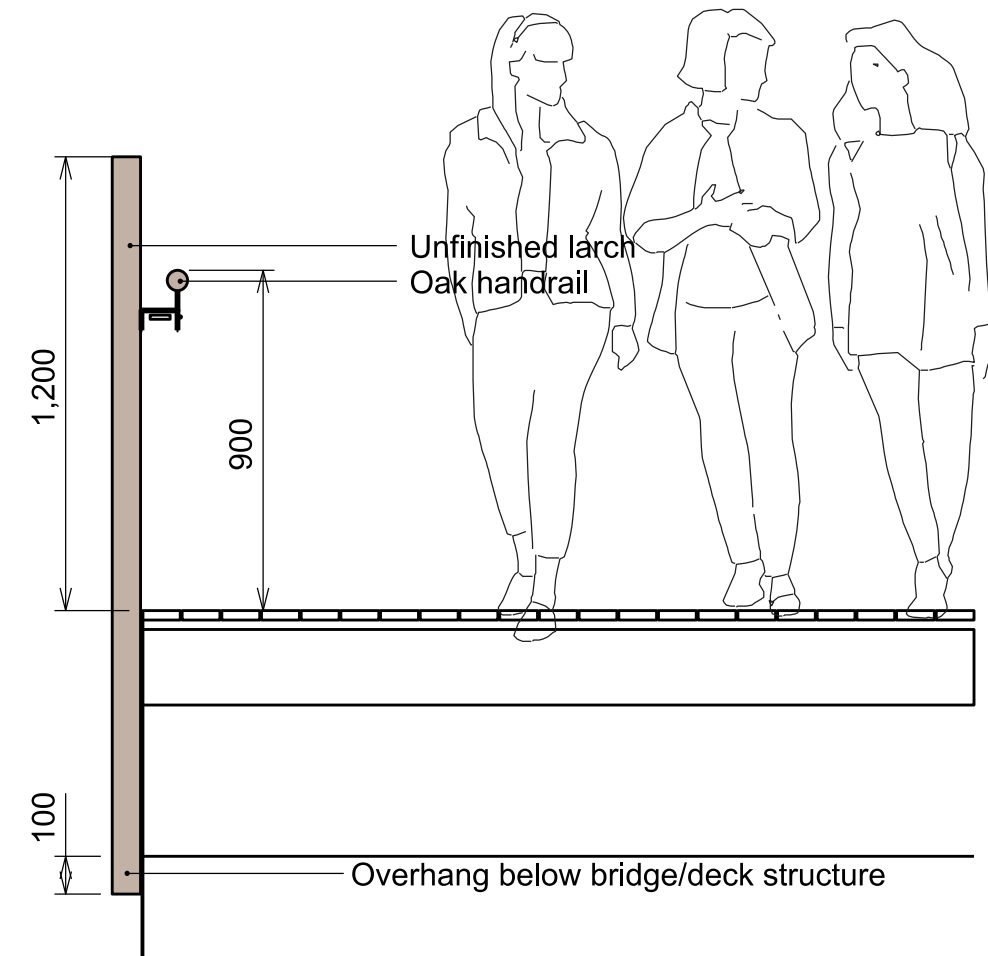
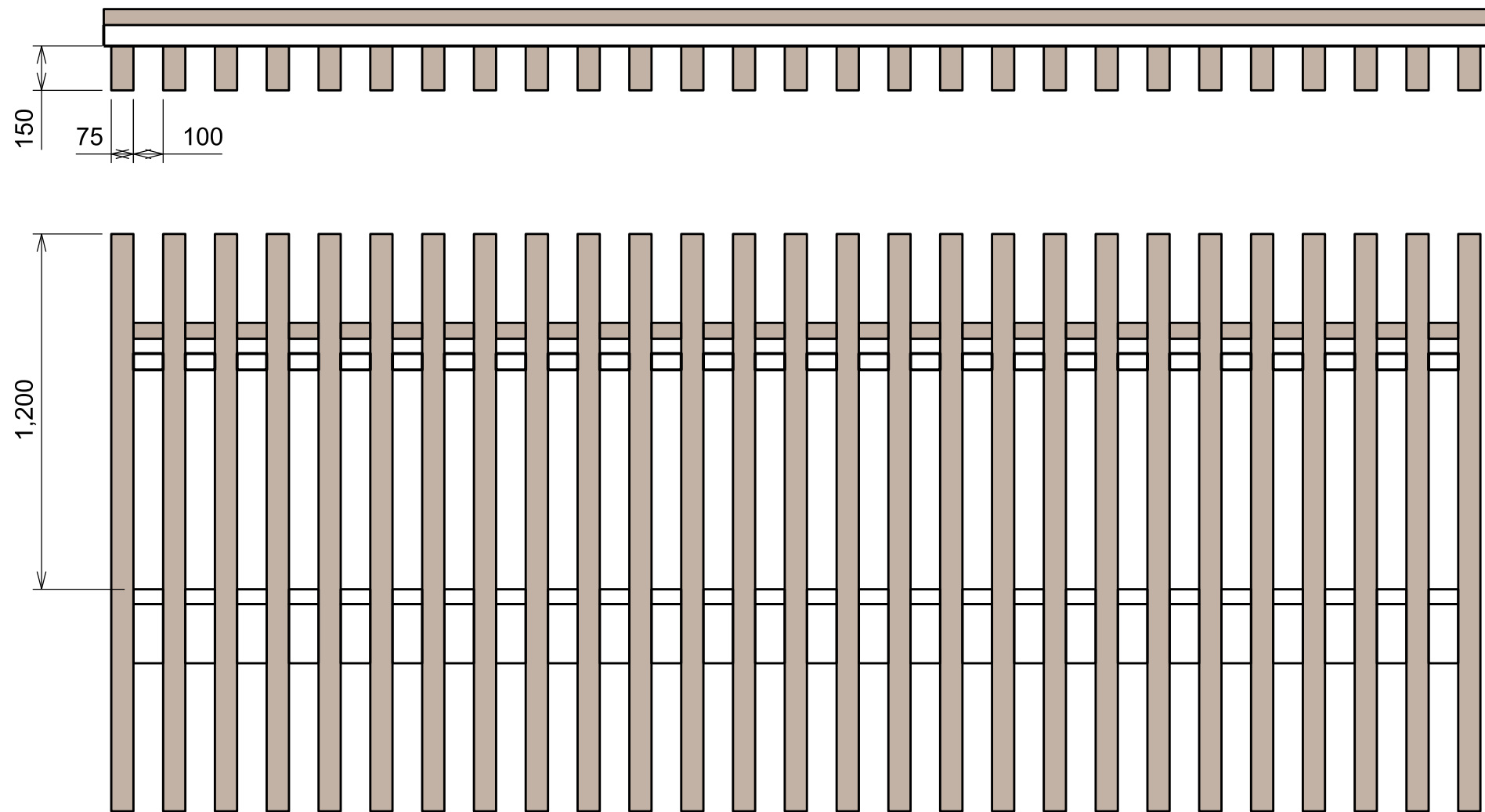


Balustrades: Type A

Type A balustrades are for use only on boardwalks, bridges and decks which are on the principal site axis. They are formed with 75x150mm timber cladding members which overhang the underside of the bridge structure/deck level. A steel channel on the inner side ties the posts together. A linear LED lighting fixture lights the timber deck. A timber handrail is fixed to the channel.



Unfinished Larch



Balustrades: Type B

Type B balustrades are for use on all other locations outwith the site axis. They are formed from 12mm steel square sections with 100mm gaps, steel top rail with timber grip. A lower rail is to be fixed flush to the deck surface. The steel is to be painted a dark grey to match Campus palette (RAL 7016)

