Appearance
Proposed Building

The wider context of Leconfield Industrial Estate currently accommodates approximately 20 industrial warehouse units of varying sizes and varying standard commercial construction, including brick, profiled metal cladding, and prefabricated steel frames.

The CMIQ hub building will be the main central building of the campus and as one of the first new builds on the site will be an important catalyst for change in the area. As the hub will be the focal point for the campus it needs to be iconic in its appearance and be distinct to create a landmark building as defined in the design code document. This can be done in several ways the material palette has been carefully selected and the use of building materials reflects the local character and vernacular of the surrounding buildings as well as how it sits within its rural backdrop with the woodlands to the rear.

A strong distinct palette has been chosen, with the use of high-quality materials. As suggested in the design code timber has been selected as an elevational treatment to the entrance areas of the building and will help settle the building within its context as well as being a material of low embodied carbon.

The concept of 'renewal' has been the driver behind the elevational treatment of the facade. The peeling away of the old, 'black cladding and the revealing of new natural timber in the entrance areas. This concept is to mirror the evolution of the Leconfield industrial estate with its renewal into the new Cleator Moor Innovation Quarter.

With the black metal cladding to the ends of each wing, Vertical timber cladding is used to entrance areas with the dark cladding appearing to be stripped off the wing ends revealing a new natural material underneath. The timber helps connect the building to its surrounding whilst the black cladding gives a nod back to the industrial history of the site. This type of vernacular and material combination is not uncommon in rural settings for use in farm buildings throughout Cumbria.

Curtain walling and overhead sectional doors break up the façade to allow multiple access points to the building. Colour-matching external rainwater goods help them to blend in, with lighter-coloured vertical solar shading fins to help emphasise the verticality and rhythm of the façade. Spandrel panels in the entrance areas will be coloured to aid with wayfinding and are in line with the design code

3D Image of the proposed hub building

Appearance
Building Elevations

01 NORTH WING - WEST ELEVATION
SCALE: 1 : 100

02 HUB - WEST ELEVATION
SCALE: 1 : 100

03 SOUTH WING - WEST ELEVATION
SCALE: 1 : 100

04 SOUTH WING - SOUTH ELEVATION
SCALE: 1 : 100

Plant Enclosure

Glazed roof lights

Fixed Solar Shading – Aluminium fins

05 SOUTH WING - EAST ELEVATION
SCALE: 1 : 100

06 HUB - SOUTH EAST ELEVATION
SCALE: 1 : 100

07 EAST WING - SOUTH ELEVATION
SCALE: 1 : 100

08 EAST WING - EAST ELEVATION
SCALE: 1 : 100

Bitumen roof

Curtain Wall – with bifold doors for secondary access

09 EAST WING - NORTH ELEVATION
SCALE: 1 : 100

10 HUB - NORTH ELEVATION
SCALE: 1 : 100

11 NORTH WING - EAST ELEVATION
SCALE: 1 : 100

12 NORTH WING - NORTH ELEVATION
SCALE: 1 : 100

External Feature Cladding – single skin PPC metal cladding

Timber Cladding

Spandrel Panel – Colour TBC

Frosted Glass for added privacy – dependant on tenant requirements

Sectional Overhead Doors – glass panels with solid base kick panels, built in door for pedestrian access

Please refer to Elevation drawing CMMIQ-NOR-HUB-ZZ-DR-A-00101for material references

Access
Travel Connections

The site is central to Cleator Moor and can be used to strengthen connections through the town.

The Hub will bring together existing and future developments in Cleator Moor as a key central space.

As part of the s106 agreement a new bus shelter will be created to help increase local transportation connection to the area.

BUS STOP
DRIVING CONNECTIONS
NATIONAL RAIL STATION
PRIMARY ROADS
SECONDARY ROADS
WALKING DISTANCE

10 mins to WHITEHAVEN

THREAPTHWAITE FARM

TO A66/M6

5 mins

10 mins

HIGH STREET

WEST LAKES SCIENCE PARK

15 mins to SELLAFIELD

Map showing the site in relation to Cleator Moor town centre. Copyright google maps

