



# CRAIGFORTH CAMPUS, STIRLING

DESIGN AND ACCESS STATEMENT  
OFFICE



Stallan-Brand

Date: 06/07/2020

1077.00 Craigforth

**DESIGN and ACCESS STATEMENT:  
DETAILED PLANNING APPLICATION FOR OFFICE DEVELOPMENT**



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A	13.07.20	Issued for Planning	PW	IH

- 1.0 Introduction**
- 1.1 Vision
- 1.2 Project Background

# Introduction

# 1.0

## Introduction

## Vision

### Overview

The proposed HQ office building to which this application relates is central to a visionary redevelopment proposal of the wider Craigforth Campus.

The aspiration for the Craigforth Campus is to deliver a sustainable, mixed use campus which optimises employment opportunities.

Alongside this the masterplan seeks to open up public access to a stunning landscape and riverside.

This vision is complimentary to wider City Masterplan initiatives centred around key sectors including tourism, heritage, environment, leisure, food & drink and health & well being.

### Current Considerations

Craigforth is a stunning setting. The main occupier, Prudential, has a long association with the site providing key employment in the area both in terms of their own business and in the other associated businesses on the Campus and in the surrounding area.

The existing buildings at Craigforth are not suitable for medium to long term requirements. They are ageing, involve significant maintenance and have poor energy efficiency. They are not suitable to upgrade or adapt to suit modern ways of working and energy standards both in terms of their configuration and the costs that would be involved. The campus is experiencing a gradual reduction in its ability to retain and attract talent.

The spaces between the buildings and wider landscape provide a very poor environment for pedestrians and amenity despite being a stunning setting which includes Stirling's third Crag (the others having the Castle and the Wallace Monument on them), a key Listed Building, attractive woodland and the opportunity for an attractive riverside environment connecting into Stirling's broader aspirations for the riverside, landscape and path network throughout the City and beyond. Public access is not encouraged to Craigforth currently and it does not feel very safe or secure if it was.

### HQ Office Building Proposal

The proposal is for a new headquarters office building and associated landscape which has been designed in collaboration with Prudential to facilitate the medium and long term commitment for them to stay at Craigforth, enabling them to have a continued association with this stunning campus setting whilst improving their facilities and creating the opportunity in the wider campus for other employment opportunities and opening up extensive public amenity which will deliver a long term vision for the whole campus.

The proposals for the North site and the wider Masterplan carefully consider the ambitions and priorities of the wider Stirling City Masterplan to optimise the benefit of the many attributes of Stirling and the surrounding rural communities by creating the opportunity for a mixed use campus centred around key objectives of employment, heritage, sustainability, environment and health and well-being.

The wider masterplan proposal is to deliver a destination that incorporates tourism, leisure, rural skills, digital innovation, food and drink, education and intergenerational living.



## Introduction

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## Project Background

### Ambassador

Ambassador is a Scottish company with extensive expertise in developments of this nature.

They carry out many high profile projects and pride themselves in delivering unique solutions appropriate to each individual project. An example of current work is the significant development in the Outstanding Conservation Area at Park Circus in Glasgow.

Ambassador have experience in all of the uses proposed for redevelopment of Craigforth and understand how to deliver successful developments which provide genuine benefit locally, regionally and nationally with targeted objectives on aspects such as employment.

### Development of Proposal

In developing the proposal for the campus, Ambassador have engaged with Stirling Council and Prudential over a number of years and have invested significantly in a wide range of studies and investigations to support the proposal and the opportunity it creates.

Key examples of improvements which can be delivered are as below.

- Incorporation of sustainable drainage systems which will reduce the peak run off in to the river
- Enhancements to access to the unique Craigforth Crag as well as the riverside, for pedestrians, cyclists and those using public transport and a range of uses which will reduce car traffic at peak times
- Enhancement of biodiversity combined with a landscape management regime
- Refurbishment of the Listed Craigforth House and enhance its setting to secure its long term future
- The potential to deliver an office building with an enhanced renewables strategy that would not be available in other, more urban locations

### Design Team

Ambassador have appointed a team who have leading credentials in their specialisms. They are all based in Scotland and have significant experience in developments of this nature and particular knowledge of the Stirling context.

Ambassador are committed to delivering a development that is of excellent quality. The team are as follows.

#### Savills

Planning, Property Advice

#### Stallan Brand

Architecture, Masterplanning, Public Realm and Conservation

#### OOBE

Landscape Architecture, Biodiversity, Ecology, Tree Specialist

#### Gardiner and Theobald

Project Management and Cost Consultant

#### Fairhurst

Transportation, Roads, Flooding, Drainage, Civil and Structural Engineering

#### Atelier Ten

Energy, Sustainability, Building Services and Utilities

#### Resources Unlimited

Energy Strategy, Coordination of Environmental Studies

#### Other

There are also various other specialists for a variety of Environmental Studies

**2.0 Existing Campus**

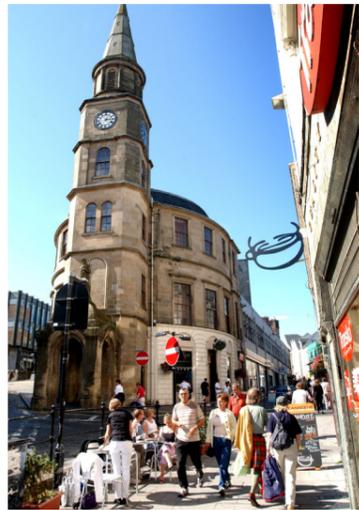
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- 2.5 Opportunities and Constraints
- 2.6 North Peninsula Site

Existing Campus

2.0

Existing Campus

Location



Existing Campus

Site Context

**Wider Context Overview**

Stirling lies in the centre of Scotland at the gateway to the Highlands. Hills and mountains are visible all around Stirling and from the Craigforth Campus.

The City of Stirling has a population of around 40,000. This is a relatively small population for a city, yet it has many key city assets including the Castle, a cathedral, significant train station, university, college and many historic civic buildings. There are a number of rural settlements which have an important connection with the city - historically, socially and economically.

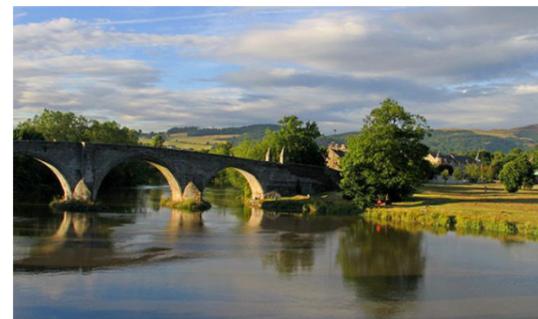
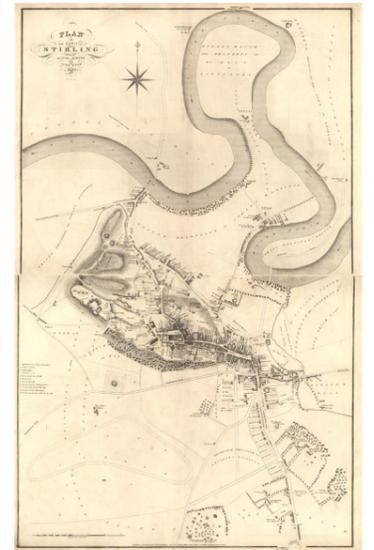
The river is a key feature in the city. This provided key links to the rural areas upriver and overseas down river. This combines dramatic topography with three distinctive crags – one for the Castle, one the Wallace monument and the one in the Craigforth Campus.

This blend above creates a city with unique feel and which has excellent potential to continue to thrive and prosper. The city does have some challenges, particularly that older buildings and steep streets with narrow pavements do not meet the needs of all in a dynamic city. The city is encouraging new developments, many of which are on flatter areas along the river, to provide accessible and stunning districts to complement the older parts of the City.

*The Carse of Forth and The Three Crags*

*'In Scottish geography, a Carse (the modern form of older Scots kerse) is an area of fertile, low-lying (typically alluvial) land occupying certain Scottish river valleys, such as that of the River Forth.'*

Craigforth Campus lies around 3km to the north west of the Castle beyond a Business Park and the Motorway. Although there are a number of buildings on the campus, from a distance the crag dominates the location.



Existing Campus

Wider Campus Overview

**Existing Campus**

Craigforth Campus is a 54 hectare site adjacent to a key junction on the M9 (which is the the main motorway heading north in Scotland) and the A84 (which is a key road into the Trossachs and Highlands).

It lies on the opposite side of the motorway from Castle Business Park and the proposed Kildean Business Park. Directly adjacent are the fairly recently completed Dobbies Garden Centre and the Auction Mart.

The Campus itself is marked by the distinctive Crag which covers approximately a quarter of the site and is 60m tall (equivalent to 20 building storeys). The Crag is covered in ancient woodland. Within the woodland on the west side of the Crag facing the motorway is a Listed Building, Craigforth House.

There are currently a number of other buildings on the site which have been developed over the last 50 years or so and have varied architectural styles which are showing signs of age. These are mainly fairly large office buildings of 3 to 5 storeys in height with some other lower buildings such Lomond View which is a former large garage converted into an office space. This mix of buildings accommodates around 3000 staff.

Access to the site is from the north. This leads to generous car parking areas including 1,383 spaces serving the office buildings. Pedestrian access is poor. Staff also park on the other side main road next to the river and on the of the motorway at the park and ride and casually in front of the Kildean Business Park. Although there is significant parking, the trees and Crag are the dominant feature.

The site is largely inaccessible to the public.



Existing Campus

Site History

**Craigforth Estate**

In 1329, the Craigforth estate was described as being within the land ownership of Robert the Bruce and then within the ownership of the Elphinstone family from 1553. The mansion house known as Craigforth House was constructed by the Callendars who acquired the estate in 1675 and it remained the family estate until the early 20th Century.

Originally the house was positioned at the end of a tree lined avenue as illustrated on the Roy Map from 1760. The building has been much altered and added to over time. The building was used during both world wars including as a hospital during WWII and was partially destroyed by a fire in 1930.

**Craigforth Campus**

In 1952 the estate was acquired by Scottish Amicable who initially used Craigforth House as their headquarters. During the 1970s the campus was expanded extensively when many of the current campus buildings were constructed and a modern office conversion was carried out on the main house. In 1973, during this period of campus expansion, Craigforth House was listed Grade B by Historic Scotland.

Over subsequent years, the development of the campus has continued, additional buildings have been added and the internal road layout and car parking has been extended to the level it is today with the current 1,383 parking spaces on site.

In addition to car parking, the campus has Coach Parking with 15 vehicles bus stands and a covered walkway.

In 1997, Scottish Amicable were taken over by Prudential who subsequently carried out some redevelopment that was predominantly focused on internal refurbishment of the office buildings and expansion to car parking and roads infrastructure.

Overall, there are 17 separate buildings within the campus including 8 office buildings, a conference suite and dining canteen, garages and workshops, an IT suite/Data centre, a security gatehouse and residential units.

The North part of the campus is predominantly a large surface car park. Lomond View, a portal framed former garage building was converted to office/call centre as part of Prudential's redevelopment programme.



Roy Military Map 1750



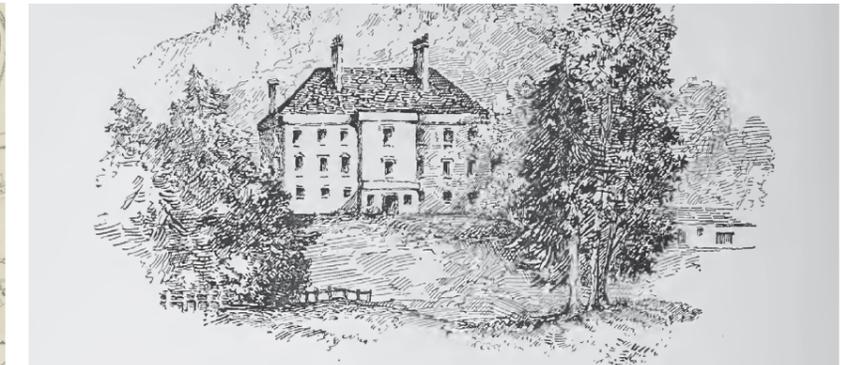
1860



1950



2010



Old Craigforth.

Part 2.  
**Old Craigforth.**

**C**RAIGFORTH, anciently Craggorth, Craignorth, etc., belonged to, and was enumerated amongst, King Robert the Bruce's lands in 1329. The estate seems then to have consisted of the Rock and a considerable extent of level lands, yielding a good revenue. Robert II., in 1381, gives a charter of confirmation to William More and his heirs, whom failing, to William de Lindsay and Cristaine, his spouse, whom failing, to others, of the greater part of the estate; and Robert, Duke of Albany, burdens the crown portion, in 1417, with an annual rent of 20 merks, for a chaplain to the chapel of St. Michael the Archangel in Stirling Castle, to pray "for the souls of Robert and David de Bruce, and Margaret and Murielle, their wives." James II. pledged it, along with other royal lands, as a security in his marriage contract, for a



The Main Campus Buildings Today

Existing Campus

Opportunities and Constraints

**Craigforth Masterplan**

The proposed development of a new Office Headquarters at Craigforth North is part of a wider campus masterplan proposal.

A key aim of the Craigforth masterplan is to retain employment whilst bringing additional employment opportunities to the area and the office development on the North site is a key component in unlocking these opportunities for the wider masterplan.

**Development and Employment Benefits**

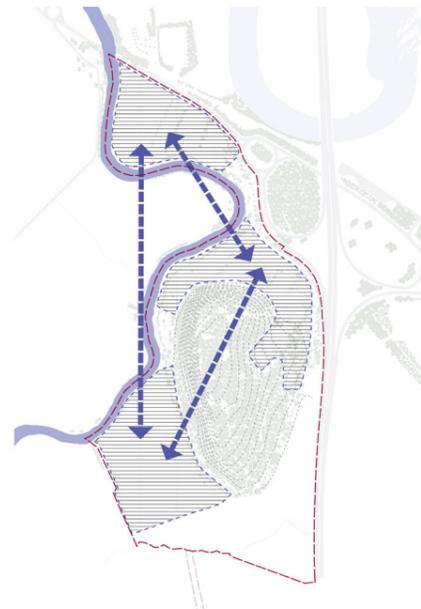
- The development of a new office headquarters on the North Site will allow the existing office campus to continue to operate whilst construction is in progress.
- The development of a new, state of the art office on the North site allows existing financial services employers to be retained in this key location and enables development of a range of complimentary facilities that are not currently available on site and are important for the long term sustainability of the campus.
- The wider masterplan development will provide additional and alternative employment opportunities on site

**Opportunities**

- Enable access to the Crag and Ancient Woodland for the wider public
- Access to more than 1km of attractive riverside.
- Public access to extensive areas of open space and natural landscape with dramatic long distant views
- Enhance and protect biodiversity and introduce sustainable drainage strategy to reduce run off to river
- Protect Local Heritage and enhance the setting of the Listed Craigforth House and enable a more appropriate conversion
- Significantly improve access for pedestrian, cyclists and public transport users and reduce traffic congestion at peak times.
- Replace ageing, energy hungry buildings with new, more sensitively designed, easily maintained, energy efficient buildings.
- Enhance the existing built environment with more sensitively designed and appropriate architecture and landscape.

**Constraints**

- Flooding Considerations
- Topography of the Crag and the wider site
- Existing Green Infrastructure
- Transport and Access issues
- Listed Building
- Noise and Air Quality issues / adjacent road infrastructure
- Requirement for existing buildings to remain operational during construction of new developments



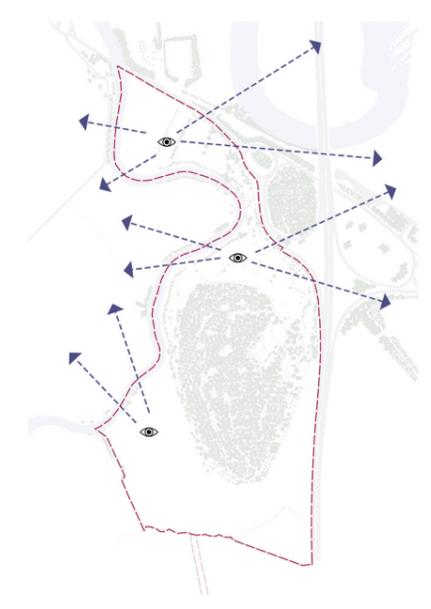
**A 'Whole Site' Approach**  
Despite their different characters, each of the 4 areas of Craigforth area compliment each other and a strategy for connecting these distinct site areas should be a key consideration of any development proposal



**The River Edge**  
The river creates a valuable natural asset connecting the four site areas and provides a strong visual amenity



**The Crag**  
The Crag and its natural ancient woodland provides opportunities for leisure activities and amenity within the heart of the site



**Panoramic Views**  
The site provides high quality views to surrounding landmarks and the wider landscape



**Existing Development Buildings/Roads/Parking**



**Flood Risk**  
Flood Risk areas along western edge limit developable area of the site



**Green Infrastructure and Ecology**  
Existing mature woodland throughout the site contributing to an established ecology



**Road Infrastructure**  
Noise and Air Quality Issues from the M9 and the A84

Existing Campus

North Peninsula

**Site Characteristics**

The north peninsula is 6.6 Hectares in area whilst the site area identified for the new office building and associated parking and landscape is 2.38 Hectares. Although it appears generally level the sites topography slopes down towards the river with a resulting 1 in 200 year event flood plane extending inwards from the river edge.

Almost half of the north peninsular is currently occupied by surface car parking along with the existing Lomond View building and the remainder is existing natural green landscape, part of which is within the flood plain. There are mature trees primarily along the north site perimeter providing screening from the A84. Linear arrangements of Mature trees also form a feature within the car park.

Although several hundred metres from the Crag, the sheer scale of the 60m high Crag is a defining feature of the site.

These considerations lead to a logical site selection for a proposed office building on the north east corner of the existing car park.

**Enabling Development and Employment**

The north peninsula area has been identified as the most appropriate site for the new office headquarters development, for a number of key reasons.

- Allows the existing campus buildings and parking to remain operational during construction.
- Allows a separate, independent access both for construction traffic and for the completed office facility that will alleviate existing traffic congestion.
- Allows the relationship with the existing financial service partner business within the Lomond View building to continue
- Other existing partner organisations within the wider campus including the Riverside Pavilion building on the central site and the nursery within Craigforth House, to continue to operate during the redevelopment period.
- The existing car parking on the northern site can be retained and reused for the new development enabling a more sustainable development approach and maximising the retention of existing trees within the site, the car park area and along the site perimeter
- Using part of the existing car park for a new building reduces the number of cars and a potential for reconfiguration of the access and road layout to reduce congestion on the site
- The north site is directly adjacent to public transport link and is also adjacent to Garden Centre and its associated facilities on the north side of the A84
- Redevelopment of the North Site can provide a modern replacement office facility that will enable redevelopment of the wider campus area including the introduction of a range of complimentary uses suited to the aspirations and requirements of both existing and potential businesses which in turn will help to attract and retain talent whilst also providing a wider range of employment opportunities.



- 3.0 Planning Context**
- 3.1 Placemaking
- 3.2 Stirling City Masterplan
- 3.3 Previous Craigforth Masterplan 2008
- 3.4 Planning Designation

## Planning Context

3.0

## Planning Context

### Place Making

#### Overview

Ambassador Group, along with their carefully selected team of designers and specialist consultants are highly experienced in designing and delivering developments of this nature in Scotland.

The team are conversant with relevant planning policy and best practice guidance, often contributing to and assisting in reviews of evolving policy as well as participating in design review panels and other initiatives aimed at promoting best practice, contributing at conferences and collaborating with leading research organisations.

The team are familiar with relevant planning and development policy at a Local, Regional and National level and have been part of the design and delivery of many award winning projects.

#### Significance of National Place Making Policy

The most significant Scottish Government Planning Policy and one that has the potential to positively influence the quality of the Craigforth Masterplan development, is the progressive National Place Making Policy.

This Policy prioritises sustainable and placemaking development differently from late twentieth century 'zoning led' planning approaches that often resulted in disconnected areas of living, separated from employment and leisure facilities, creating silos of singular land use rather than well designed and considered neighbourhoods.

#### Scottish Government Place Making Policy

Place making is, from a Statutory Planning perspective, the key development strategy that determines the shaping of our built environment.

In the last ten years planning has moved away from a 'generic zoning' approach to a more specific urban and townscape led evaluation process.

A key consideration in the development of an ambitious masterplan development proposal for Craigforth Campus

is to ensure the masterplan addresses the main criteria of the Scottish Governments 'Place Making Policy' directive.

#### Place Making Policy Directive

Importantly Local Authorities across Scotland are required to champion the Scottish Government's Place Making Policy. Authorities regeneration, estates, planning and procurement teams are advised by Government to;

*"... take every opportunity to create high quality places by taking a design-led approach, direct the right development to the right place and support development that is designed to a high quality, which demonstrates the six qualities of successful place as follows;"*

- Distinctive
- Safe and Pleasant
- Welcoming
- Adaptable
- Resource Efficient
- Easy to Move Around and Beyond



Planning Context

Stirling City Masterplan

**Stirling City Masterplan**

Working with a range of Partners and Stakeholders and involving extensive consultation, Stirling Council have developed a visionary masterplan for the City with consideration of benefits to the wider rural communities. This masterplan has facilitated a successful City Deal Bid and has significantly influenced planning policy and investment priorities. Stallan Brand assisted Stirling Council in the development of the Stirling City Masterplan.

**Relevance to Craigforth**

In a similar manner to broader Scottish Government Placemaking Policy, Stirling City Masterplan embraces the move away from late 20th century zone led planning approaches that disconnected areas of living, from employment and from leisure to create silos of singular land use instead of neighbourhoods.

It focuses on a variety of key strengths and challenges to be considered specific to the Stirling Context. At the heart of this is to deliver regeneration centred around improving peoples lives with a focus on health and well-being and economic prosperity which will benefit all.

Key sectors are identified including digital innovation, tourism, heritage, environment, food and drink, health and well-being and leisure. Fundamental to their success are connectivity and co-location to encourage collaboration. In the case of Stirling, creating a unique blend of opportunity for small, medium and large employers and other organisations to share and support opportunities.

A key component is the opportunity for the river as a linking element within Stirling.

In developing the proposal for the new HQ office at Craigforth, a key consideration has been the visionary mixed development opportunity which emerges for the wider Campus and is highly complementary to the City Plan Vision.



Planning Context

Previous Masterplan and Planning Designation

**Previous Craigforth Masterplan (Approved 2008)**

A masterplan was developed in 2007 for Craigforth which obtained support from Stirling Council and was granted planning consent in 2008 - ref 07/00673/OUT

This masterplan proposal was focused long term sustainability of the Prudential Campus by enabling further development opportunities which could contribute to ongoing viability of the campus including aspects such as the significant maintenance requirements the existing buildings, the listed building and the extensive landscaped grounds. It also proposed significant improvements for public access to the Crag and open space along the river.

**Key Components of the 2008 Masterplan**

**Prudential**

The previous masterplan proposed that Prudential would continue to occupy the main campus buildings and their campus would be consolidated within the key buildings of the central area of the site - Due to ongoing maintenance costs and poor energy performance of the existing buildings, this approach is no longer considered appropriate for long term viability, and a new modern office facility is now proposed for the North site.

**North Site**

The 2008 masterplan proposed a variety of uses on the North peninsula including pub/restaurant with beer garden, 200 bedroom hotel, 150 bedroom budget hotel, conference and leisure facilities and a petrol station - The new masterplan proposal is to deliver a similar but improved mix of uses but within the central site rather than the North peninsula.

**Central / South Site**

The 2008 masterplan proposed additional uses on land between the Crag and the river and along the river, stretching along the riverside into the southern part of site. These uses included Live/Work units and a number of Business Park office pavilions - This type of development is no longer considered viable today and so the new masterplan proposal is for more appropriate development that is more sensitively positioned into the landscape and to bring enhanced accessibility to the campus to enable access to a wider demographic.

**Density and Capacity**

The 2008 masterplan proposal included a total floor area of 880,000sqft with 2,758 parking spaces - the new masterplan proposal seeks to deliver a similar density and floor area in order to optimise employment opportunities but with reduced parking requirements.

The mix of uses proposed will generate significantly less parking requirement, will benefit from having reduced volumes of traffic particularly at traditionally peak congestion times whilst a new site entrance as a dedicated access point for the new Office building on the North site will further improve traffic flow and reduce site congestion.

**Access**

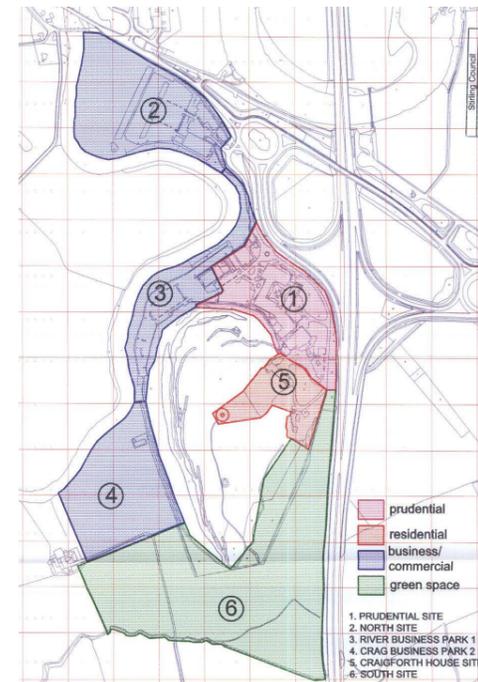
The approach taken for the new Craigforth Development Masterplan makes significantly more area accessible to the public. The HQ office development is a key first component in achieving this.

A key outcome the Public Consultation was recognising the existing north south pedestrian and cycle route through the site - this will be enhanced and improved and separate from cars

**2018 Development Plan Use Designation**

In the 2018 Stirling Development Plan, the Use designation of Craigforth Campus was updated to include a mix of uses, to reflect the 2008 masterplan proposal and this has largely informed the new masterplan development proposal.

The proposal for residential development on the south site acknowledge placemaking policy for mixed use. Another example where business park space has been changed to mixed use is at Kildean where residential, hotel and bar restaurant have been introduced. Similar principles can be seen at Forthside in Stirling where the blend of leisure, residential, heritage, tourism and food and drink combine to create a 24/7 riverside quarter.



Extract from Local Development Plan



Previous Masterplan - Consented 2008

## Planning Context

### Public Consultation

In accordance with the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013, the Design Team have engaged in Public Consultation throughout the design process and this has informed many of the design decisions made as the proposals for Craigforth North have developed.

The formal pre-application process began following the submission of a PAN and site location plan to the Council on 7 February 2020.

In light of the COVID-19 emergency, the proposed public event could not be held in person without posing a significant risk to public health. As such, The Town and Country Planning (Miscellaneous Temporary Modifications) (Coronavirus) (Scotland) Regulations 2020 suspended the requirement for a public event and instead required applicants to hold an online public consultation event. These regulations came into effect on 24 April 2020.

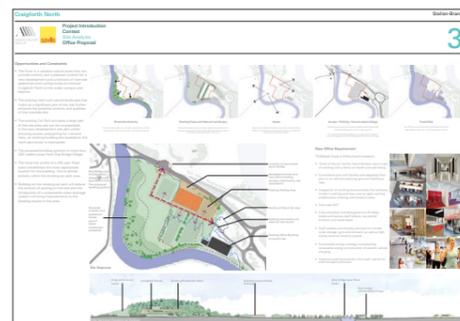
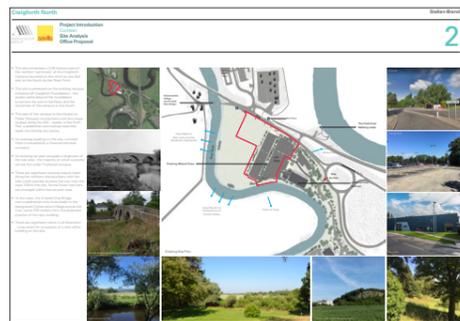
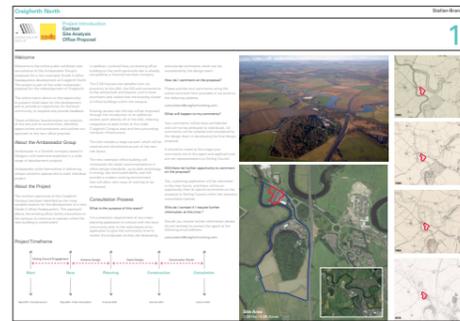
Consequently, an online public consultation event was hosted at [www.craigforth-stirling.com](http://www.craigforth-stirling.com) on 8 May 2020. The format of the online website and consultation was agreed with Stirling Council in advance.

In accordance with the statutory requirements, a newspaper advert setting out details of the online pre-application consultation event was published. The newspaper advert appeared in the Stirling Observer on 29 April 2020, in advance of the online public event. The content of the newspaper advert was also in line with the Town and Country Planning (Miscellaneous Temporary Modifications) (Coronavirus) (Scotland) Regulations 2020.

The project team were available to engage with members of the public and answer any questions between 4-6pm via a live chat function.

For a more detailed description of the pre-application consultation process that was undertaken, please refer to the separate PAC report provided by Savills, the planning consultant for the project, submitted as part of this application.

Presentation Materials for the Online Consultation



### Environmental Impact Assessment

In accordance with the requirements the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 an extensive Environmental Impact Assessment has been undertaken and the EIA report is submitted as part of this planning application.

The EIA Report presents information on the identification and assessment of the likely significant positive and negative environmental effects of the Proposed Development.

The extent of the EIA and the surveys and assessments required to be included in the EIA process were established through a Scoping Opinion provided by Stirling Council, which in turn was prepared on the basis of consultations with relevant advisory and regulatory bodies.

For this development, the EIA was required to assess the following Factors for Consideration:

- Construction Impacts
- Use of Natural Resources (land, soil, water)
- Emission of Pollutants (Noise, Vibration, disposal/ recovery of waste)
- Risk to Human Health
- Culmination of effects with other projects
- Impact on Climate
- Technologies used

In response to the Factors for Consideration, the EIA includes the following assessments and reports.

- Landscape & Visual Impact Assessment
- Biodiversity Assessment
- Drainage and Hydrology and Flood Risk Assessment
- Site Investigation and Ground Conditions
- Ecology and Biodiversity
- Traffic and Transport Assessment
- Noise and Vibration Assessment
- Air Quality Assessment
- Human Health Assessment
- Sustainability and Climate Change
- Socio-Economics Impacts



**4.0 Wider Masterplan Context**

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- 4.2 Masterplan Framework
- 4.3 Phasing
- 4.4 Illustrative Masterplan
- 4.5 Public Access and Active Travel

Wider Masterplan Context

# 4.0

Wider Masterplan Context

Existing Campus

**Existing Campus Layout**

The existing campus has developed over a number of years from when it was first acquired by Scottish Amicable in 1952.

Initially, the existing Craigforth House was used by Scottish Amicable and then Prudential as their main Scottish Headquarters. Additional buildings were added over subsequent decades as Prudential developed their campus and today 17 separate buildings occupy the site.

The majority of the Campus buildings are located within the central area of the wider Craigforth campus site. To the North, the existing Lomond View building was converted to office use from what was originally a large garage and workshop.

The buildings and car parking areas are linked by a network of internal roads. A track that extends around both sides of the Crag connects with an access road to the Southern site boundary.

Although there are areas of attractive natural and designed landscaped areas, a large proportion of the North and Central site area is hard landscaped and occupied by designated car parks making the experience of working and visiting the campus much less desirable than might be expected.

In addition to the almost 1400 parking spaces, there is often informal parking on road verges and other spaces.

**Existing Campus Buildings**

The existing campus buildings, predominantly 3 to 5 storeys in scale, were constructed over a number of decades and are increasingly showing signs of age.

The office buildings were designed to meet the specific requirements and standards of their time and for a specific purpose and brief.

Their design and layout is in many ways dated and inefficient and does not meet many of today office design standards, including the British Council of Offices recommendations.

The buildings are expensive to maintain, are inefficient in terms of energy use. They are dated in terms of their visual appearance and not particularly sympathetic to their environment and setting.



Wider Masterplan Context

Masterplan Framework

**The ‘Masterplan Framework’ and ‘Illustrative Masterplan’**  
 As a Planning Permission in Principle (PPiP) the Craigforth masterplan is presented in sufficient detail to test key issues around access, land use and visual impact. At the same time, the framework provides sufficient flexibility for detailed proposals to evolve at AMSC stage.

By providing a Masterplan Framework and an illustrative masterplan (for information) there is a clarity around what is being approved and what is being provided to assist in the understanding of the masterplan vision.

The Masterplan has been built around a series of placemaking principles that take advantage of the site’s existing assets

These principles underpin the masterplan and establish a coherent strategy for access, development areas and landscape. A key aspect of these principles is to take advantage of the site’s riverside setting to ‘stitch’ the various aspects of the campus together into a cohesive place with a distinctive identity.

**Key Elements of Masterplan Framework**

**1. Existing Access and Infrastructure**

Utilise existing access points to the site whilst enhancing the southern approach from Dumbarton Road and providing a new entrance from the A84

**2. Connections and Active Travel**

Create new and upgrade existing routes throughout the site creating a connected green network and improving access to the Crag

**3. Ecology, Green Buffer and Visual Screening**

Enhance planting along the eastern edge to set development away from the motorway and screen key views of the site

**4. Riverside Park**

A variety of green spaces and amenity along the river edge creating a accessible green infrastructure serving the whole site

**5. Development Site**

Three development zones, each with a strong connection to the river edge and the site’s other unique natural assets

**6. Stitching the Masterplan Together**

Structure the masterplan to stitch together the site’s green infrastructure, interweaving with new and existing landscapes

**7. Develop an appropriate urban grain**

Develop proposals for each sub-area that respond to their specific settings



**1. Utilise existing access and infrastructure**

Utilise existing access points to the site whilst enhancing the southern approach from Dumbarton Road and providing a new entrance from the A84



**2. Unlock Connectivity within the site**

Create new and upgrade existing routes throughout the site creating a connected green network and improving access to the Crag



**3. Green Buffer and Visual Screening**

Enhance planting along the eastern edge to set development away from the motorway and screen key views of the site



**4. Riverside Park**

A variety of green spaces and amenity along the river edge creating a accessible green infrastructure serving the whole site



**5. Three masterplan sub-areas**

Three development zones, each with a strong connection to the river edge and the site’s other unique natural assets



**6 ‘Stitch’ the site together through development**

Structure the masterplan to stitch together the site’s green infrastructure, interweaving with new and existing landscapes

## Wider Masterplan Context

### Illustrative Masterplan

The masterplan framework is illustrated opposite and establishes the key spatial elements of the Craigforth Masterplan this includes:

#### Access and Movement

- A new access point from the A84 to the northern part of the site
- A new internal access road providing access between the three sub areas and defining a series of development plots
- The upgrading of the existing path along the eastern side of the Crag to allow emergency access within the site clear of the 200 year flood zone
- The upgrading of the access road from Dumbarton Road to the

#### Landscape and Public Realm

- A new riverside park accessible from all areas of the site
- Landscape enhancements along the south-eastern area of the site to provide visual screening from the wider area and a buffer to the M9

#### Development Zones and Land Uses

- A northern Sub-Area (Sub Area A) containing office development and associated parking provision
- A central Sub-area (Sub Area B) containing a mix of uses including residential, leisure, retail, hotel, food and beverage as well as the potential for additional office/employment uses. This sub area also includes the refurbishment of Craigforth House.
- A southern Sub-Area (Sub Area C) containing an intergenerational residential development as well as potential for a residential care home/supported living as well as community uses and social infrastructure.