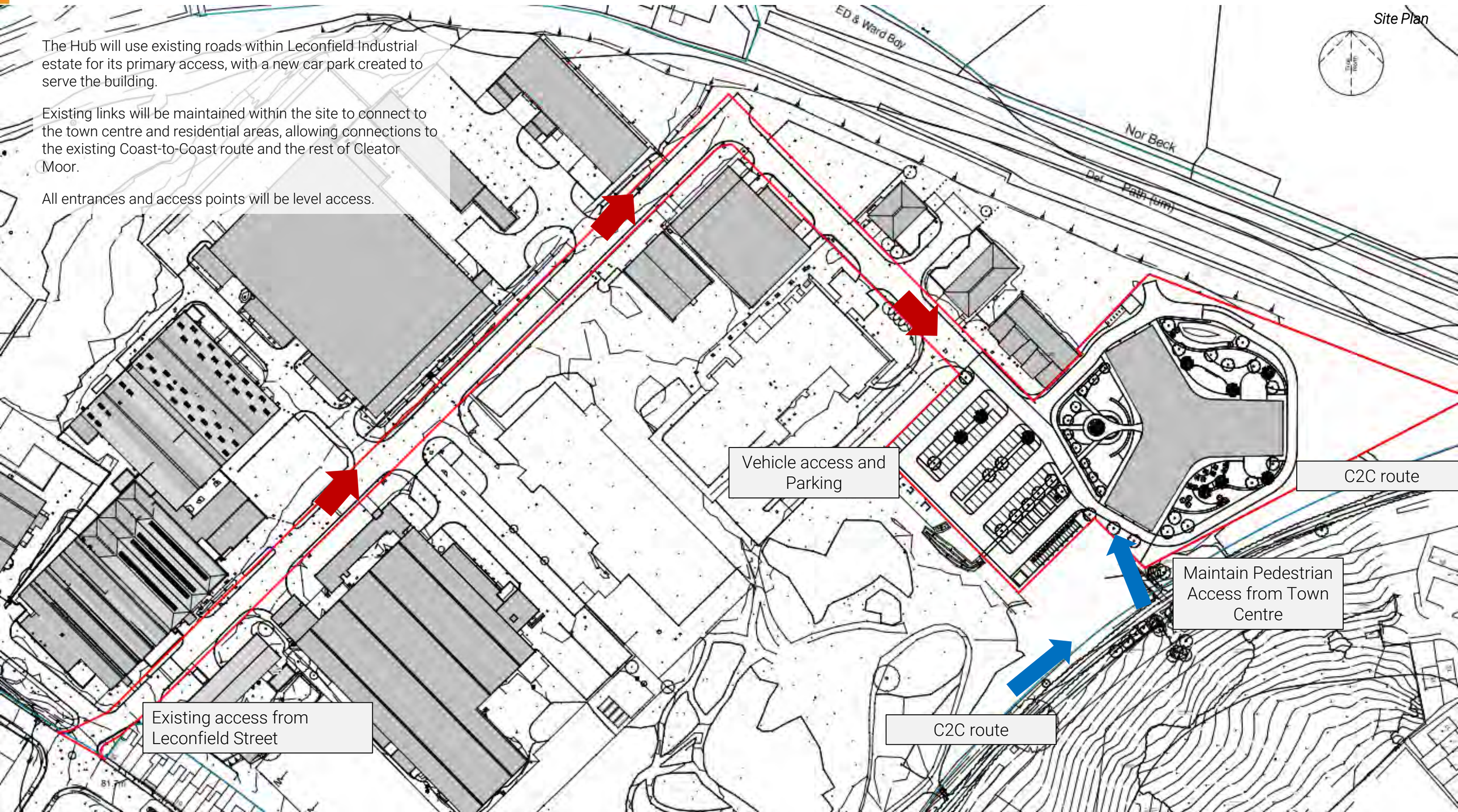
Access
Site

The Hub will use existing roads within Leconfield Industrial estate for its primary access, with a new car park created to serve the building.

Existing links will be maintained within the site to connect to the town centre and residential areas, allowing connections to the existing Coast-to-Coast route and the rest of Cleator Moor.

All entrances and access points will be level access.