Masterplan Development Areas



Illustrative Masterplan

- 5.0 North Site Masterplan**
- 5.1 Existing Site Plan
- 5.2 Opportunities and Constraints
- 5.3 Office Requirement
- 5.4 Site Response

## North Site Masterplan

# 5.0

# North Site Masterplan

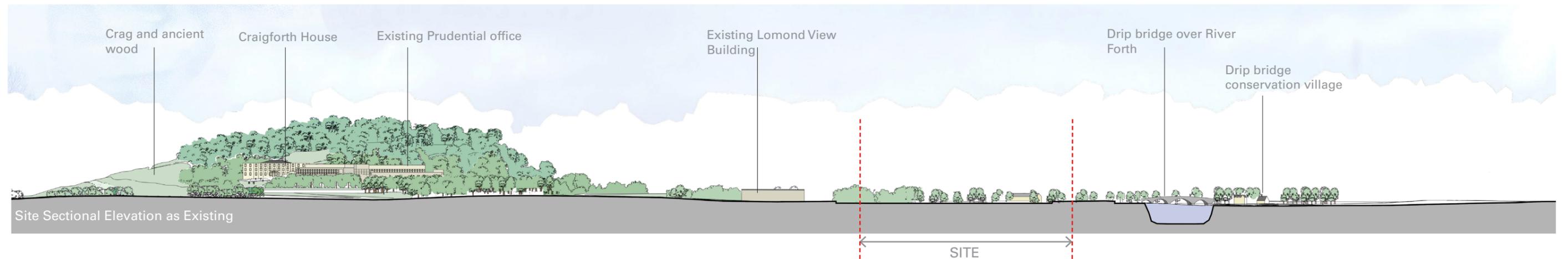
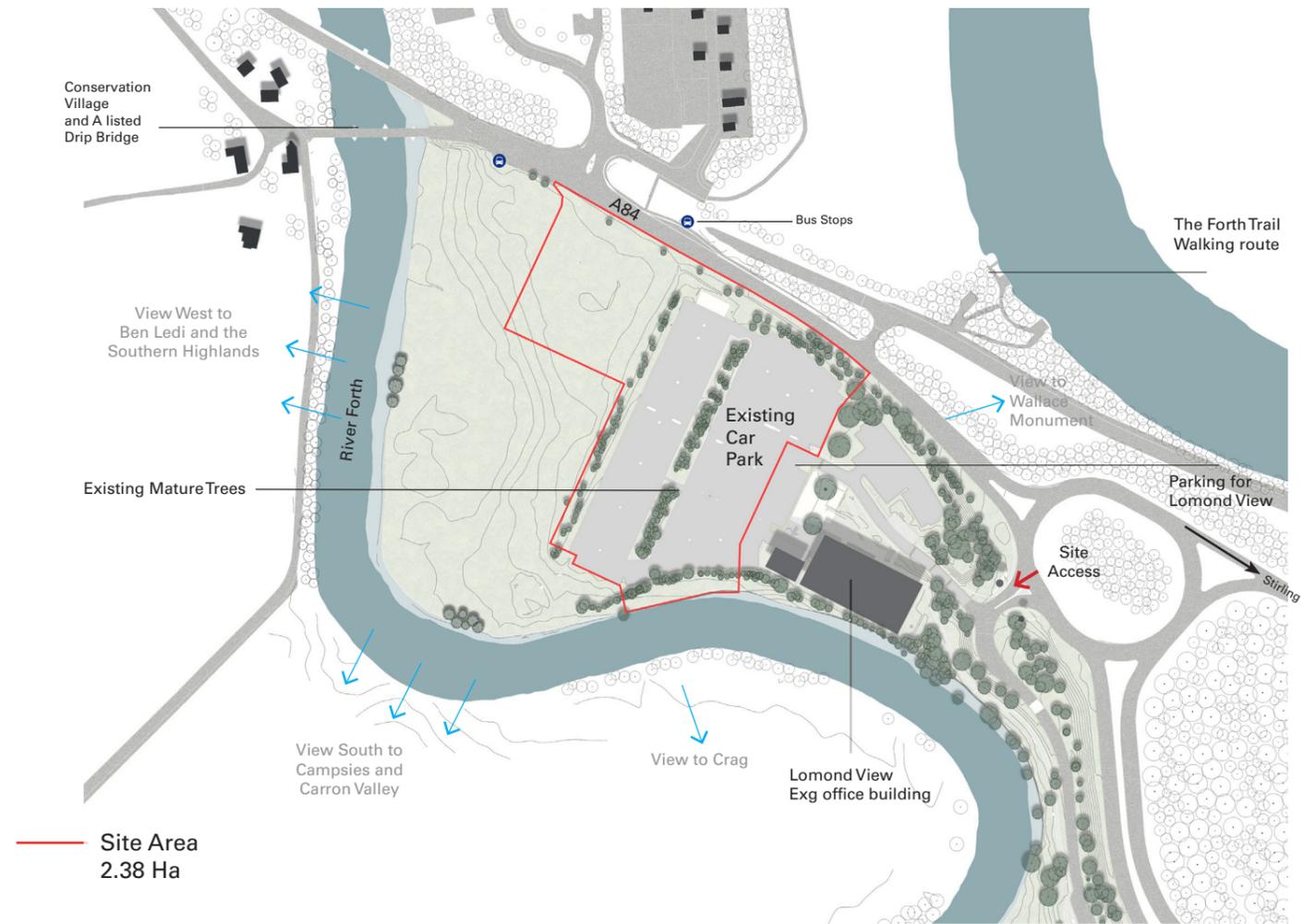
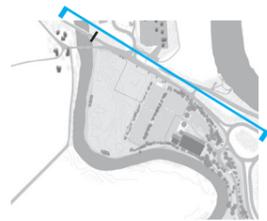
## Existing Site

### Existing Site Plan

The site is primarily an area occupied by the existing car park on the North peninsula that serves the wider campus. The site boundary for the new office building takes in a large proportion of this car park, whilst some existing parking has been left outside the new building site boundary and is to be allocated for the use of the existing Lomond View office building.

The boundary along the North perimeter of the North peninsula along the A84 extends beyond the car park area to the west to provide scope for a potential dedicated access. The boundary extends southwards to take in the existing car park as far as the river edge on the south.

The site section below looking south west from the A84 shows the how the site sits in relation to the Crag, Craigforth House and the other existing campus buildings to the East and Drip Bridge and Conservation Village, to the West.



North Site Masterplan

North Site - Opportunities and Constraints

**Opportunities**

**Riverside Amenity and Views**

The riverside location is a valuable natural asset for the development site and the wider masterplan area with impressive views to the South, East and West

**Existing Mature Trees and Natural Landscape**

A semi-formal arrangement of planted trees softens the existing parking layout along with trees around the perimeter of the site and a natural green landscape outwith the car park tarmac surface area

**Connections and Active Travel**

Although currently not well served by sustainable transport opportunities, there are proposals to improve this substantially with segregated and combined cycle routes and footways connecting with existing routes to the West, to the East into Stirling and into the wider masterplan through the site to the South and beyond



Riverside Amenity / Views



Existing Trees and Natural Landscape



Connections / Active Travel

**Constraints**

**Flooding**

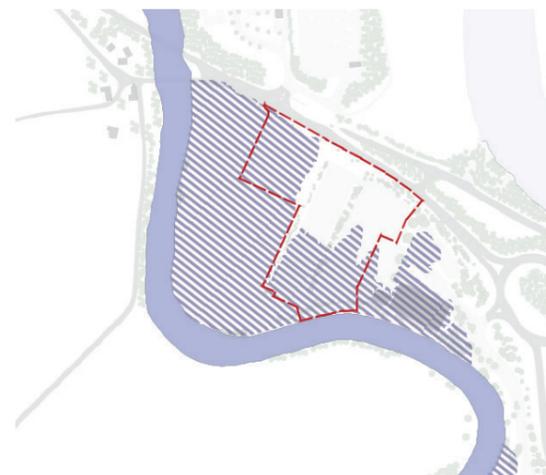
An extensive flood risk study has been carried out and the 200 year event flood risk is a site constraint that helps identify the area most suitable for location of a new building.

**Existing Access and Parking**

A single site access point from the Craigforth Roundabout provides access to the North site and the wider masterplan area. Within the North site, an existing two way carriageway currently serves a large existing car park as well as the existing Lomond View office building on the north site.

**Drip Bridge and Conservation Village**

The listed bridge and conservation area lies to the West of the northern peninsular



Flood Risk



Existing Building, Access and Parking



Drip Bridge / Conservation Village

## North Site Masterplan

### Office Requirement

#### Existing Office Provision

The existing Prudential Campus comprises a number of office and ancillary buildings that have been constructed, extended and adapted over a period of some 70 years and many of these buildings date back to the 60s and 70's and are inefficient, costly to run and maintain and their design and plan arrangements do not lend themselves to modern working practices.

Craigforth Campus is occupied by a number of different organisations, providing not only the core financial services operations but also a wide range of supporting services and facilities that are required to allow the campus to operate successfully.

The total floor area of the existing campus extends to nearly 300,000sqft over a disparate collection of some 15 buildings. Of this total area, approximately 240,000sqft is specifically for general office use whilst the remainder is predominantly ancillary / supporting services accommodation.

Despite the number of separate buildings and ancillary accommodation, provision of welfare and amenity facilities has historically been very limited at Craigforth - there is limited secure cycle storage and associated facilities to support cycling and other sustainable travel initiatives.

#### Contemporary Office Work Space

Modern workplace design is largely centred around the provision of a range of different working environments from large open plan areas to enclosed quiet working spaces to informal collaborative working zones and to cater for working arrangements beyond the traditional '9 to 5' working day structure.

This Agile Working approach to office design achieves far greater efficient use of space whilst providing essential amenity and welfare facilities for staff.

#### North Site Office Headquarters

The brief for a new headquarters office building on the North site recognises the changing work practices adopted by today's commercial and financial services providers.

#### Building Design Criteria

- 75,000 sqft Net Internal Floor Area
- 80/20 Net/Gross efficiency
- Large, simple floorplates that are adaptable and easily subdivided
- Efficient Planning Grid
- Centralised Core comprising toilets and washrooms to meet contemporary space standards and quality
- Occupancy levels to incorporate workspaces including meeting, collaborative working, break-out and social spaces
- Consideration of integration of appropriate provision of tea-points and food-prep areas and other staff welfare
- Staff Areas to include personal secure lockers, discreet phone use areas and quiet spaces
- Allowance for general storage and digital printing facilities
- Generous Reception Area and visitor area at entry level
- Consideration of sustainability and energy use and other design standards including British Council for Offices, BREEAM, Well Standard and Wired Score.



North Site Masterplan

Site Response

**Building Form and Position**

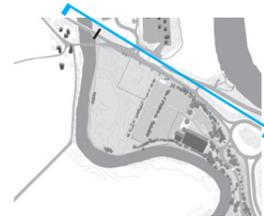
An office building comprising 75,000sqft of Net Internal Area could take a number of forms - considering plan efficiency, floorplate depth, daylighting, energy use and fire strategy - a 3 storey building comprising 25,000 sqft office floor plates emerges as the optimum building form in terms of quality of environment, flexibility and energy efficiency and in terms of its response to its setting and site parameters

The site topography and the 200 year Flood Plain establishes the most suitable location for a new building, parallel to the A84 on the highest part of the site along the north boundary sitting predominantly within the existing car park.

**Access and Parking**

This site arrangement enables a potential dedicated access to the north site via a new slip-road off the A84. The new one-way access extends through the site to connect with the existing internal access road and the existing Lomond View building.

The east-west internal access road establishes a south facing main entrance and allows the remaining existing car parking to be retained and works with the existing Lomond View site layout.



**Existing Ecology and Trees**

This site arrangement positions the new building predominantly on existing car park surface allowing the large area of existing natural landscape along the south and west of the site to be retained as valuable amenity space. The majority of existing mature trees on the periphery and within the centre of the site to be retained.

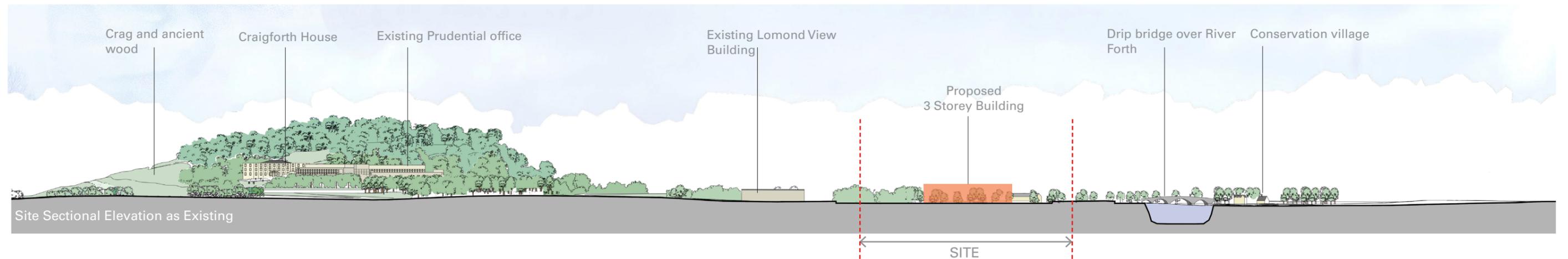
**Connections and Active Travel**

The building is located close to existing public transport links on the A84 as well as existing and proposed active travel connections - new cycling and pedestrian routes along the A84 connect with Stirling City centre and beyond. The site will also be connected via new leisure routes proposed for the wider Craigforth masterplan and on to connections outwith the Craigforth campus.

**Context and Scale**

Set within the context and backdrop of the existing campus buildings as well as the Crag, a 3 storey building sits comfortably within its context.

There is a substantial distance between the location for the proposed new building and the adjacent conservation area. At this distance and at 3 storeys, the proposed new building has minimal visual impact.



- 6.0 Office Design Proposal**
- 6.1 Contemporary Workplace Vision
- 6.2 Office Typologies
- 6.3 Plan Diagram
- 6.4 Proposed Building
- 6.5 Massing / Scale / Proportions / Articulation
- 6.6 Elevation Strategy
- 6.7 Materials Palette

- 6.9 Placemaking and Site Layout
- 6.9 Visualisations

## Office Headquarters Building Proposal

6.0

Office Headquarters Building

Contemporary Workplace Vision

**The Modern Office Workplace**

The modern office workplace embraces new ways of working and incorporates a wide range of different working environments to suit a variety of tasks.

The environment should be inspiring, flexible and dynamic and provide a pleasing working environment whilst providing core amenities and support facilities for staff and visitors.

**Workspaces**

A variety of workspaces that provide for the following activities:

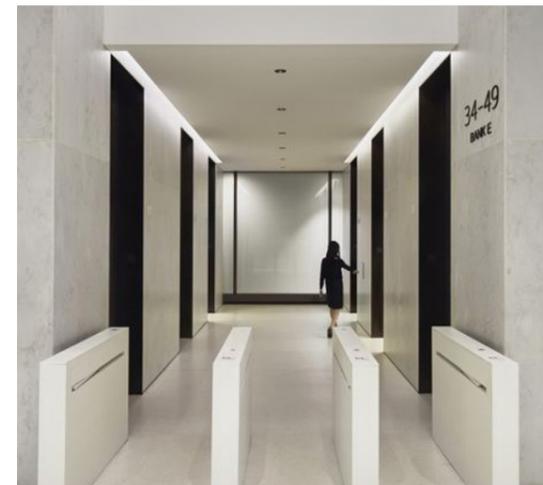
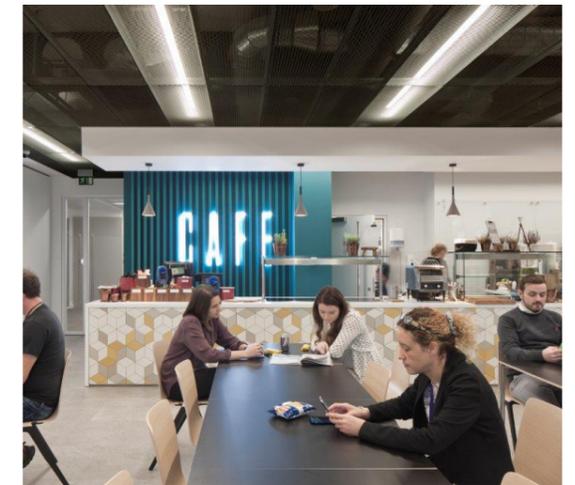
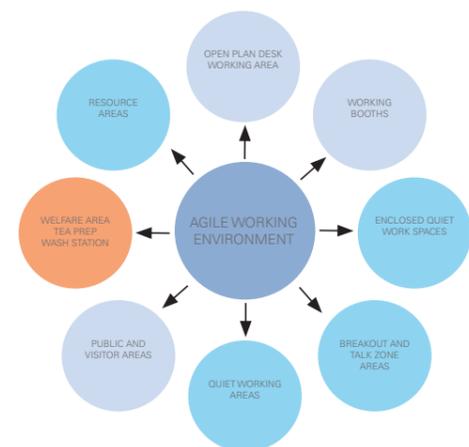
- Individual focused activities
- Concentration Work
- Confidential Work
- Telephone Calls and interactive conversations
- Formal and Informal Meetings
- AV meetings
- Areas for breaks, rest and relax

**Amenities**

- Reception / Concierge and help point
- Cafe / Retail / Vending Facilities
- Banking / ATM
- Gym with Changing Facilities and Showers
- Site Wide Wi-Fi
- Cycling Facilities - Storage and Repair Zone
- Staff Lockers and Cloakrooms
- Tea Point / Kitchenette on each floor
- Device Charging Points
- Mothers Room and Quiet Rooms

**Other Design Considerations**

- A Zoning strategy that looks to place noisy / quiet spaces strategically throughout a floorplate to minimise adjacency issues
- Open Plan spaces that can be subdivided to allow team working and minimise acoustics issues
- Informal / Noisy areas places near main circulation and entry points
- Focus / Quiet Rooms should be easily accessible and placed near to open plan workspaces
- Formal meeting and Collaboration spaces located centrally on the floorplate to enable good access
- 75% of normally occupied workspaces should be within 7.5m of external glazing or atrium (WELL compliance)
- Internal Landscaping



Office Headquarters Building

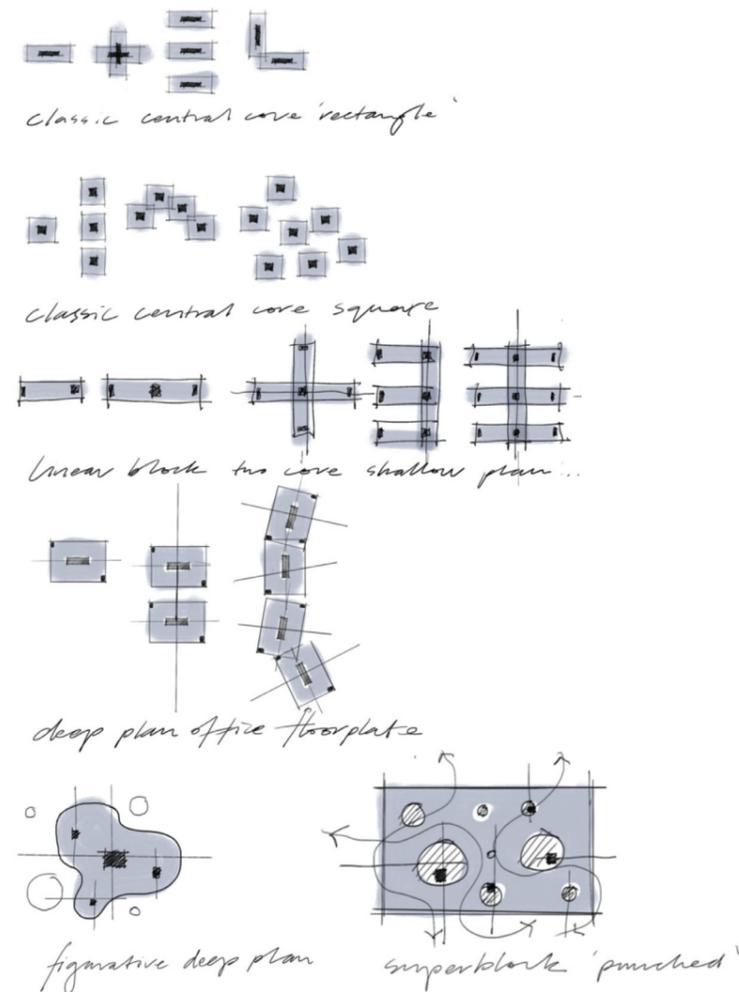
Office Typologies

Plan Arrangement

Typical office typologies include a range of plan configurations that respond to different site conditions and specific end user requirements. Floorplates range from linear to square plan, shallow to deep plan, simple blocks to more figurative forms.

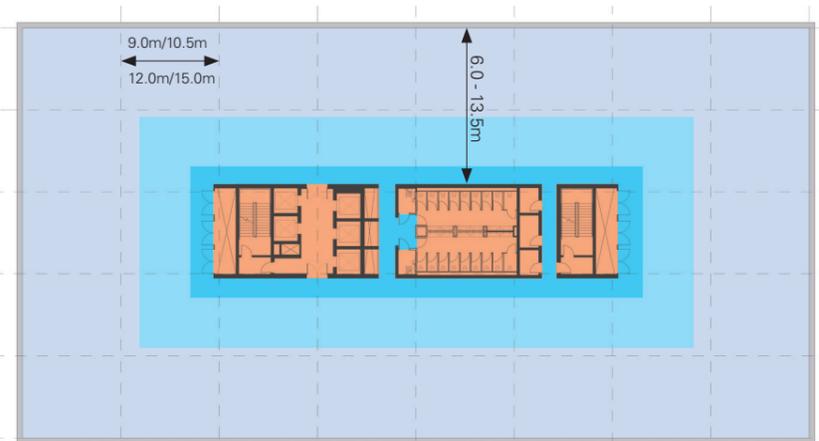
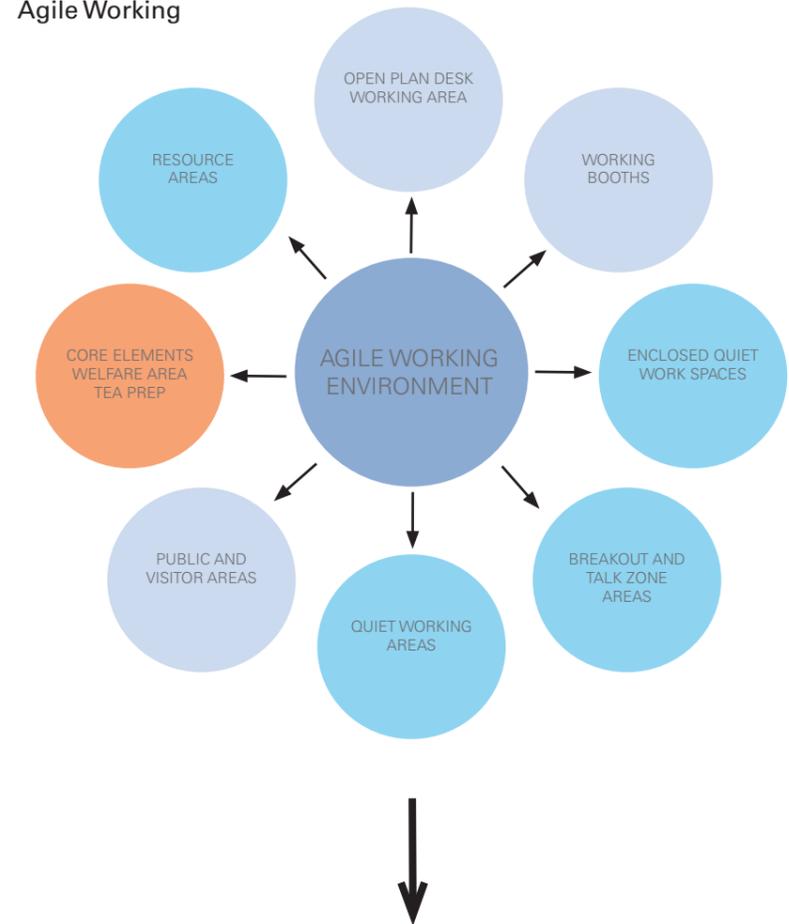
At Craigforth, a simple linear block sits comfortably within the developable area of the site and responds to the site specific constraints and opportunities.

The centralised core arrangement provides a flexible floorplate that can support Agile Working with a range of different workspace environments from open plan to small quiet enclosed spaces.

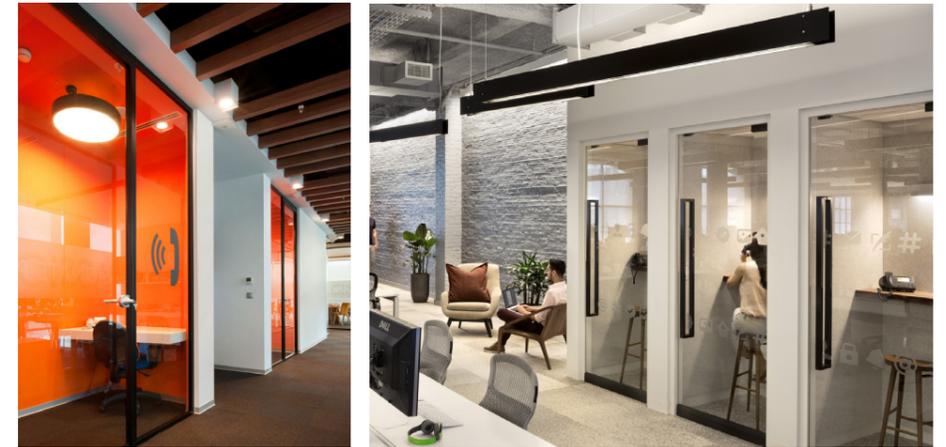


Office Floorplate Typologies

Agile Working



Deep Plan / Centralised Core Floorplate



Office Headquarters Building

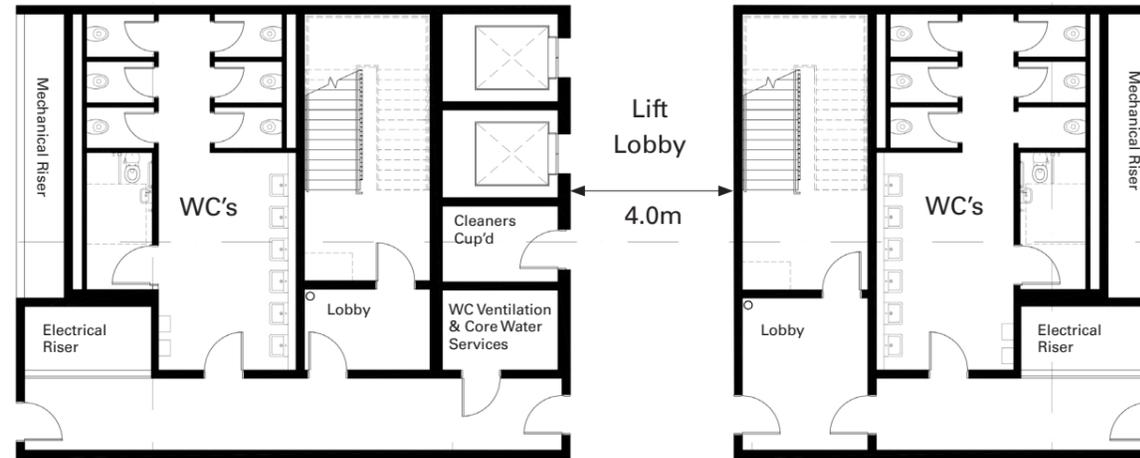
Plan Arrangement

**Centralised Core**

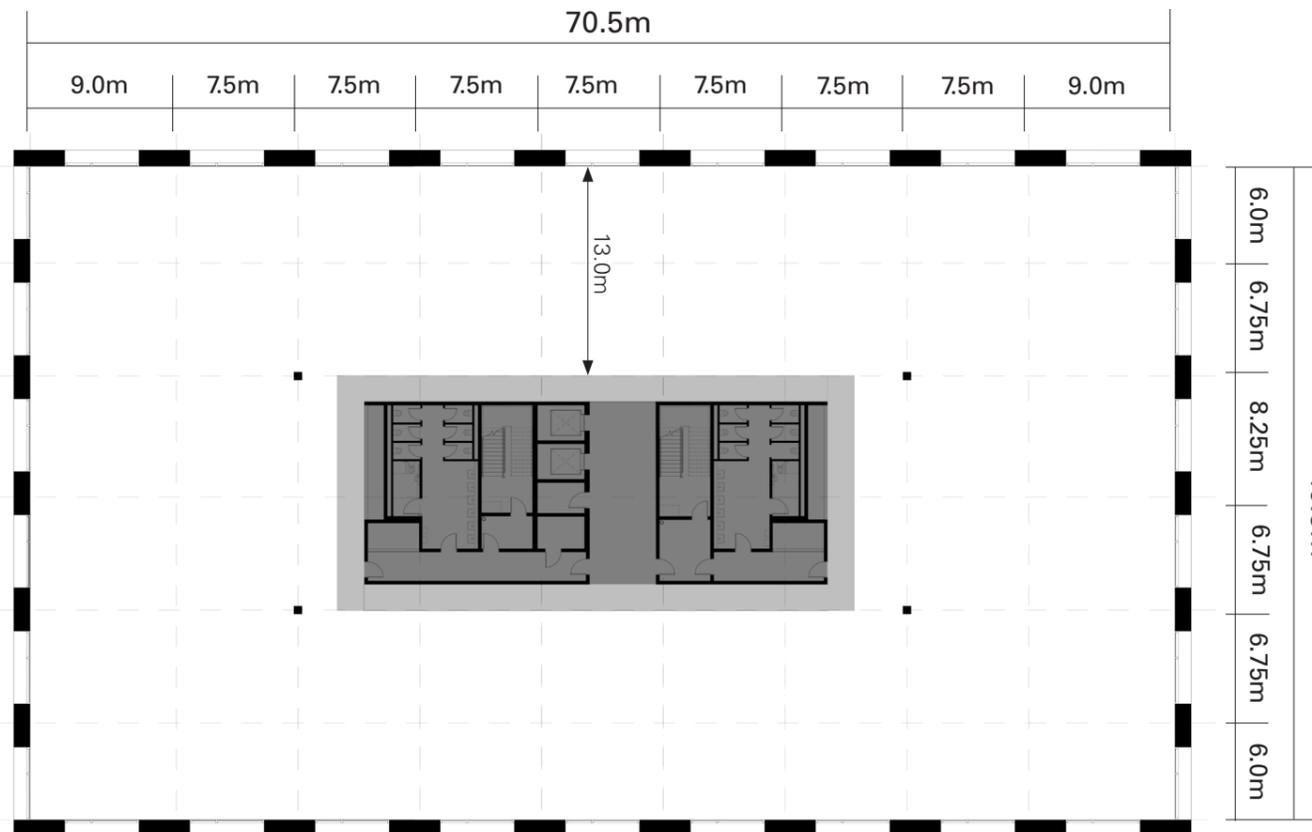
The centralised core arrangement provides a highly efficient and adaptable floorplate capable of supporting a range of working environments from large open plan to smaller cellular accommodation.

This configuration also allows the floorplates to be subdivided as required.

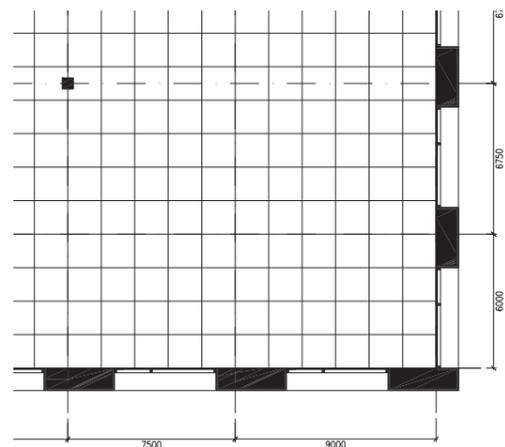
- Enables large floorplates with generous uninterrupted fenestration on all four elevations.
- The Structural grid is based on a multiple of a 1.5m planning grid for optimum space planning
- All core elements are contained within the central core including Stairs, Lifts, Toilets and all Service risers.
- Primary circulation and smaller, cellular accommodation can be placed around the core
- Larger open plan zones are placed the perimeter of the floorplate with natural light from all four elevations
- Window to Core / circulation is 13.0m as per BCO recommendations for deep plan floorplates



Large Scale Plan of Core



Plan Diagram



1.5m Planning Grid

Office Headquarters Building

Proposed Building

The proposed office building comprises 3 levels with a centrally positioned main entrance on the south elevation.

A generous, double height space forms the reception area with access to the centrally located lift lobby.

Plant Rooms, Cycle stores, Changing Rooms/Lockers and Showers are located to the rear of the core and accessed from the North side of the building.

The remainder of the Ground Floor provides two office spaces that are accessed directly from the Reception / Lift Lobby.

NIA = 7,156sqm / 77,027sqft including Reception area, Cycle Stores, Showers and Changing Rooms

Office NIA = 6,936sqm / 74,659sqft excluding Reception, Cycle Stores, Showers and Changing Rooms.

Accommodation Summary

**Ground Floor**  
 GIA 2,785sqm / 29,977sqft  
 NIA 2,249sqm / 24,208sqft

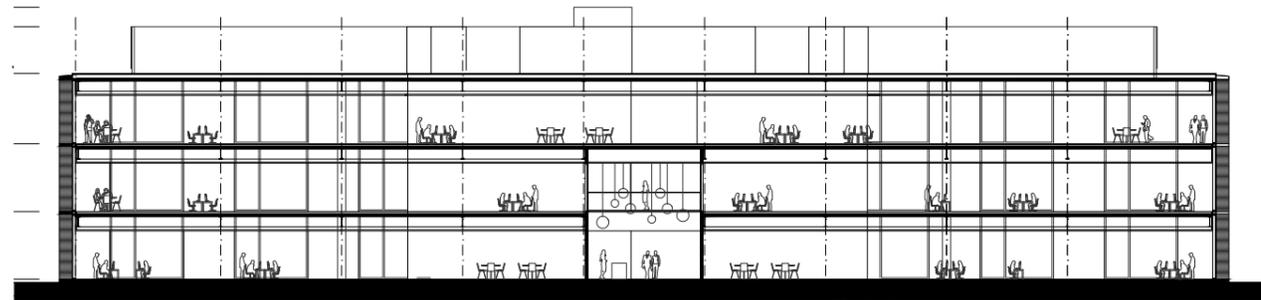
NIA includes:  
 Reception 84sqm / 904sqft  
 Cycles/Showers 136sqm / 1,464sqft

**First Floor**  
 GIA 2,785sqm / 29,977sqft  
 NIA 2,374sqm / 25,554sqft

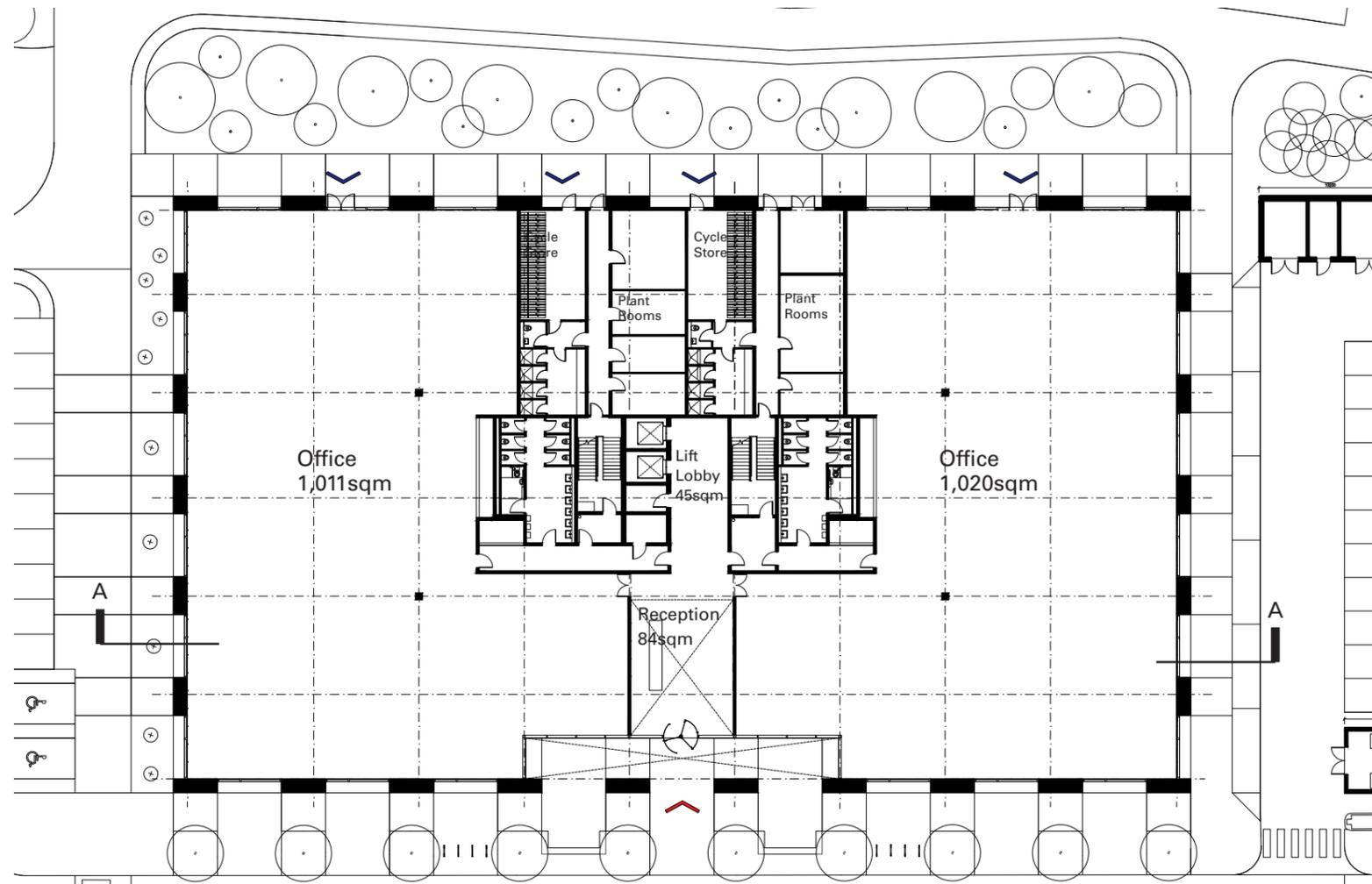
**Second Floor**  
 GIA 2,855sqm / 30,731sqft  
 NIA 2,533sqm / 27,265sqft

**TOTAL**  
 GIA: 8,425sqm / 90,685sqft  
 NIA: 7,156sqm / 77,027sqft

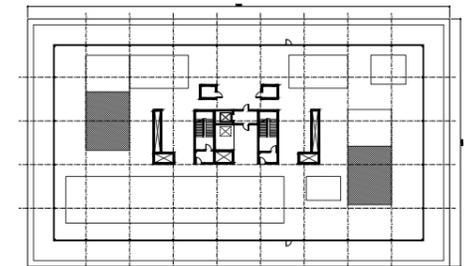
TOTAL NIA excluding reception, cycles stores, showers and changing rooms is 6,936sqm / 74,659sqft



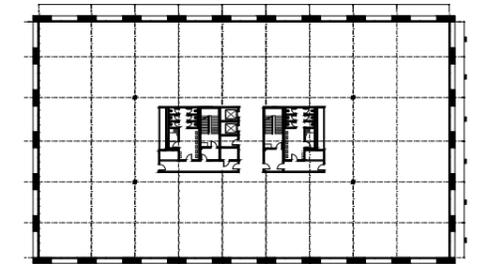
Section on Line A-A



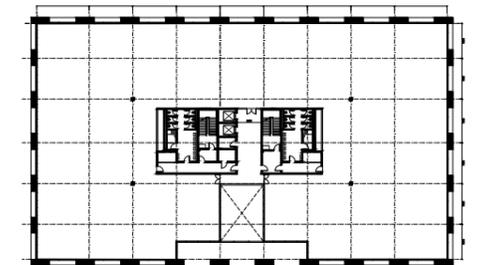
Ground Floor Plan (Level 0)