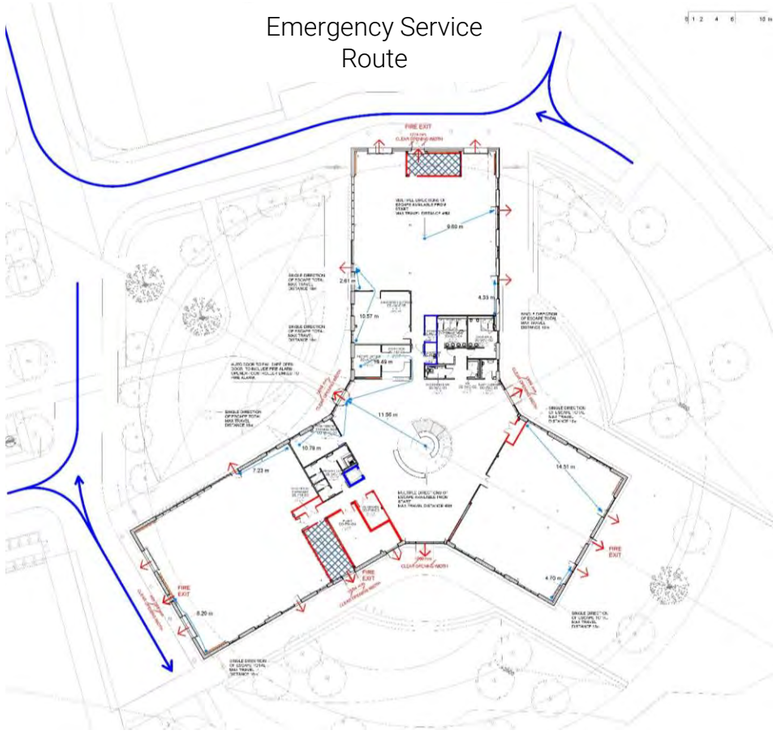
Site Plan



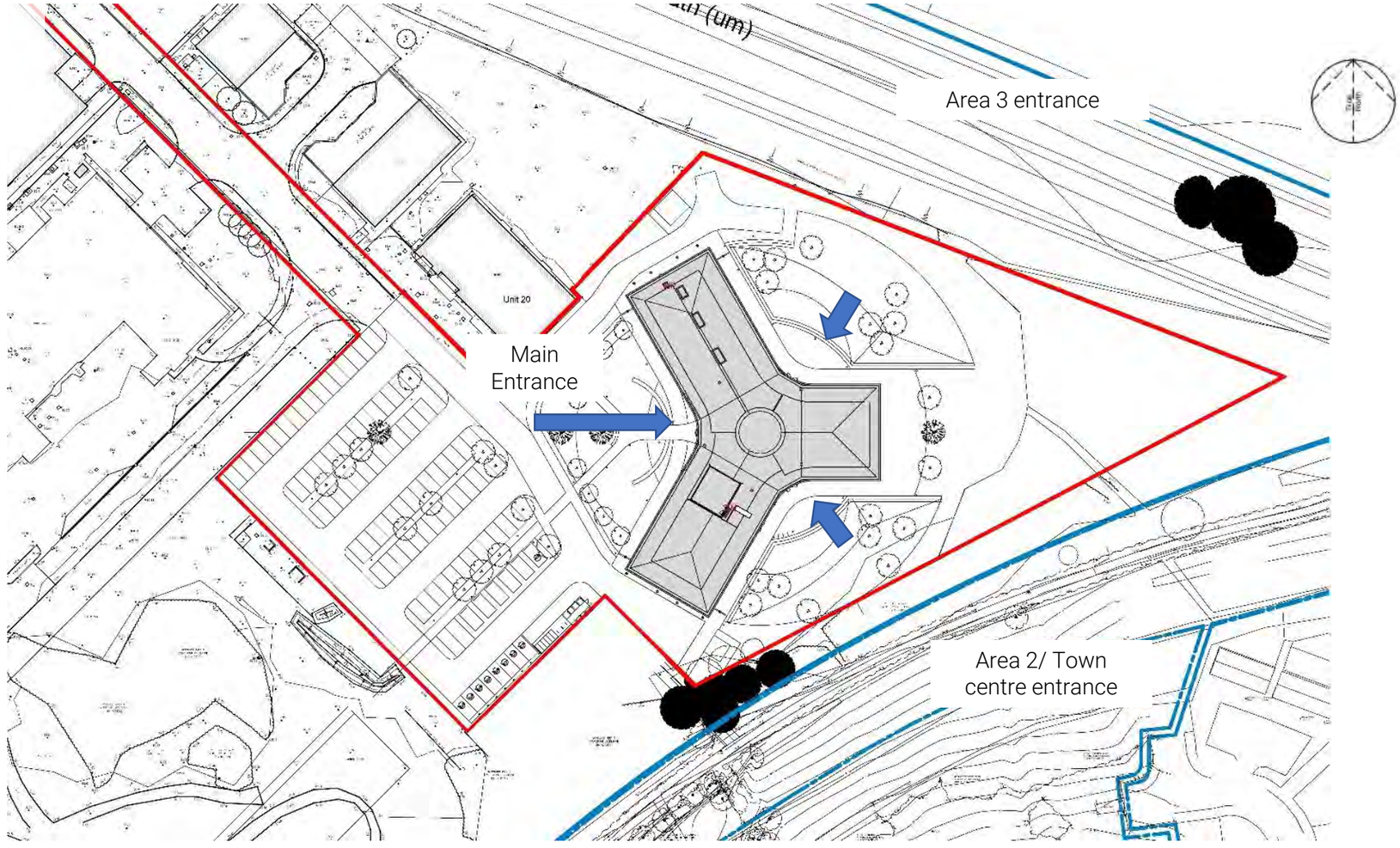
Access
Building

The main entrance to the building is from the car park and is orientated toward the rest of the Leconfield Industrial Estate. There are two secondary access points from the North and East, the East access is from the C2C route. The third entrance from the North is proposed to allow access from occupants of future units on the expansion land. All entrances take pedestrians into the central circulation space.
There are multiple other access points around the perimeter of the building to allow entrance or escape from workshop areas.

The emergency services can access the perimeter of the building as shown below.