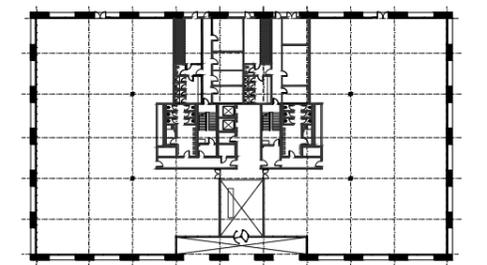
Level 03



Level 02



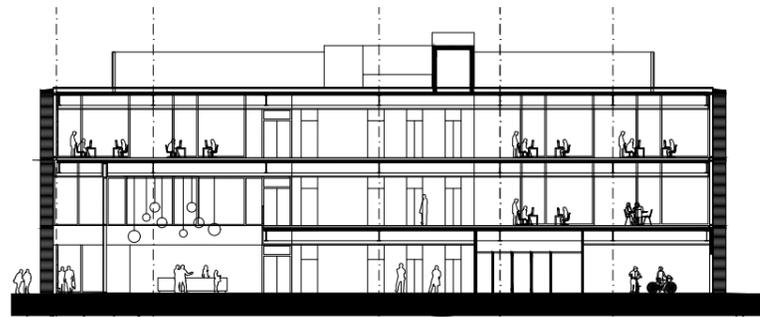
Level 01



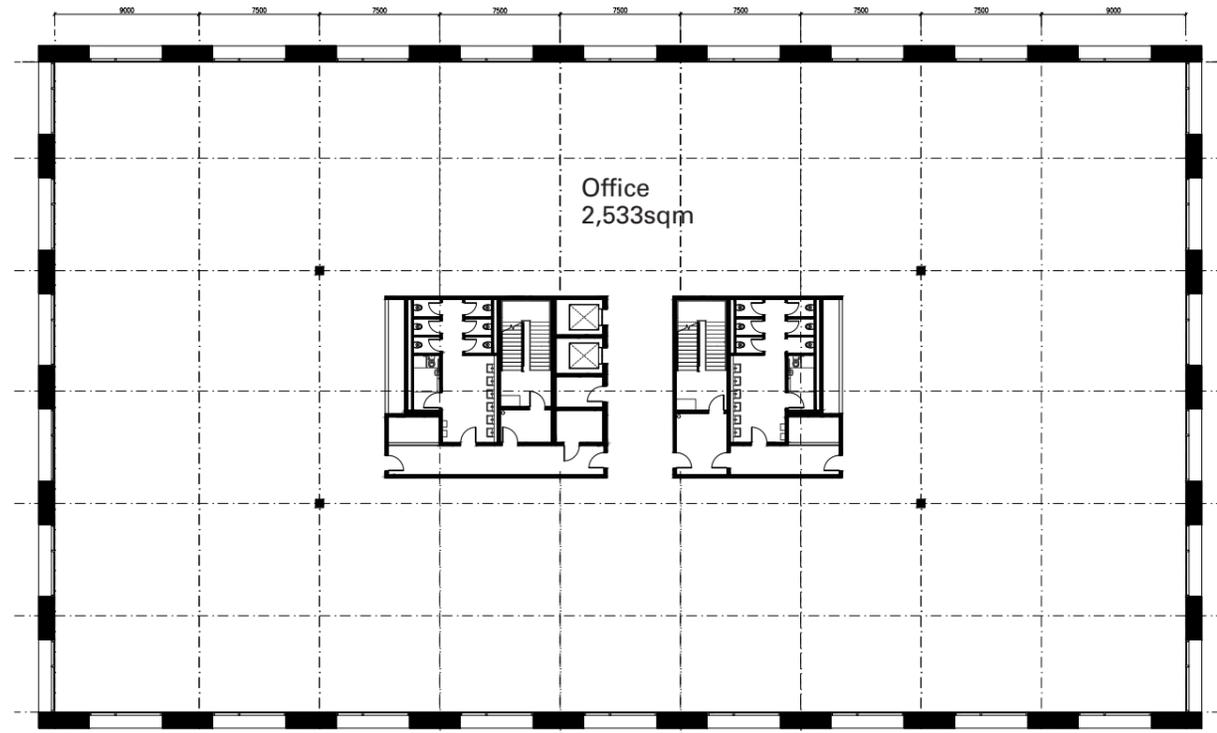
Level 00

Office Headquarters Building

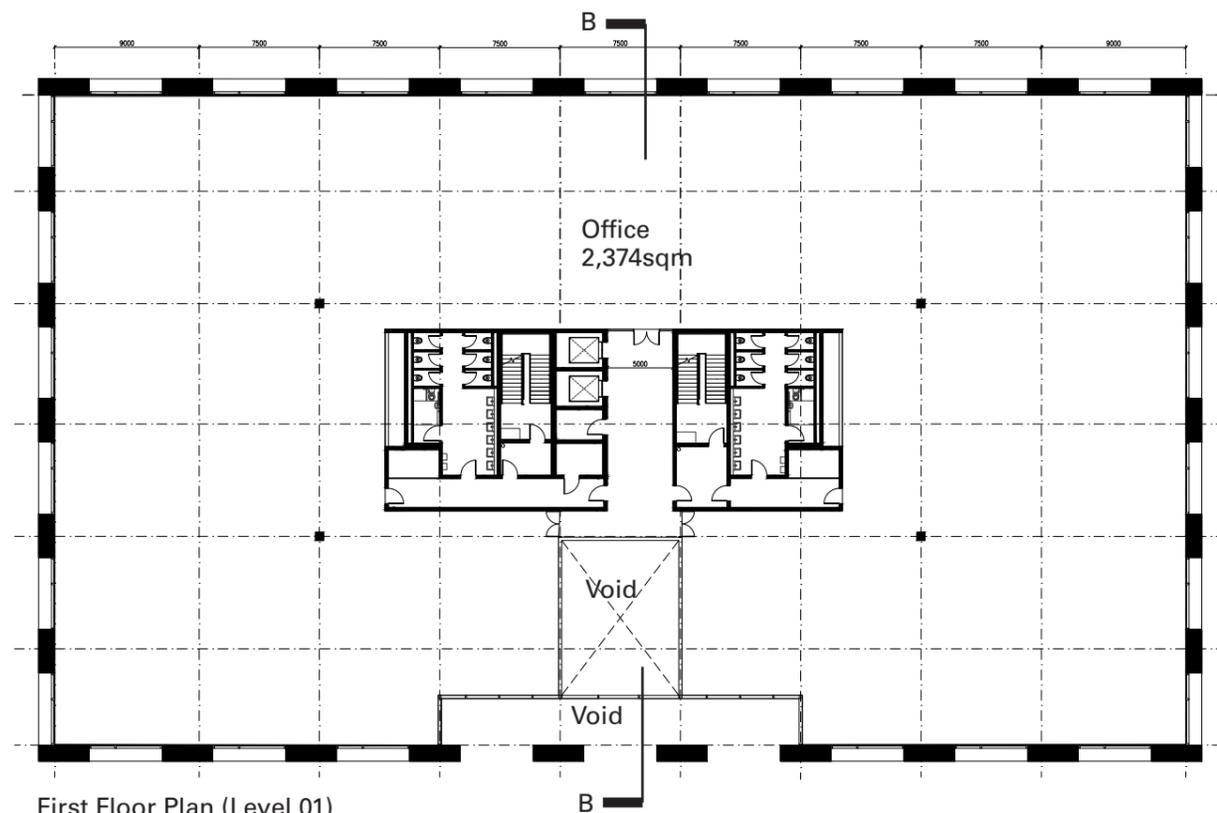
Proposed Office Building /cont.



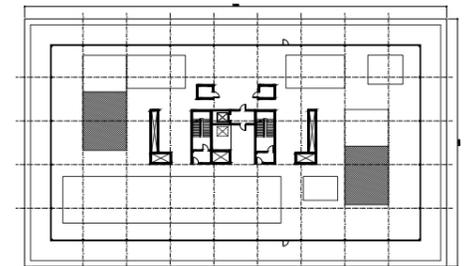
Section on Line B-B



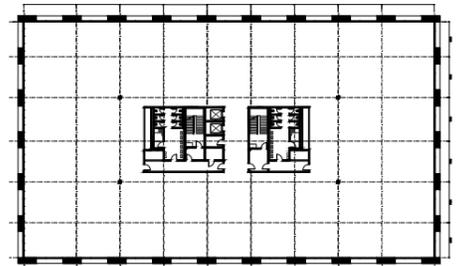
Second Floor Plan (Level 02)



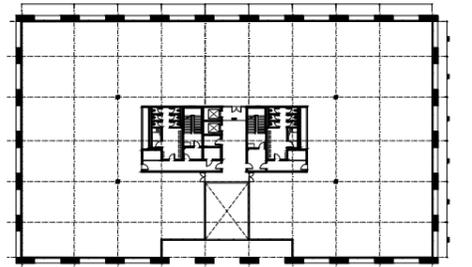
First Floor Plan (Level 01)



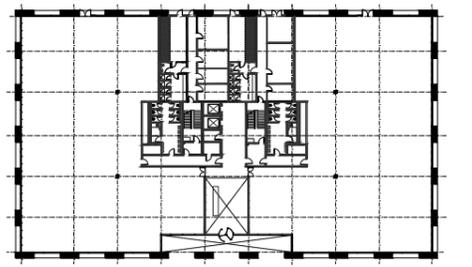
Level 03



Level 02



Level 01



Level 00

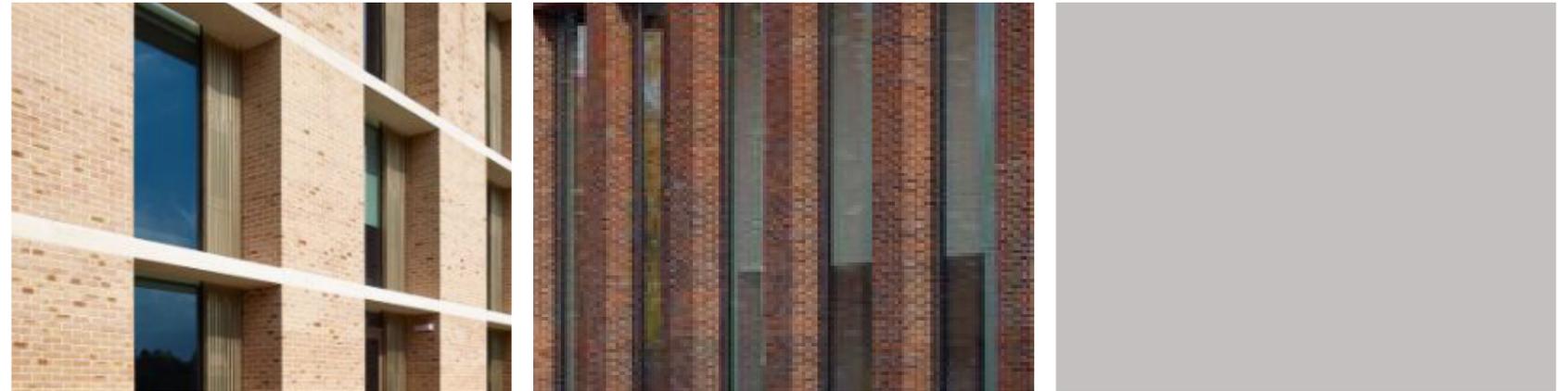
Office Headquarters Building

Massing / Scale / Proportion / Articulation

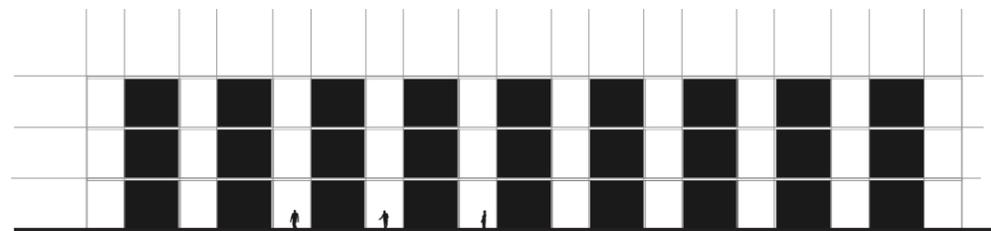
A three storey scale building achieves an appropriate massing that sits comfortably with the buildings footprint and its simple linear form.

The centralised core arrangement allows fenestration on all four elevations and a repetitive, arrangement of equally proportioned solid/void elements achieves an appropriate ratio of glazing to be achieved across all elevations.

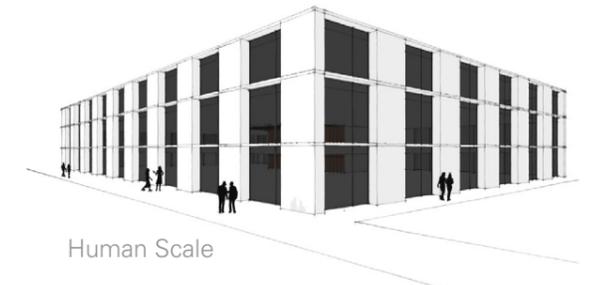
The simple rhythm of the facade reflects the rational plan diagram, and provides a restrained articulation with a human scale.



Solid / Void

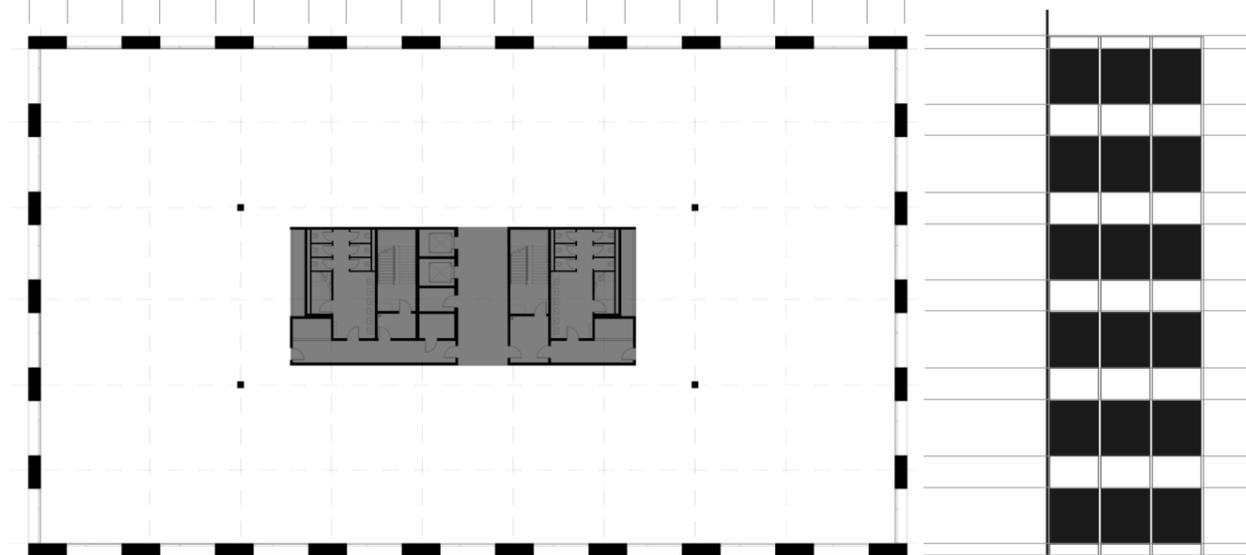
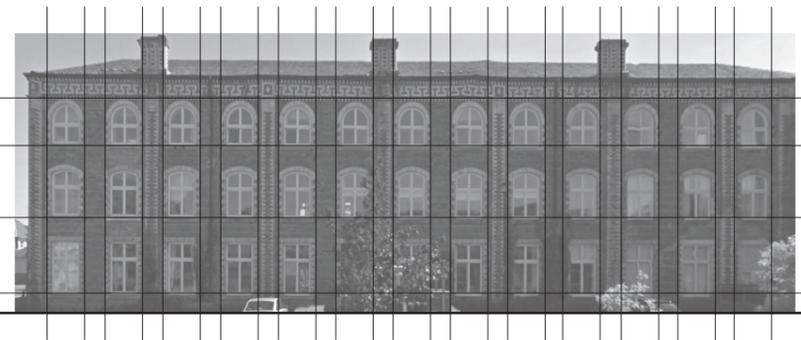


Repeating Grid Pattern



Human Scale

Hayford Mill, Cambusbarron



Rational Plan / Rational Elevation

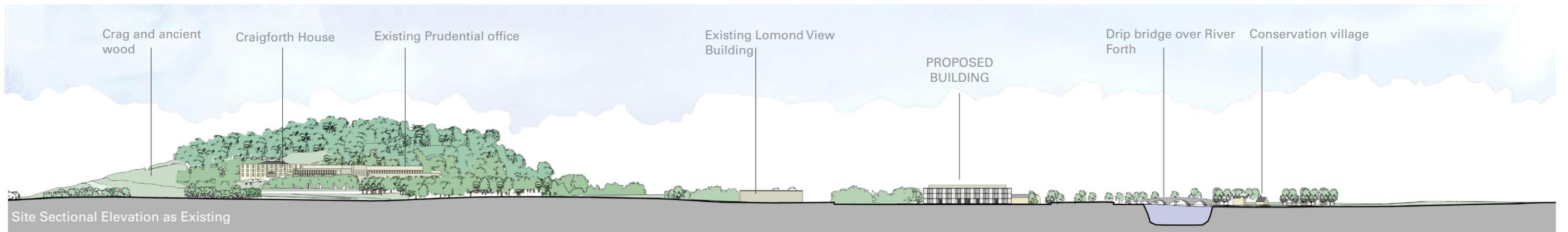
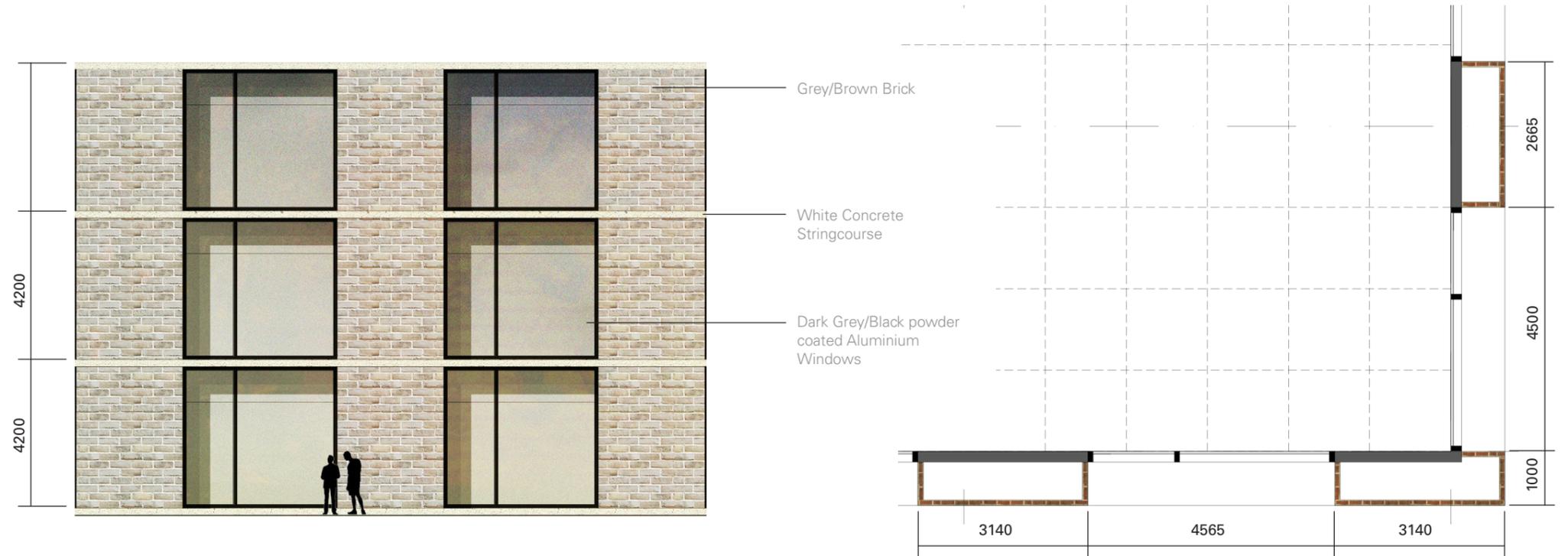
Office Headquarters Building

Elevation Strategy and Materials

A restrained palette of materials comprising brick, white concrete string-courses, dark powder-coated aluminium windows and doors, compliments the solid/void facade arrangement.