Fire Strategy Plan



Site Plan

Sustainability

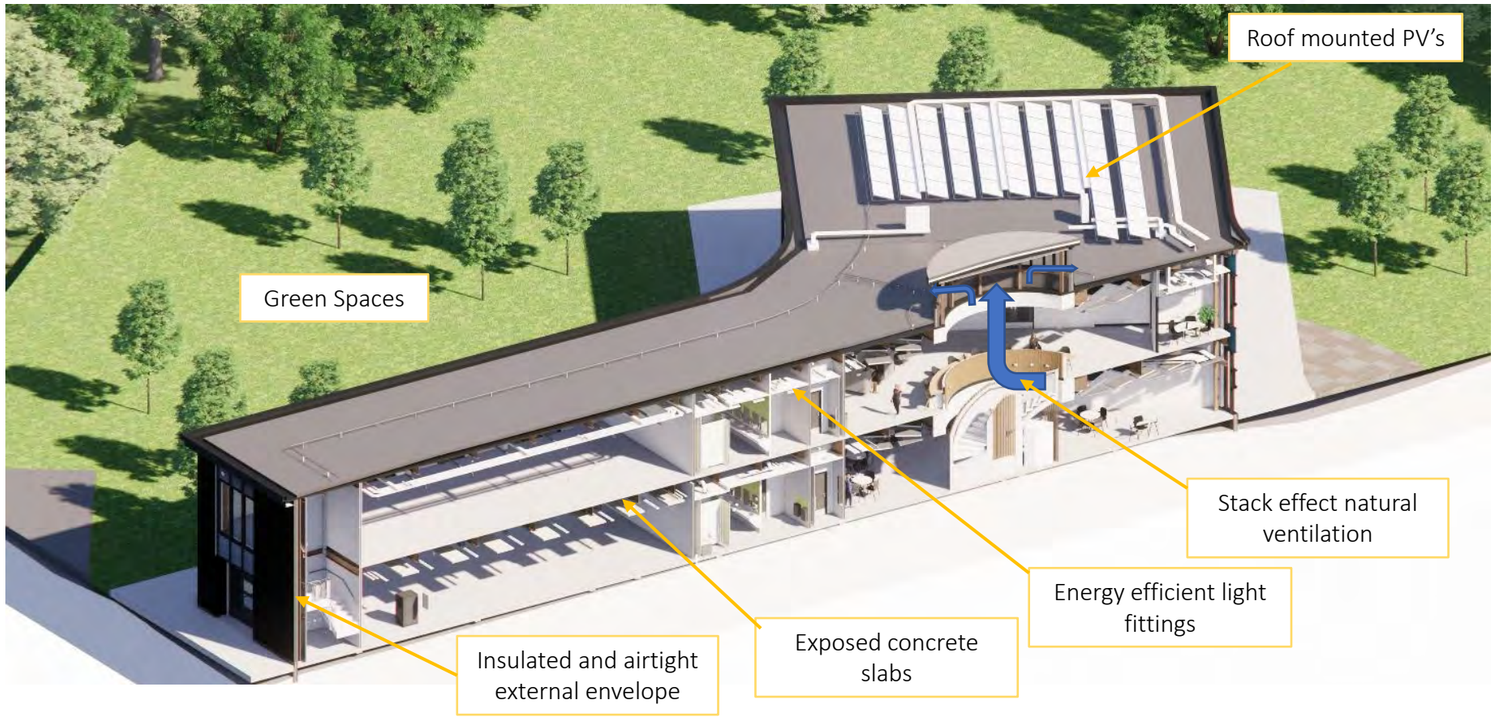
The building has been designed to current Building Regulations Part L requirements.

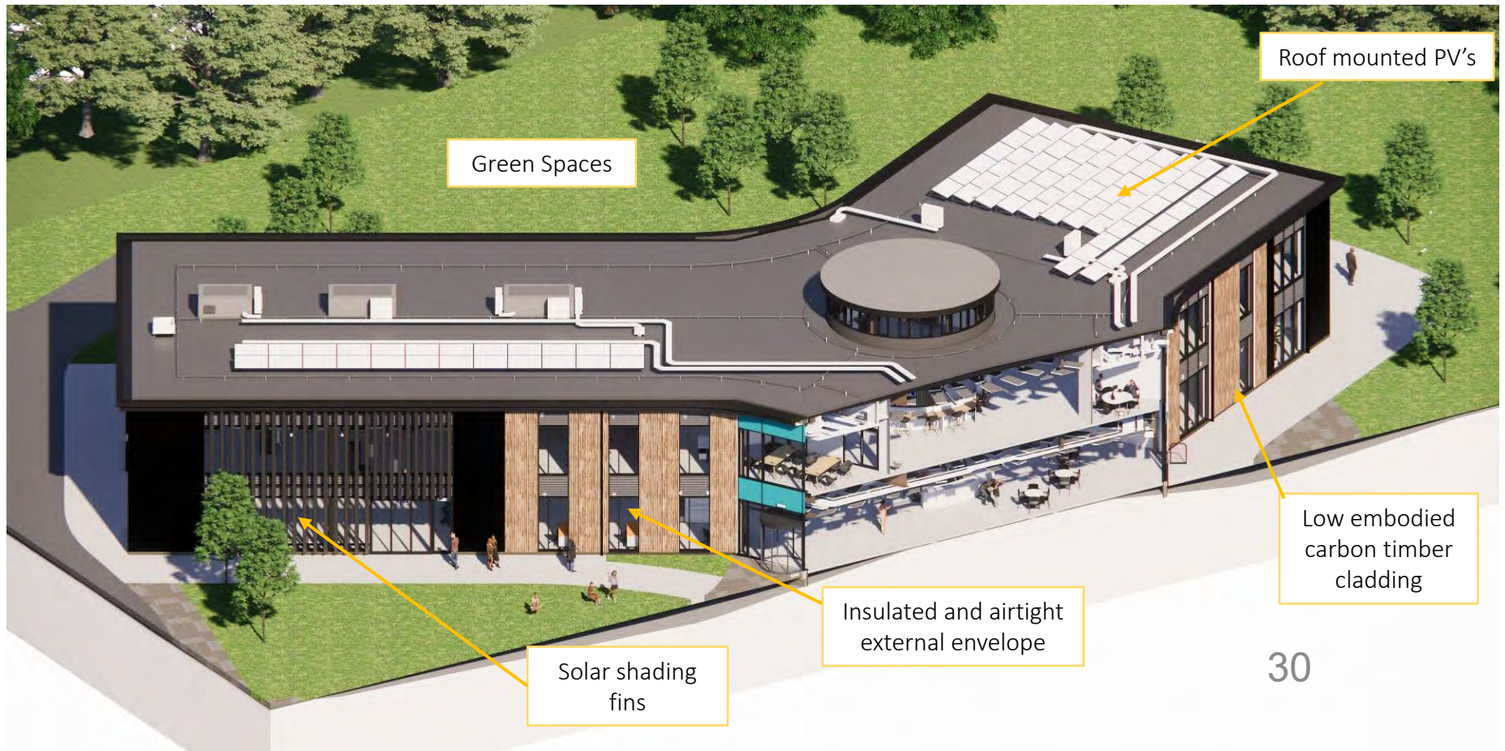
It was essential that the hub building's thermal elements were carefully considered at the inception stages of the building. The greatest value in reducing plant size, capital cost, and running costs can be achieved by increasing thermal insulation and reducing air tightness.

The hub building design emphasises cross ventilation and allows for natural ventilation through operable windows. This is shown within the double-height central atrium space and the function room. This will be enhanced using high-quality windows and doors that maintain air-tightness when closed and have a low 'G Value' (solar transmittance).

It was essential that the correct renewable energy systems are applied to the building to maximise carbon savings. PV's are proposed for the roof space and can help reduce carbon emissions. With the orientation in mind, the design of the hub building applies appropriate shading to prevent unwanted solar heat gains in the summer months whilst utilising low winter sun to reduce heating loads and help naturally control the internal climate. This is particularly important in building with large areas of glazing. Vertical aluminum solar fins have been used and are sympathetic in manner to the surrounding plots as per the Design Guide. Exposed concrete slabs at ground floor contributing towards thermal mass and regulation of internal temperatures during warmer summer months.

The external environment has been designed to maximise carbon absorption through green spaces and the correct selection of suitable planting. Timber cladding has been selected for the entrance areas which is a low embodied carbon material.





Landscape Proposal

Landscape Proposals

Landscape Proposals –Masterplan

Relevant Extracts from the Stage 2 Masterplan Design to inform the Hub Design Principles

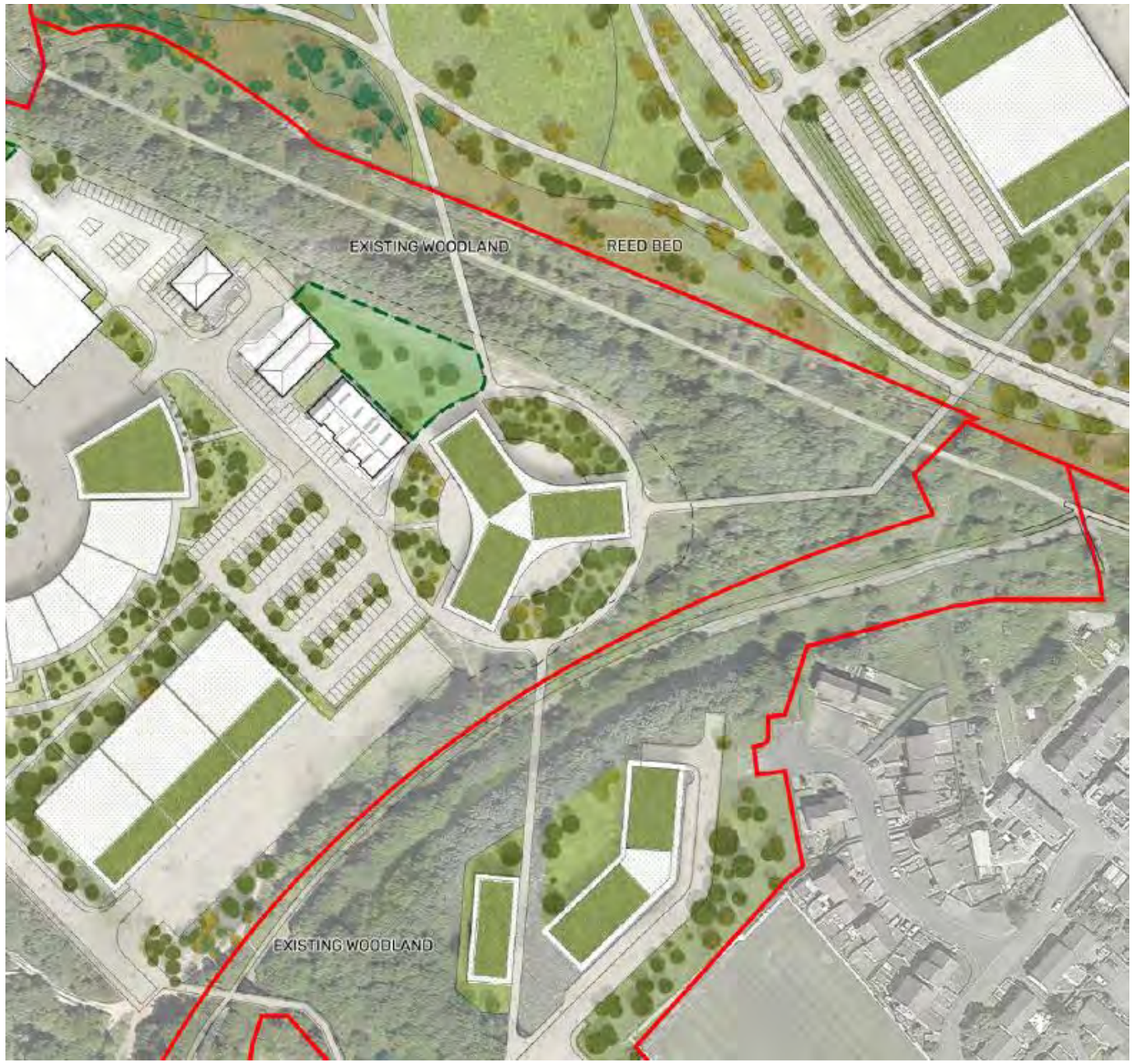
The landscape development for each plot should reflect the objectives of the landscape led masterplan principles to create a seamless landscape across plots and infrastructure.