Substantial reveals to the solid/void elements reinforce the robust and grounded architecture.

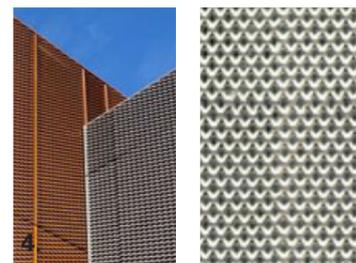
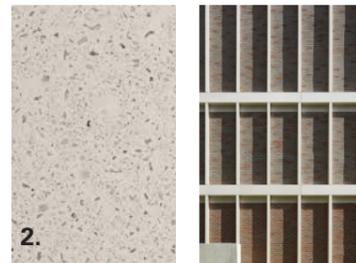
This elegantly proportioned solid/void arrangement establishes a robust, contemporary architecture and a building that sits comfortably within its landscape setting.



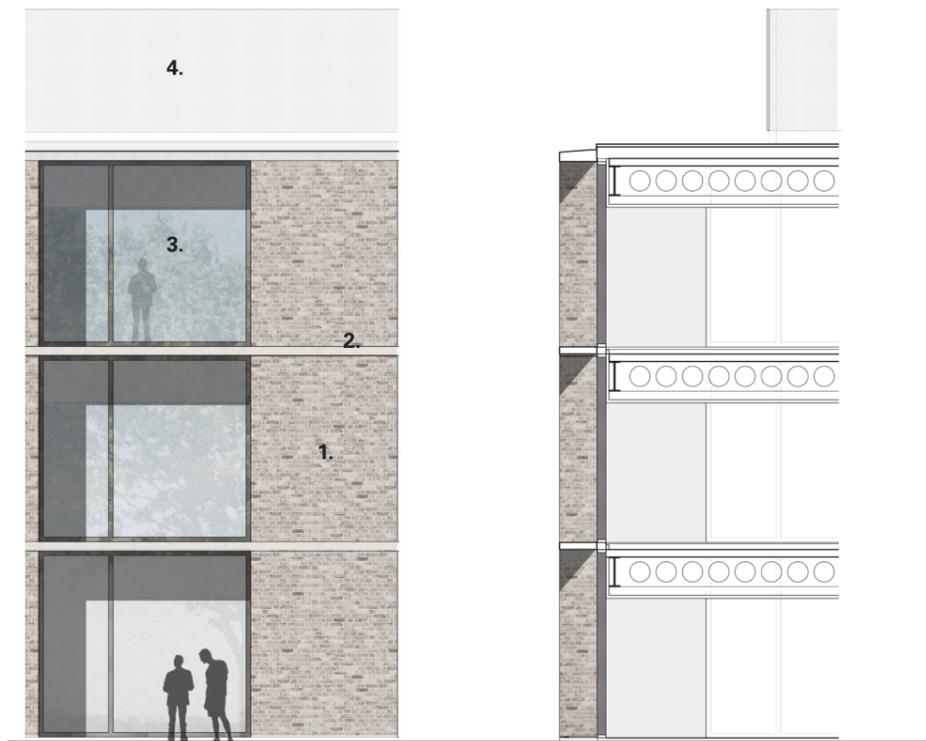
Office Headquarters Building

Material Palette

A restrained palette of materials comprising brick, white concrete string-courses, dark powder-coated aluminium windows and doors, compliments the solid/void facade arrangement.



- 1. Grey/Brown Waterstruck Brick
- 2. Acid Etched White Concrete
- 3. Anodised Aluminium Curtain Wall
- 4. Anodised Mesh Plant Screen



Facade Bay Study

Office Headquarters Building

Place Making / Site Layout



View across the 'Office Garden'

The site is accessed from the north via a proposed new junction in the form of a slip road off the A84.

The site layout retains and reuses the majority of the existing car park whilst a new avenue is formed to provide a route through the site and connect with existing access roads within the wider masterplan area.

The main entrance to the building is south facing with direct access from the car park and central avenue.

The majority of existing trees across the site are retained as part of the overall landscape strategy which is builds on the landscape's existing assets. The landscape design also responds to the needs of the buildings users, creating a unique landscape amenity.

Currently there are no footpaths on the north peninsula whilst the proposal incorporates around 1km of multi-user footways and high quality amenity space. The introduction of extensive new tree planting in addition to the existing mature trees on the site enhances the existing biodiversity and provides other benefits such as carbon reduction.

The enhanced landscape design provides office users with invaluable quality external space and the potential to host events such as charity days, combining activities such as running, cycling or water sports.

As part of the refurbishment of the existing carpark, the proposals include for the introduction of Electric Car Charging points.



- 1. Site Entrance
- 2. Avenue through site
- 3. Building Main Entrance
- 4. Office Garden
- 5. Substation
- 6. Refuse Store
- 7. Coach Park
- 8. Car Park
- 9. Riverside Park
- 10. Multi-user paths
- 11. Existing Suds Ponds
- 12. Lomond View

Visualisations











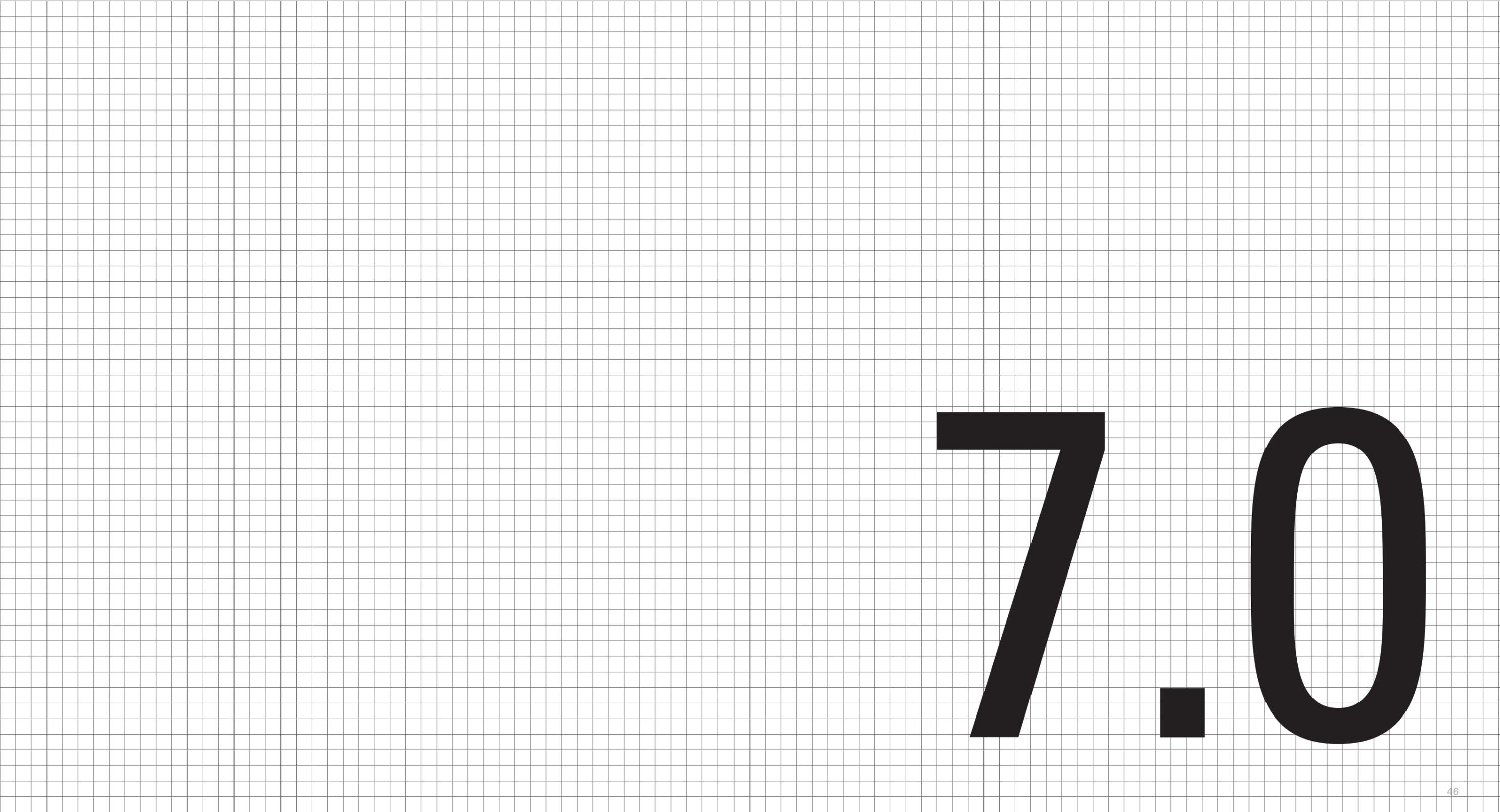






- 7.0 Sustainability**
- 7.1 Health and Wellbeing
- 7.2 Energy Strategy

# Sustainability



7.0

Sustainability

Health and Wellbeing

**Health and Wellbeing**

At the heart of this project is a vision for health and wellbeing through the enhancement of the existing natural assets of the site and the surrounding environment.

Craigforth has a stunning setting with natural landscape assets that make a significant contribution to the quality of its environment. A sensitively designed building and complimentary landscape will enhance and protect the natural assets and will ensure a sustainable future to benefit not only those working in or visiting the building but also for the wider masterplan area and wider community.

The Crag, the Ancient Woodland and the Riverside are valuable natural assets, all of which are currently underused but which can bring enormous benefits in terms of health and well being.

The site is accessible on foot, by bike and via public transport. Comments received during the public consultation demonstrate that routes through the site are popular as part of longer cycle and walking routes.

Active Travel links through the North site of Craigforth are very limited at present and the proposal for the North site is to bring new footpaths and cycle routes through the north site to connect the existing and proposed active travel routes within the wider masterplan area and beyond. Currently, there is no access through the North site to the A84 or the Old Drip Bridge - the proposed site layout and landscaping will remedy this.



**A Sustainable Approach to Development**

Enhancing and improving the landscape and active travel opportunities and enhance the site's natural assets is a fundamental part of the development proposal which seeks to optimise the wide range of health and well-being benefits offered by the site and its location:

- Attractive and well established natural landscape
- Generous Ancient Woodland area with a distinctive identity
- Historic Craigforth House and nearby conservation village
- The Crag as a destination and a leisure opportunity
- Numerous views to significant local landmarks including the Wallace Monument, the City of Stirling and the Castle, and exceptional long distance views to southern highlands and lowland peaks.
- Active Travel connections to Stirling and beyond including cycling, walking, jogging as well as river-based transport potential.

This approach to the development enables efficient and sustainable use of the existing assets whilst enhancing the quality of the environment and delivering improvements and benefits for the site occupants as well as the wider area.

**Sustainable Transport**

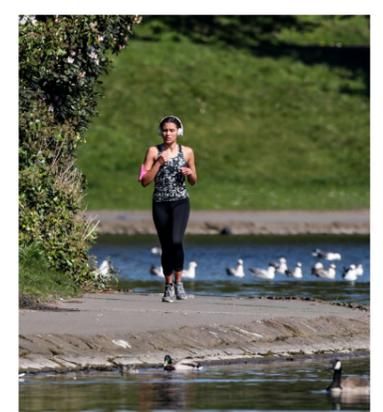
The existing car-park has been retained and reused and the new building is also largely located on a part of the existing car-park, reducing the number of car spaces provided.

The majority of the existing natural and design landscape has been retained and enhanced providing valuable amenity space for occupants and the wider public and alternative, Active Travel is embraced with cycle routes and foot-ways linking to the existing active travel infrastructure. The building is also directly adjacent to public transport links on the A84.

The development therefore targets reduced reliance on private vehicles and car use generally whilst promoting health and well-being through active travel and through the provision of amenity space and opportunity to take advantage of the natural landscape assets.



Active Travel and Public Transport Links



Energy and Sustainability

Energy Strategy

Vision

'Sustainability and Low carbon design principles have been a fundamental aspect on the design development of the Craigforth Office building. The project implements passive design measures to reduce the energy demand with high efficient systems and LZCGT applied to minimise operational carbon emissions.

To address wider sustainability issues, the project is also considering BREEAM Excellent Certification' Aterlier 10

Building Design and Energy Use

The existing office buildings on the campus are of an inefficient form and they have poor fabric performance and aging heating and energy systems

The simple, rational design of the proposed office building embraces low energy use, whilst its orientation exploits natural light and provides a pleasant working environment with views out across the distinctive natural and designed elements of the landscape and local environment.

Development Plan - Low Carbon Requirement

A sustainability and Low Carbon M&E design approach for the building responds to the Stirling Local Development Plan (2018) requirements.

Specifically, the design responds to Primary Policy 4 (Green House Gas Reduction), Policy 4.1 (Low and Zero Carbon Buildings) and Policy 4.3 (Heat Generation).

The site is not within a high heat density area and there are no nearby existing district heating networks that the building can connect to (as defined by the Scottish Heat Map). As a result, the buildings energy strategy will adopt low carbon heating technologies (i.e. VRF ASHP) with heat recovery.

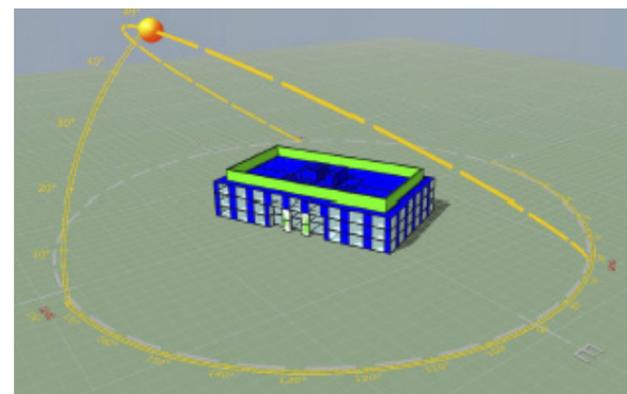
In the design development of the building, an energy hierarchy process has been applied to reduce the buildings energy demand and carbon emissions. This includes the application of high standards of fabric thermal performance, energy efficiency systems (heating, cooling, and lighting) and the inclusion of LZCGT (these being VRF ASHP and PV). These strategies align with the requirements of Primary Policy 4 of the Local Development Plan.

Building Standards - Section 6 Compliance

Section 6 energy modelling has been completed to demonstrate that the proposed energy strategy achieves compliance against Section 6 (Energy) of the Scottish Technical Standards. In addition, the modelling confirms that the LZCGT proposals of VRF ASHP and 145m<sup>2</sup> of PV provides the 20% reduction in carbon emissions as required by Policy 4.3 of the Development Plan.

To address the wider issues of sustainability (e.g. water conservation, materials, ecology etc.) the development has been design to target BREEAM Excellent certification.

Energy Modelling for Craigforth North Office



Low Carbon and Renewable Energy Options Appraisal

Technology	LZCGT Study	Feasibility
Photovoltaic Panels Building mounted solar photovoltaic panels to generate renewable electricity	<ul style="list-style-type: none"> <li>PV panels provide a renewable source of electricity.</li> <li>Operating and maintenance costs for PV panels are low compared to other renewable energy systems.</li> <li>Roof access will be required as photovoltaics require maintenance and cleaning.</li> <li>Cost effective technology to reduce CO<sub>2</sub> emissions which can achieve payback.</li> <li>The yield of the system has yet to be estimated and should be explored further during the next stage of development.</li> <li>Technology recommended.</li> </ul>	
Solar Thermal Heating Building mounted solar collectors to generate domestic hot water for use in each building	<ul style="list-style-type: none"> <li>The outputs from solar thermal systems installed in Scotland tend to be low. The capital cost of the system may result in a poor pay pack - a varying occupancy profile can have major effect.</li> <li>A benefit is that this system would qualify for payment under the non-domestic Renewable Heat Incentive.</li> <li>Potential technology however there are cost and technical issues to be investigated further.</li> </ul>	
Wind Turbines Free standing mast mounted micro wind turbine to generate renewable electricity	<ul style="list-style-type: none"> <li>Installation of technology subject to Scottish Power approval for embedded generators.</li> <li>High capital cost, and ongoing maintenance costs associated with technology.</li> <li>Can be contentious planning issues, particularly due to aesthetics, noise and environmental/ wildlife impacts.</li> <li>At this stage, this technology is not recommended.</li> </ul>	
Biomass Use of wood biomass or biofuel to generate hot water for space heating and DHW.	<ul style="list-style-type: none"> <li>Boilers require tall flues several meters tall to comply with the Clean Air Act and can result in air quality issues particularly in city centre locations.</li> <li>System requires a significant amount of plant space for thermal stores, fuel stores and auxiliary plant.</li> <li>System is costly to install and maintain.</li> <li>Biomass does however receive payments against the non-domestic Renewable Heat Incentive however it is not suited to the development.</li> <li>Technology not recommended.</li> </ul>	
CHP Combined generation of heat and power from a single fuel source	<ul style="list-style-type: none"> <li>Installation of a CHP requires large up-front capital investment.</li> <li>Demand profile must be stable all year round to suit ideal operation of CHP plant.</li> <li>Combustion within cities is a major cause of air pollution.</li> <li>Financially intensive.</li> <li>High maintenance and capital cost.</li> <li>Technology may not achieve Carbon dioxide neutrality due to the fuel/electricity carbon contents.</li> <li>Technology not recommended.</li> </ul>	
Air Sourced Heat Pump Use of the thermodynamic refrigeration cycle to generate hot water using air as a heat sink	<ul style="list-style-type: none"> <li>System provides low carbon heat and less installation/ plant space compared with ground and geothermal heat pumps.</li> <li>VRF Heat pumps can provide both heating and cooling.</li> <li>ASHP can be applied to generate domestic hot water.</li> <li>Technology recommended in the form of VRF heat pump system.</li> </ul>	
Water Sourced Heat Pump Use of hydropower plants capture the energy of falling water to generate electricity.	<ul style="list-style-type: none"> <li>System provides low carbon heat and can also provide cooling</li> <li>Technology has a high capital costs due to civil works required to install heat exchanger within the River Fourth</li> <li>Technical and program risks with co-ordinating approvals/ works with relevant stakeholders (e.g. SEPA, ECC, coastal water groups etc.)</li> <li>High maintenance costs and fault issues, particularly if the system is open loop (i.e. debris from the river getting into the system)</li> <li>Technology not recommended due to the above</li> </ul>	
Hydroelectricity Use of hydropower plants capture the energy of falling water to generate electricity	<ul style="list-style-type: none"> <li>Technology has a high capital costs due to civil works required to install the turbine/ generator.</li> <li>Technical and program risks with co-ordinating approvals/ works with relevant stakeholders (e.g. SEPA, ECC, coastal water groups etc.)</li> <li>High maintenance costs and fault issues due debris from the river affecting the operation/ performance of the turbine/ generator.</li> <li>Technology not recommended due to the above.</li> </ul>	

Technology Feasible, Suitable and Recommended.
 Potential technology; further investigation required.
 Technology not recommended

Sustainability Strategy

ENERGY & CO2 EMISSIONS	WATER	MATERIALS	SURFACE WATER RUN-OFF	WASTE	POLLUTION	HEALTH & WELLBEING
<p>The proposed office building will be designed to minimise the carbon emissions associated with the operational energy consumption. A full computer thermal simulation analysis has been undertaken for the building proposed. This model has assessed and honed the optimum combination of U-Value, air tightness and glazing performance to deliver the best possible passive design. Further calculations to monitor the energy performance of the buildings throughout the design process will be undertaken to ensure energy goals and targets are achieved.</p> <p>Energy efficient light fittings and controls will also be specified throughout the development, both internally and externally. Sub-metering will be installed to facilitate the monitoring of substantial energy uses and low energy lifts will be specified.</p>	<p>To minimise the consumption of potable water in sanitary applications, water efficient fixtures and fittings will be installed in all buildings. This will include low flush toilets and low flow taps and showers. Water metering will also be installed to encourage monitoring and benchmarking of water consumption.</p> <p>Leak detection systems will be installed within the building in order to ensure leaks do not go undetected. Similarly water shut off systems to toilets will be considered throughout the development to minimise the risk of taps and showers being left on after use.</p> <p>Landscaping will also be carefully selected to minimise the requirement for irrigation systems.</p>	<p>Responsibly sourced materials for key building elements, including thermal insulation materials, and finishing elements will be specified, wherever feasible. Additionally, any timber used in these elements will be legally sourced (e.g. FSC certified).</p> <p>The intention is to select materials from local suppliers or from manufacturers who can provide an environmental management system (EMS) certificate (e.g. EMAS/ISO14001 certificate).</p>	<p>Surface water run-off storage and Sustainable Drainage Systems (SUDs) will be considered to reduce and delay the discharge of rainfall run-off to public sewers and watercourses.</p>	<p>A Site Waste Management Plan (SWMP) will be developed and implemented according to best practice. This will enable reduction and effective management of construction site waste.</p> <p>Recycled and/or secondary aggregates (if this can be reasonably procured) will be used in construction, thereby reducing the demand for virgin material.</p> <p>Adequate dedicated storage space for non-recyclable and recyclable waste generated by the building's occupants and visitors will be provided. This will enable appropriate management of waste disposal during building operation.</p>	<p>Insulating materials with a Global Warming Potential (GWP) less than five will be used where technically and financially feasible. This will contribute to reduce blowing agent emissions associated with the manufacture, installation, use and disposal of foamed thermal and acoustic insulating materials.</p> <p>Night time light pollution will be minimised through the appropriate location and selection of external luminaires and light controls during detailed design.</p> <p>Potential noise from the project affecting nearby noise-sensitive buildings will be reduced by adopting noise attenuation measures, if required.</p>	<p>Best practice levels of thermal, visual and acoustic comfort will be achieved throughout the building, including public areas. Similarly, a balanced approach to ventilation and energy performance will be applied to ensure healthy internal environments are achieved without significant energy penalties. Low emitting VOC materials will also be specified where possible.</p> <p>Internal and external lighting will be also designed in line with best practice for visual performance and comfort.</p> <p>All water systems in the development will be designed in order to reduce the risk of legionellosis in operation and water fountains will be considered to ensure occupants remain hydrated while visiting the building.</p>

**8.0 Landscape and Public Realm**

- 8.1 Landscape Concept
- 8.2 Site Layout and Landscape Strategy
- 8.3 Existing Landscape Framework
- 8.4 Views
- 8.5 Accessibility
- 8.6 The Office Garden
- 8.7 The Riverside Park
- 8.8 Planting Strategy
- 8.9 Hard Landscape Palette

Landscape and Public Realm

8.0

Landscape Design

Landscape Concept

Landscape Concept

The approach for the landscape for the new office headquarters is to respond to the needs of the building users and create a unique landscape for a place to work supported by the following site-wide Building with Nature and biophilic design and placemaking principles:

- Provide space and choice: from access to multi-sensorial, quiet environments for restoration and increase concentration to a variety of spaces for social interaction.
- Promote workplace well-being through access to an active landscape – fitness stations, walking and cycling routes.
- Strong inside – outside connection with natural light, views out into the surrounding landscape and wildlife.
- Use of natural materials in keeping with the local area and complementary to the proposed building façade treatments.

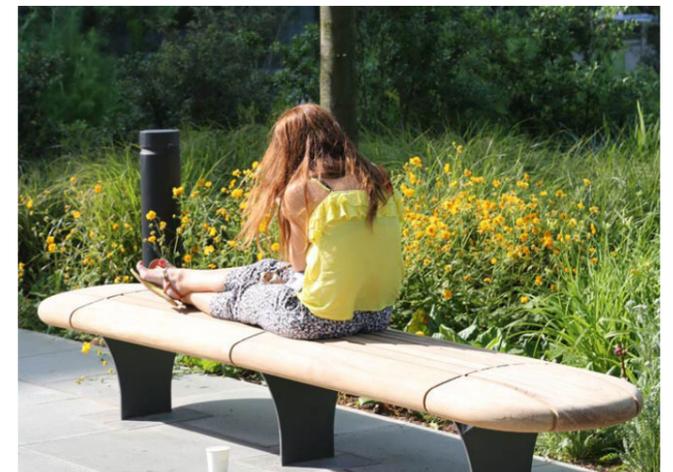


Site Layout and Landscape Strategy

Site Layout and Landscape Strategy

The aim of the landscape proposals is to provide a high quality, ecologically sensitive redevelopment to this part of the Craigforth which integrates seamlessly into the existing landscape framework. The landscape strategy will be delivered through a series of objectives including:-

- Providing a strong link with the Riverside Park as the axis that brings the full masterplan development together
- Creation of a more geometric design to reflect the location
- Position the new building and car park to work around existing trees where possible
- New trees and hedgerow planting to be incorporated to reduce visual impact of new building and infrastructure within setting of listed bridge and historic village.
- Site to be interwoven by green infrastructure
- New multi-user path to connect to Drip Bridge, existing bus stops, campus and provide onward connectivity to Riverside Park
- Provide opportunities for staff to dwell, socialize and take exercise in an attractive setting
- Provide an attractive outlook from the building for staff and frame building.



Landscape Design

Working Within & Strengthening The Existing Landscape Framework

Working Within & Strengthening The Existing Landscape Framework

The site lies to the east of a meander of the River Forth and the lower lying land is influenced by a 200-year flood plain. As a result, the existing landscape framework is characterised by the river and its fluctuating water levels and the existing designed landscape use of the site as office development and parking. The proposals aim to work with the existing green infrastructure and develop the landscape framework within four main components including:-

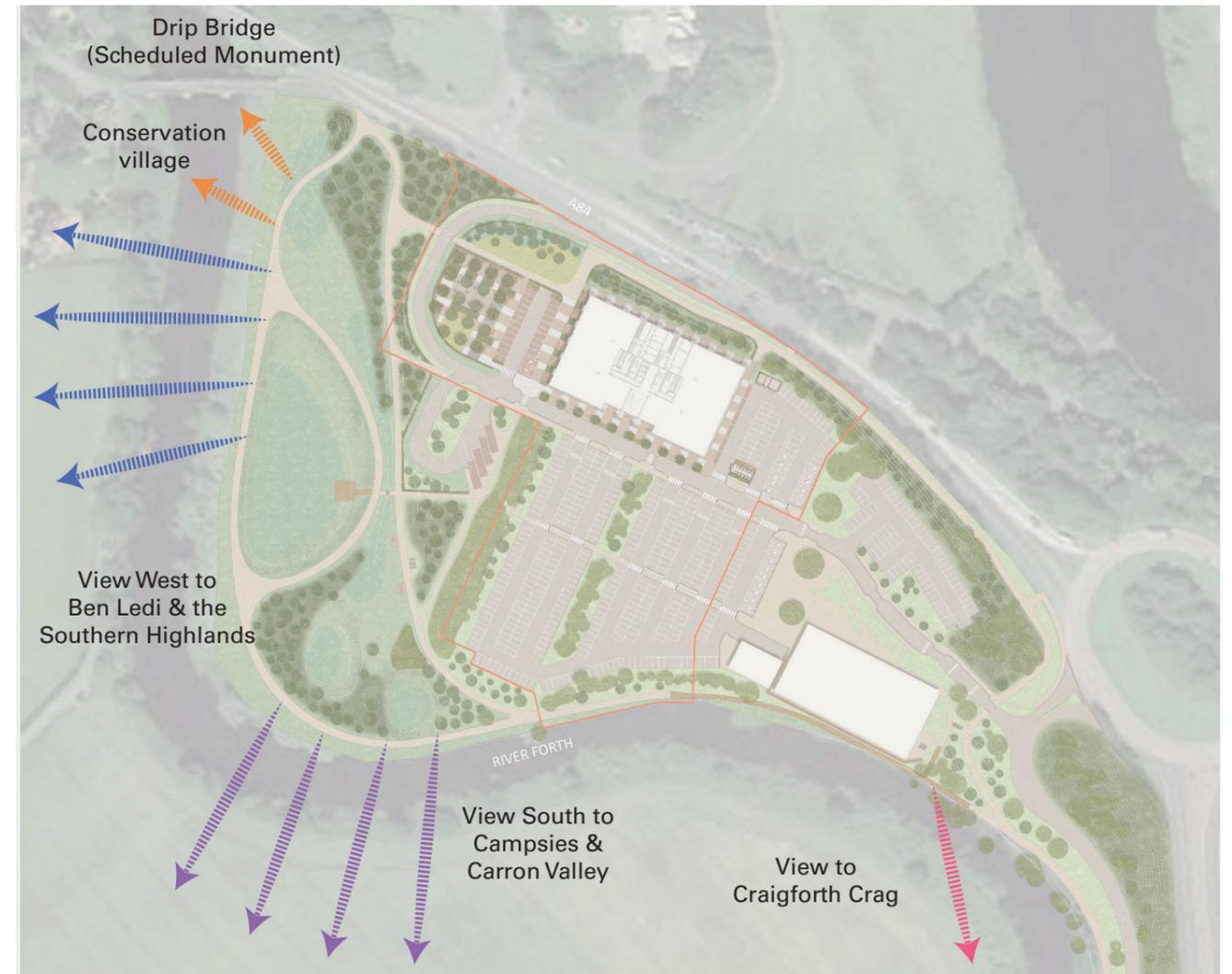
- Retaining and integrating the semi-natural habitat of marshy grassland along the River flood plain as part of developing the area into a Riverside park. Further scrapes would be introduced to create wetland meadows. An existing SuDs pond is to be retained and native riparian structure planting is to be introduced.
- Retaining where possible the existing lines of standard trees including the very mature oak trees. The new office building is to be positioned to the north of the site out with the floodplain and over an area of existing car park. Some trees are proposed to be removed to facilitate the building footprint but the majority of existing trees and vegetation are to be retained and added to, to help screen the car park.
- Introducing new native mixed hedge planting and tree planting along the northern boundary to strengthen the existing green buffer to the A84 whilst integrating the route of a proposed cycleway.
- Creation of a new office garden to provide outdoor space for the staff and setting for the building which includes clipped hedges, parkland trees, ornamental planting and lawns.



Views

Views

The existing open Carse landscape and riverside setting of the site offers impressive views to the south, east and west of the historic village of Drip Bridge, and listed bridge, Craigforth Crag and the surrounding riparian and agricultural landscape. New planting and recreational routes have been designed to strengthen and improve access to enjoy the views. The predominately south, south-westerly aspect of the site combined with the proposed planting offers sheltered, attractive spaces for staff to dwell, socialise or take exercise.



Landscape Design

Accessibility

Accessibility

The site is to be accessed off the existing A84 via a new vehicular slip road. The road is edged on one side with a swale and the other by a grass verge beyond which is clipped hedging and new trees and structure planting. A proposed active travel route is integrated into the northern edge of the site linking new cycleways with existing connections into Stirling. The new cycleways and footpaths have been designed to link with the wider recreational routes through the Riverside Park proposed within the Craigforth Masterplan extending connections to the wider Craigforth Campus.

1. New office building
2. Existing office building 'Lomond View'
3. Proposed substation
4. Proposed waste enclosure
5. New site access via sliproad
6. Existing site access / exit via Craigforth roundabout
7. A84
8. River Forth
9. Drip Bridge
10. The Forth Trail Walking Route and car park



Accessible Parking & Access



Public Transport



Coach Access & parking



Emergency Access



Refuse Collection



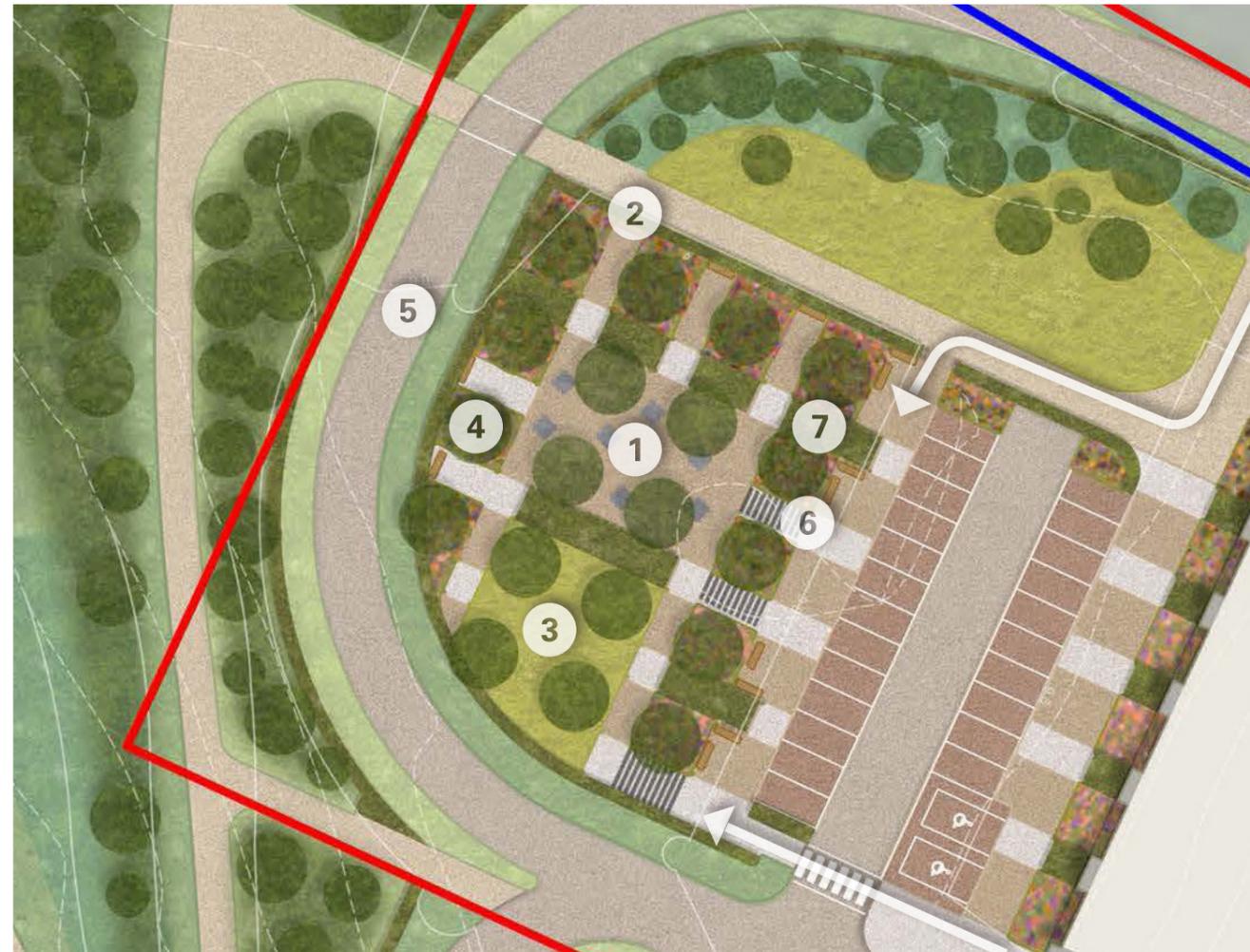
Cycle Route & Parking

Landscape Design

Office Garden

Office Garden

1. Single and group seating
2. Hedge border (single species - deciduous)
3. Lawn
4. Grid of trees (*Taxodium distichum*)
5. Access road
6. 'Plank-style' paving with wide gravel filled joints
7. Hedge blocks to add structure and divide space



Riverside Park

Riverside Park

1. Wet meadows
2. Native structure planting
3. Boardwalk
4. Existing SUDs pond to be retained
5. Existing riparian / marshy grassland planting to be retained
6. Existing structure planting to be retained
7. Cycle route
8. Fitness Stations



Landscape Design

Planting Strategy

Planting Strategy

The soft landscape will provide seasonal interest throughout the year in addition to extending the opportunities for habitat creation and provide food sources for wildlife and pollinating insects. A native hedge mix has been chosen with species attractive for birds including, Hazel, Hawthorn, Wild Privet, Crab Apple and Bird Cherry.

The wider landscape will be parkland in character with a mosaic of wetland meadows, marshy grassland and areas of structure planting and Riparian trees providing and shading and habitat creation within the flood plain. Grass and meadow seed mixes have been chosen to create a country park feel and provide a colourful range of species for wet soils and areas of which are occasionally flooded or waterlogged for short periods. Native structure planting including species such as Alder, Aspen, Willow, Downy Birch, cherry are proposed suitable for Riparian conditions.

The office garden is located to the west of the building and will provide shelter and structure through blocks of Hornbeam hedge planting and a grid of swamp cypress trees. Seasonal interest will be provided via ornamental planting including prairie style grasses and perennial and herbaceous plants interspersed with bulbs.

A line of ornamental cherry trees marks the building frontage, each tree is underplanted with ornamental planting including a mix of evergreen and perennial herbaceous plants.