Soft Landscape

Species choice should reflect the aim to enhance the biodiversity value of the site, be generally native and reflect the locally prevalent habitats. Avoid using large areas or avenues of single species plants to create robust landscape in respect of pest and diseases. The size of plants will depend on purpose, with more mature species used to highlight entrances and routes through the plots. Urban tree soil or soil crates should be used to provide sufficient root zone for trees where space is limited such as strips in car parks. Specific themes and planting mixes will be developed to create identities for character areas within the plots, such as at entrances, road and footpath links, parking zones and the central hub.

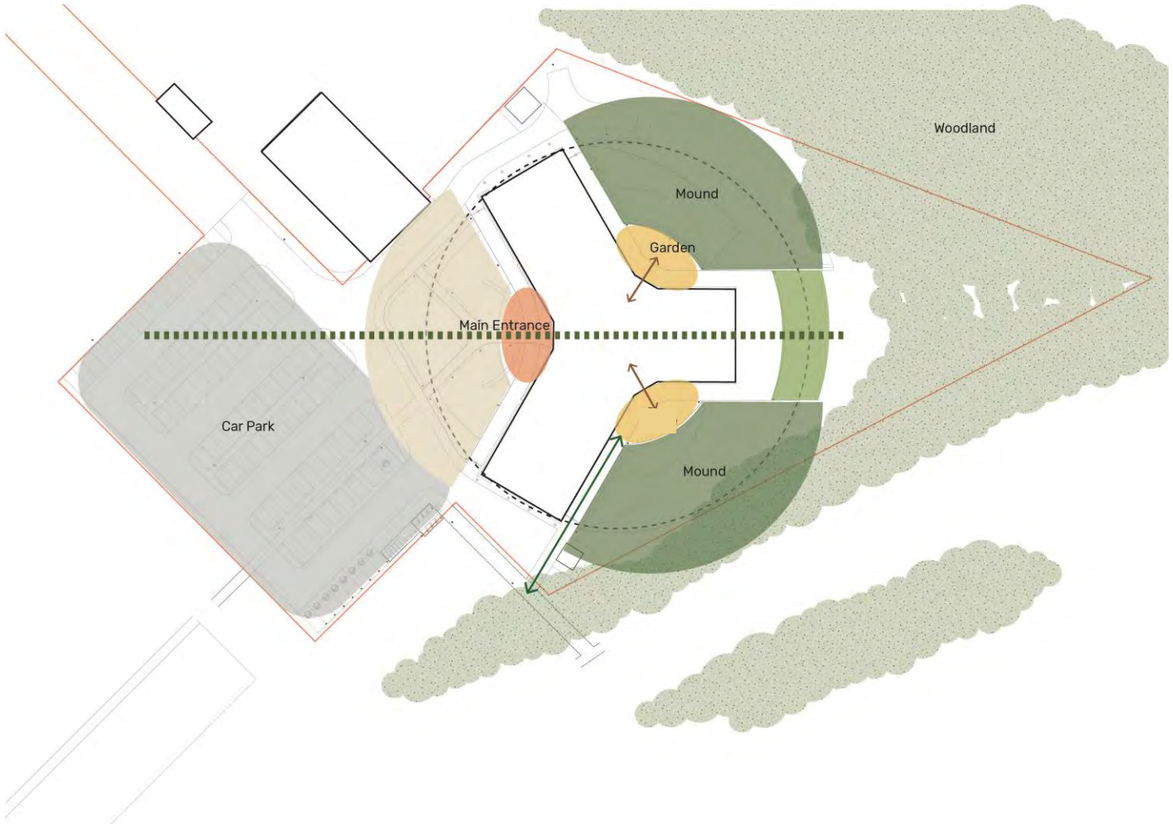
Hard Landscape

New, accessible connecting routes including shared footpath / cycleways will be identified through alternative materials (concrete block / coloured concrete) and the new car parks should be developed with block paving. Street furniture should be of a consistent type, materiality and design that helps to reinforce the character of the sites.



Extract from the CMIQ Masterplan

Landscape Strategy



Landscape Concept

Building / Landscape Interfaces

Landscape Masterplan

The iSH Hub building plays a central role in the development of the wider estate masterplan, creating spaces for workers, visitors and the local community.

There are three key areas that provide different functions with different characters:

The Entrance (Area 1)

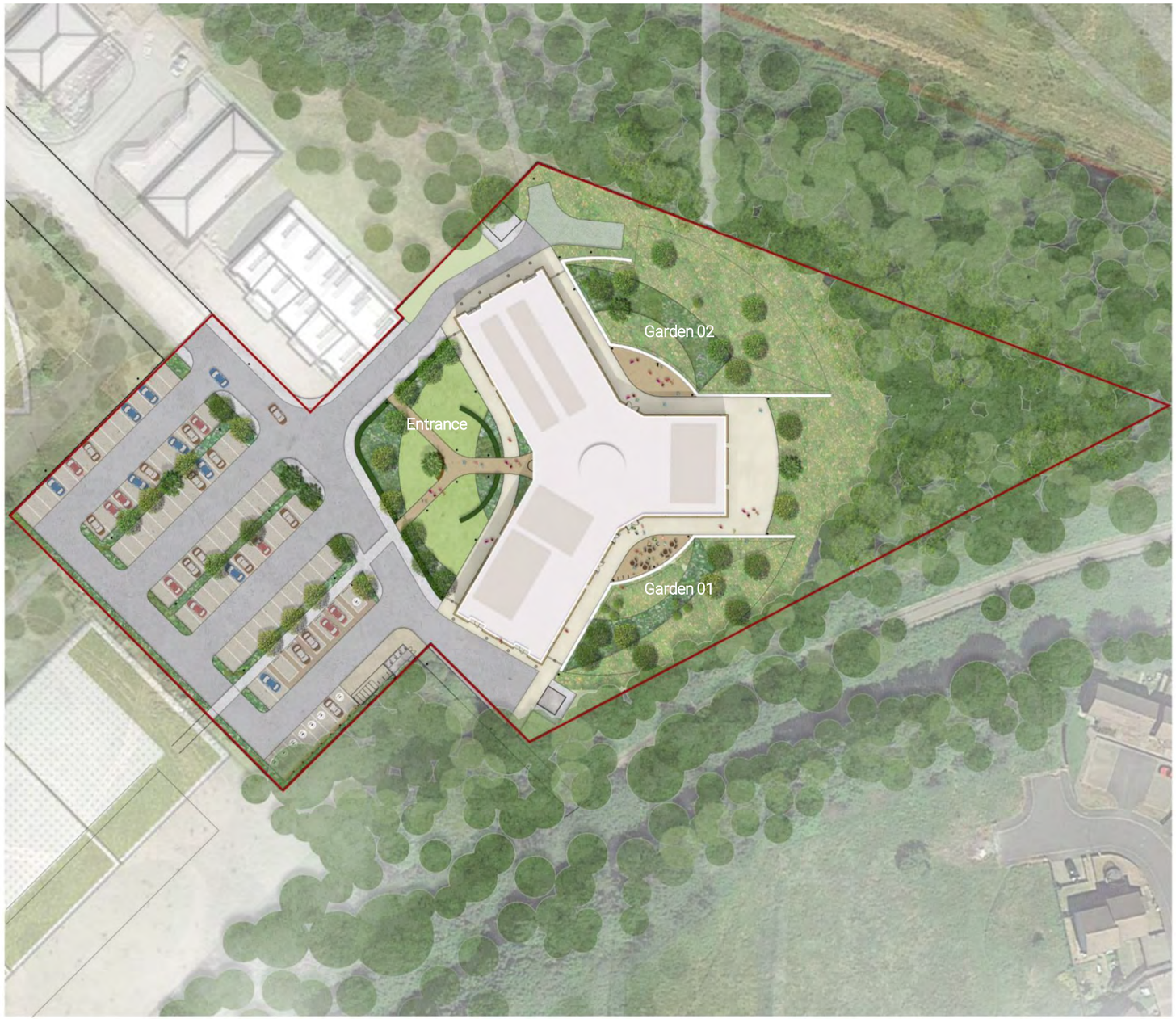
The most formal, geometric design that leads people into the main entrance with links to the adjacent car park and beyond to further plots. Distinctive, fastigiate tree planting will frame the building and extend out to provide natural wayfinding. In line with the concept for the wider estate, the lawns will not be mown, amenity grass but species rich grassland to both create a softer arrival space and improve the biodiversity of the proposals.

The Garden 01 (Area 2)

Primarily a spill out space for the internal central flexible and social space, with a space that links to the adjacent C2C Cyle Path with cycle stands, cycle maintenance point and sculptural mounding and biodiverse planting to create a sense of enclosure

The Garden 02 (Area 3)

Primarily a spill out space for the central building space with opportunities to be used for outdoor exhibitions. Sculptural mounding with biodiverse planting is proposed to create a sense of enclosure.



FOR BUILDING / ROOFPLAN INFORMATION PLEASE REFER TO ARCHITECTS DRAWINGS

Soft Landscape Species







The planting strategy is key to realising the vision of the iSH Hub set within extensive green infrastructure with a focus on biodiversity. The design has minimised impact on existing trees and woodland, with a significant number of proposed trees to mitigate the loss of existing trees.

Trees - Native species from the following proposed list, semi-mature (30-35cm girth) specimens. Root balled or container grown subject to time of planting. Irrigation pipe and deadman anchor system for below ground staking.