Note: Read in conjunction with Planting strategy plan 5274-OOB-ZZ-00-DR-L-0031



Scotia Seeds - Wet Meadow Mix



Scotia Seeds - Hedgerow Mix



Riparian Tree Planting



Riparian Tree Planting



Allium Stipitatum 'Mount Everest'



Anemone x hybrida 'Honorine Jobert'



Helenium 'Moerheim Beauty'



Helleborus orientalis



Persicaria amplexicaulis 'Alba'



Rudbeckia fulgida var sullivantii 'Goldsturm'



Verbena bariensis



Narcissus 'Thalia'



Nassella tenuissima



Molinia caerulea subsp. arundinacea 'Transparent'



Asplenium scolopendrium



Polystichum setiferum



Carpinus betulus



Prunus laurocerasus 'Otto Luyken'



Cornus kousa



Viburnum x bodnantense 'Dawn'



Taxodium distichum



Prunus 'Sunset Boulevard'



Populus tremulus



Larix decidua

Landscape Design

Hard Landscape Palette

Hard Landscape Palette

All materials and colours have been chosen to complement the new office building. The building perimeter and entrance area are to be paved in bands of high-quality block paving in two complementary plan forms and colours. The unit depth and below ground build-up will be detailed to suit any maintenance requirements and loadings. Plank-style paving is proposed as the main unit sizes with smaller, slender brick forms used to emphasize the brick pier articulation within the building elevation.

The same plank-style paving is to be used in the office garden laid with close joints in some areas and wider 'stepping-stone' format in others. Resin bound gravel is to be laid as a second complementary surfacing within the grid design.

The new slip road and access road is to be surfaced in Dense bitumen macadam, this is to be extended into the coach access, turning area and car park aisles within the site. The car park bays and coach park bays are to be surfaced in permeable block paving in a colour complementary to the building materiality and overall paving palette. The permeable paving is to support the SuDS strategy for the scheme along with swales to the road verge.

All approach paths and cycleways to the building are to be surfaced in hot rolled asphalt and are to be to an accessible grade and width. Steps are required within the Riverside path where they will be detailed to include handrails and visibility bands on treads and risers. The external exercise stations shall be surfaced in resin bound gravel.

The elevated board walks are to be constructed in natural timber with toe boards and guard rails to extend the cycleway and footpath in constrained sections of the Riverside path and give access to the wet meadows area.



Block paving to garden area:-Tobermore Manhattan or similar approved, colour sandstone



Resin bound gravel surfacing to garden and exercise area:- Addaset or similar approved, colour 6mmTrent



Natural Timber Elevated board walk:-The wild deck company Ltd or similar approved.



Permeable block paving to car park bays and coach parking bays =Tobermore Hydropave 240 or similar, colour Bracken and natural as bay demarcation



Block paving to building perimeter:- Tobermore Manhattan or similar approved, colour sandstone and Tobermore Retro or similar approved colour Bracken

Landscape Design

Wider Masterplan Area

The landscape design for the North Site is a fully integrated part of a wider masterplan strategy that covers the whole of Craigforth.

Craigforth is well connected visually to its surrounding context and has a green asset at its core, Craigforth crag.

However, the landscape is fragmented and experienced as individual elements as opposed to as part of an integrated and interconnected environment.

The aim for the landscape proposals therefore is to enable an organic interlocking of cultural and natural resources, uses and users for all areas of the wider masterplan.

**Active Travel Connections**

A fundamental element of the wider masterplan strategy is to connect all areas of the masterplan via active travel routes, to extend and improve the existing active travel infrastructure and connect with routes to the wider locality.

- Key**
- Development boundary
  - ⋯ Existing off-site footpath connections
  - ⋯ Existing / proposed off-site cycleway connections
  - Proposed combined footpath / cycle route
  - Proposed low level footpaths
  - Existing & extended footpaths up to Crag Summit
  - Shared surface residential streets



**9.0 Technical Design Strategies**

- 9.1 Access and Parking
- 9.2 Public Transport and Active Travel
- 9.3 Refuse Strategy and Emergency Access
- 9.4 Building Maintenance

Technical Design Strategies

9.0

Technical Design Strategies

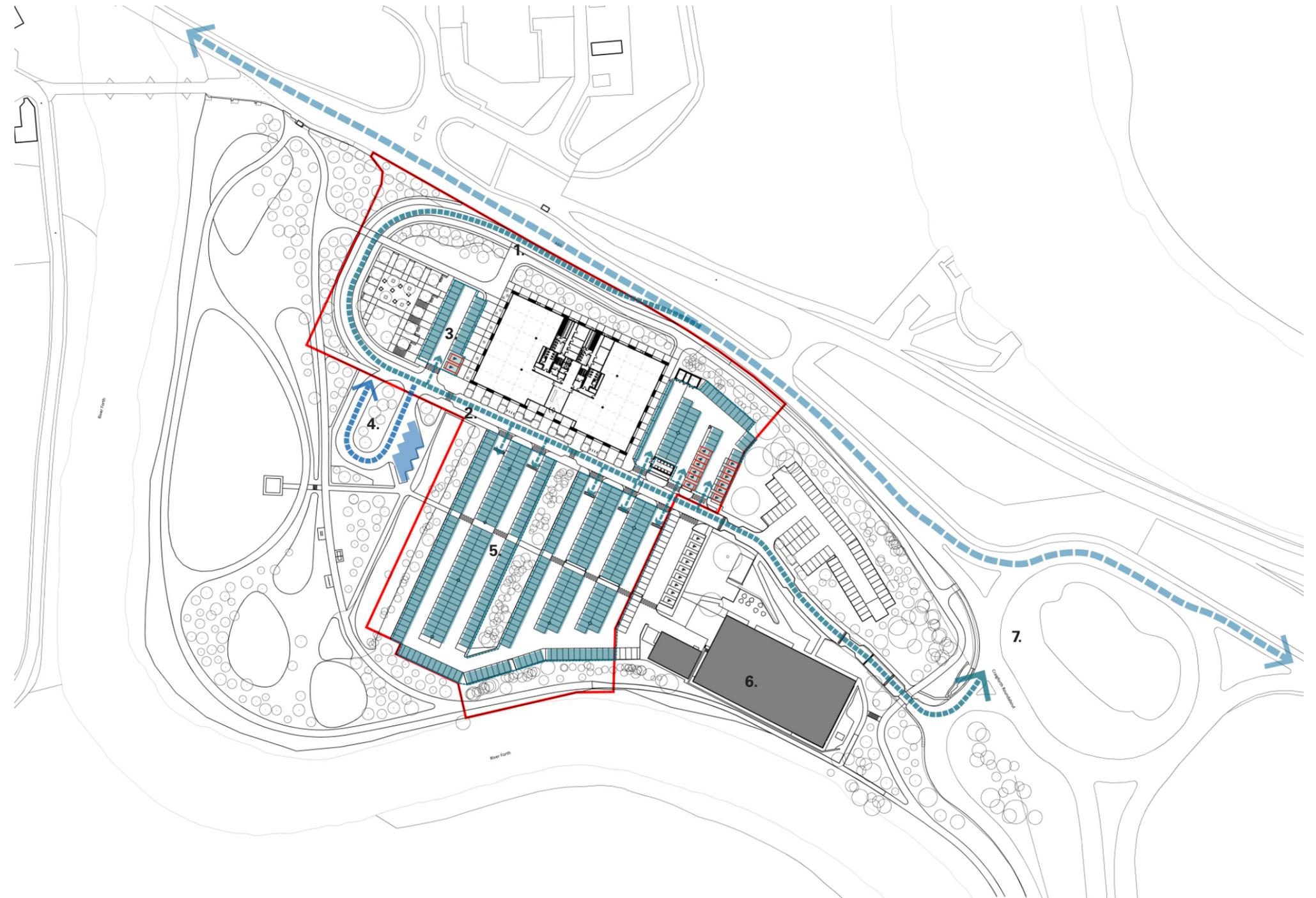
Access and Parking

Site Access

- A new, dedicated access into the site is proposed via a new slip road junction from the A84. This access is designed as an entry access.
- The new access road sweeps into the centre of the site and links to a new Avenue running West to East through the centre of the site.
- The main entrance to the building is on the south elevation, access from the central Avenue.
- The avenue continues west to east to serve the existing Lomond View building and its associated parking, to link to the wider masterplan access point at Craigforth Roundabout.

Parking and Service Access

- The majority of the parking is through reusing the existing car park with a small number of additional spaces provided to the west of the building to provide a dedicated visitor car park near to the site entrance.
- 400 parking spaces are provided overall, 14 of these are accessible parking spaces which complies with the planning requirement of 6 spaces + 2% of the total number of spaces provided.
- Electrical Vehicle Charging Points provision will be determined at the detail design stage
- A dedicated Coach parking area for up to 4 coaches is located adjacent to the site, within the boundary of the wider masterplan area.
- The coach park also provides a waiting and laydown area for service vehicles.



1. Site Access Via new slip road junction
2. Avenue
3. Visitor Car Park
4. Coach Park and Service Vehicles
5. Main Car Park
6. Lomond View
7. Craigforth Roundabout

Technical Design Strategies

Public Transport and Active Travel links

**Public Transport Links**

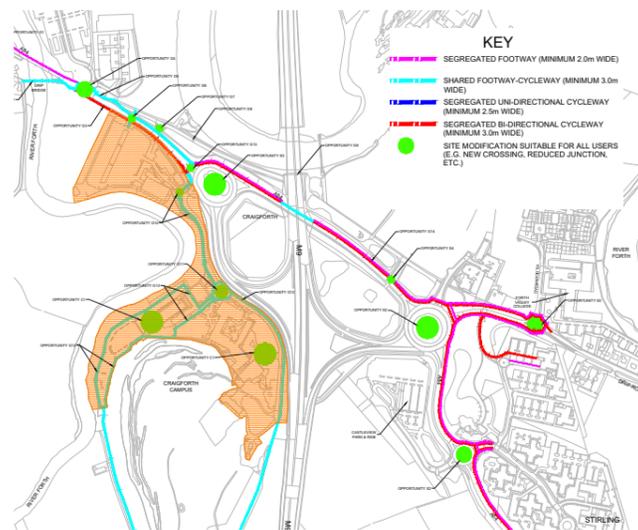
The site is served by public transport bus links on the adjacent A84 and existing bus stops are located within short walking distances of the new office building.

**Active Travel**

Existing proposals for a major Active Travel enhancement in and around the site area have been integrated into the site design proposals.

These are complimented by site-wide routes that connect with further active travel routes across the wider masterplan area.

-  Public Transport
-  Existing Bus Stop
-  Potential Pedestrian Crossing Location
-  New Sustrans Cycleway
-  Proposed Site Cycle / Multi User Paths
-  Proposed Footpaths



Existing Sustrans proposals

Technical Design Strategies

Refuse Strategy and Emergency Access

**Refuse Strategy**

A refuse storage facility is proposed for the new building providing space for up to 12 x 1100ltr capacity refuse containers.

The refuse store is located close to the building entrance within the west car park area providing convenient access from either the north or south building entrances.

Refuse collection access is via the central avenue.

**Emergency Access**

The slip road access junction and avenue provides a suitable direct emergency access to the main entrance of the building following the same route of the refuse vehicle indicated.



Technical Design Strategies

Building Maintenance Strategy

**Maintenance Access**

The simple plan arrangement and relatively low scale and height of the building lends itself to a straightforward maintenance strategy.

**Facade Access / Window Cleaning**

All four façades of the building are accessible from a hardstanding surface around the full perimeter of the building.

Externally, windows cleaning will be carried out from ground level. The maximum reach for ground level window cleaning using a water-fed pole system is 20m - the maximum facade height on the proposed building is 12.75m.

Where access is required to carry out repair or maintenance to the facade, a powered or manually operated Mobile Elevating Work Platform. The minimum width of the hard standing around the building perimeter is 2.7m which is compatible with a range of small footprint MEWP vehicles.

High-reach access to the external and internal double height volumes will be achieved in a similar way.

**Plant Access**

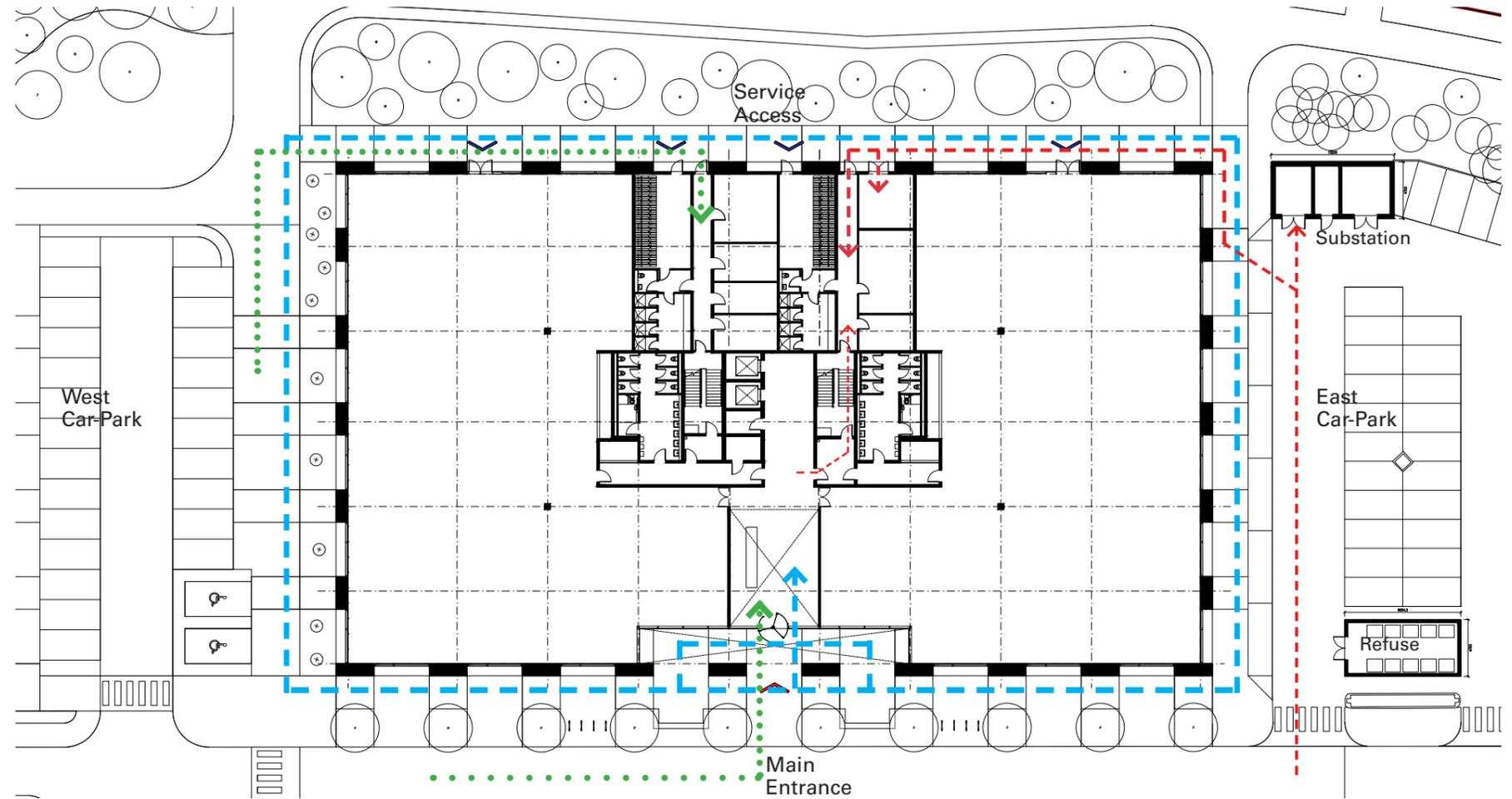
The substation and HV Switch room are accessed from the East carpark on the north side of the building. Similarly, the internal plantrooms are access this way.

Access to Roof Level plant is via either of the stair cores which extend to roof level or via one of the two lifts which is designated as service lift and extends to roof level.

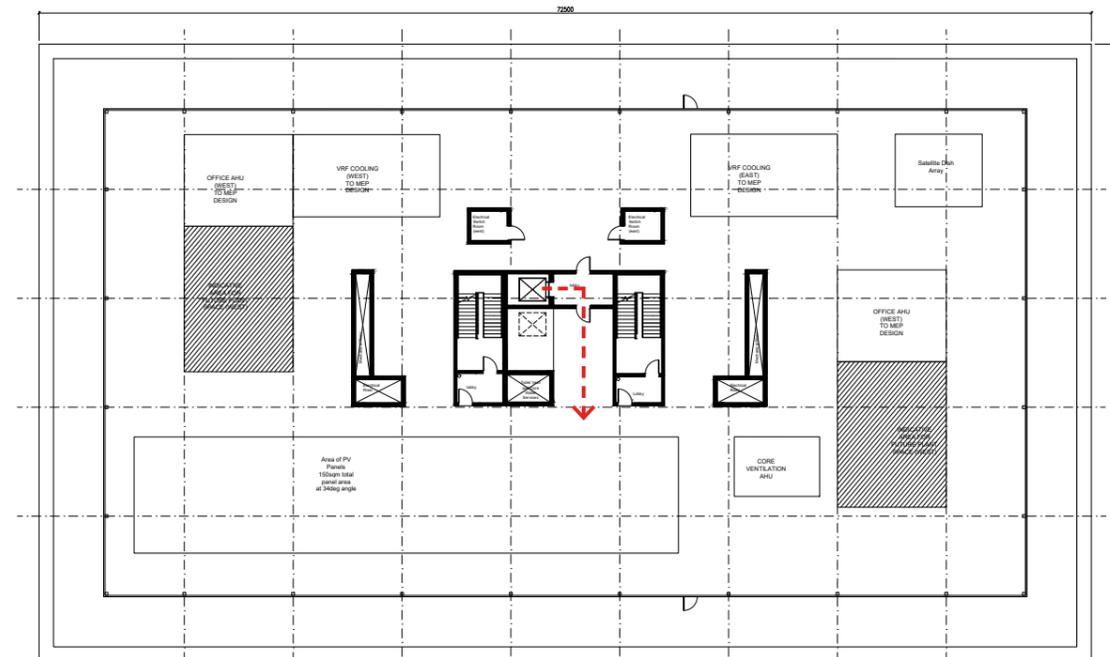
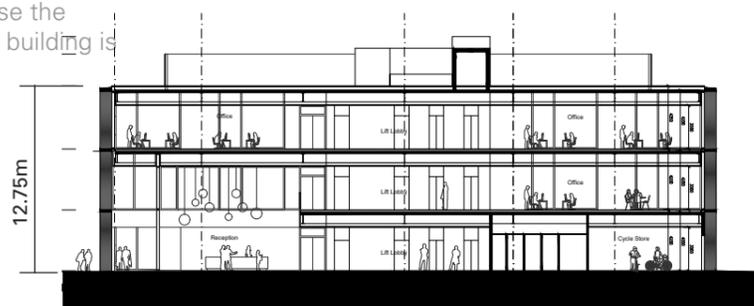
**Service / Delivery Access**

Delivery vehicles can laydown either at the main entrance on the south of the building, or at either the West or the East car parks from which access to the rear entrances on the North side of the building is provided.

In addition, larger service and delivery vehicles can use the coach parking facility, from where easy access to the building is provided.



- - - - - → Plant Access
- - - - - → Facade Access
- . . . . . → Service Access



Roof Plan