- Silver Birch (Betula Pendula) Semi-mature and Multi-stem
- English Oak (Quercus robur)
- Sweet cherry (Prunus avium)
- Alder (Alnus glutinosa)
- Carpinus betulus Fastigiata (Hornbeam)

Hedge – Portuguese Laurel, Double staggered row @700mm centers (900-1200mm). Grass Areas

Ornamental Planting – A mix of Shrub and herbaceous species to the entrance zone

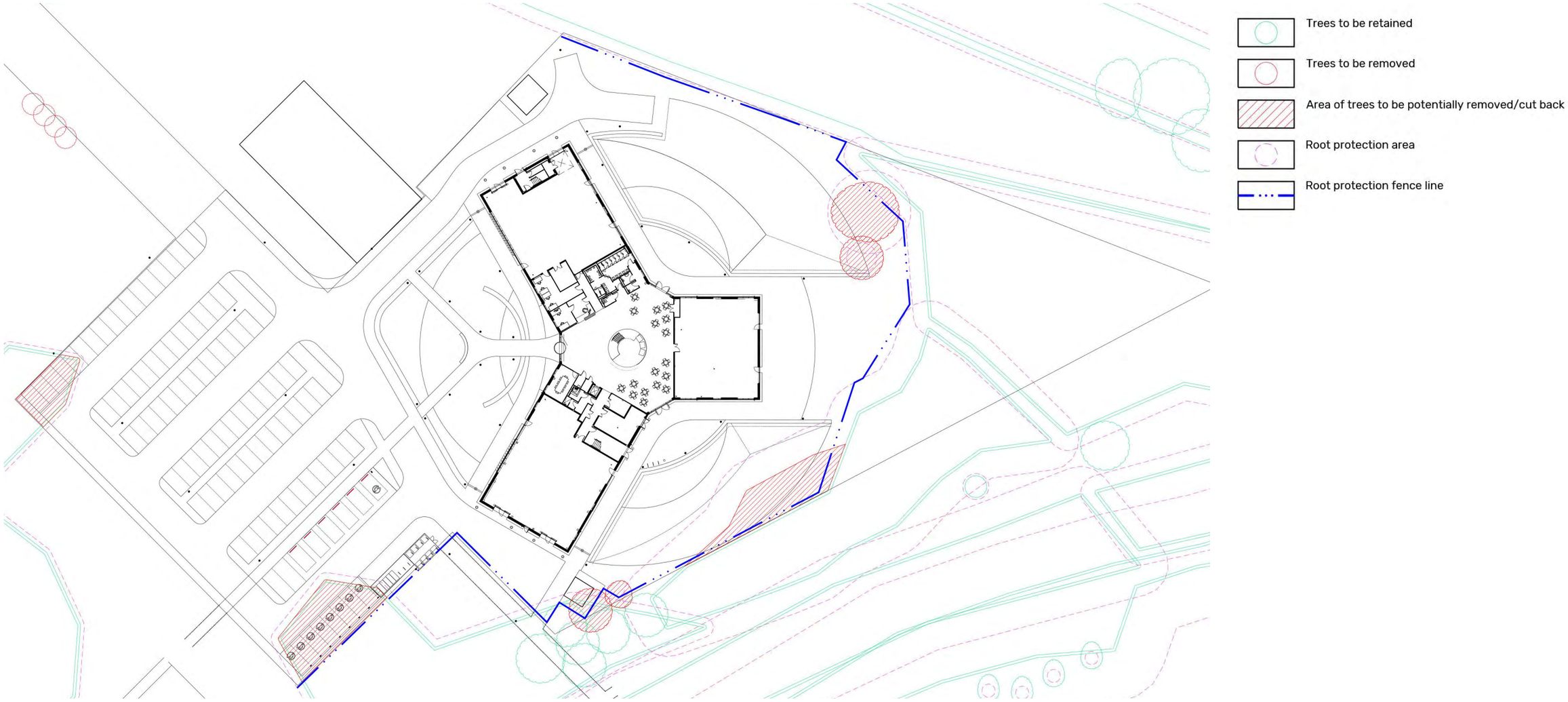
Pollinators Planting – A mix of shrub and herbaceous planting recommended for attraction to pollinating fauna.

- Meadow mix seeding – Special General Purpose Meadow Mixture EM3 (Emorsgate) or similar approved
- Flowering Lawn Mix – Emorsgate EL1

Soft Landscape General Arrangement

FOR BUILDING / ROOFPLAN INFORMATION PLEASE REFER TO ARCHITECTS DRAWINGS

Existing Trees & Woodland – Retained and Removed



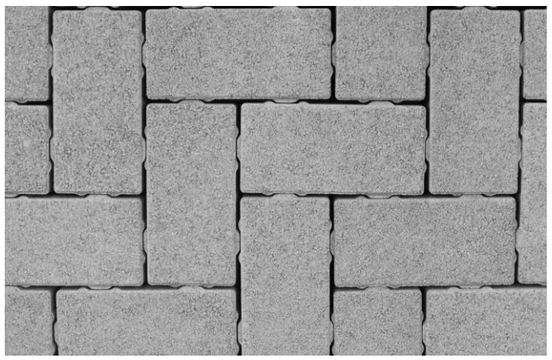
FOR BUILDING / ROOFPLAN INFORMATION PLEASE REFER TO ARCHITECTS DRAWINGS

Hard Landscape Materials

Curtilage block paving

Footpath block paving

Car park permeable block paving (standard and accessible bays)



Resin Bound Gravel

The proposed paving will be a coordinated mixture of paving blocks and resin bound gravel to highlight the building entrances and feature spaces.

Asphalt will be used for the car park movement zones and roads

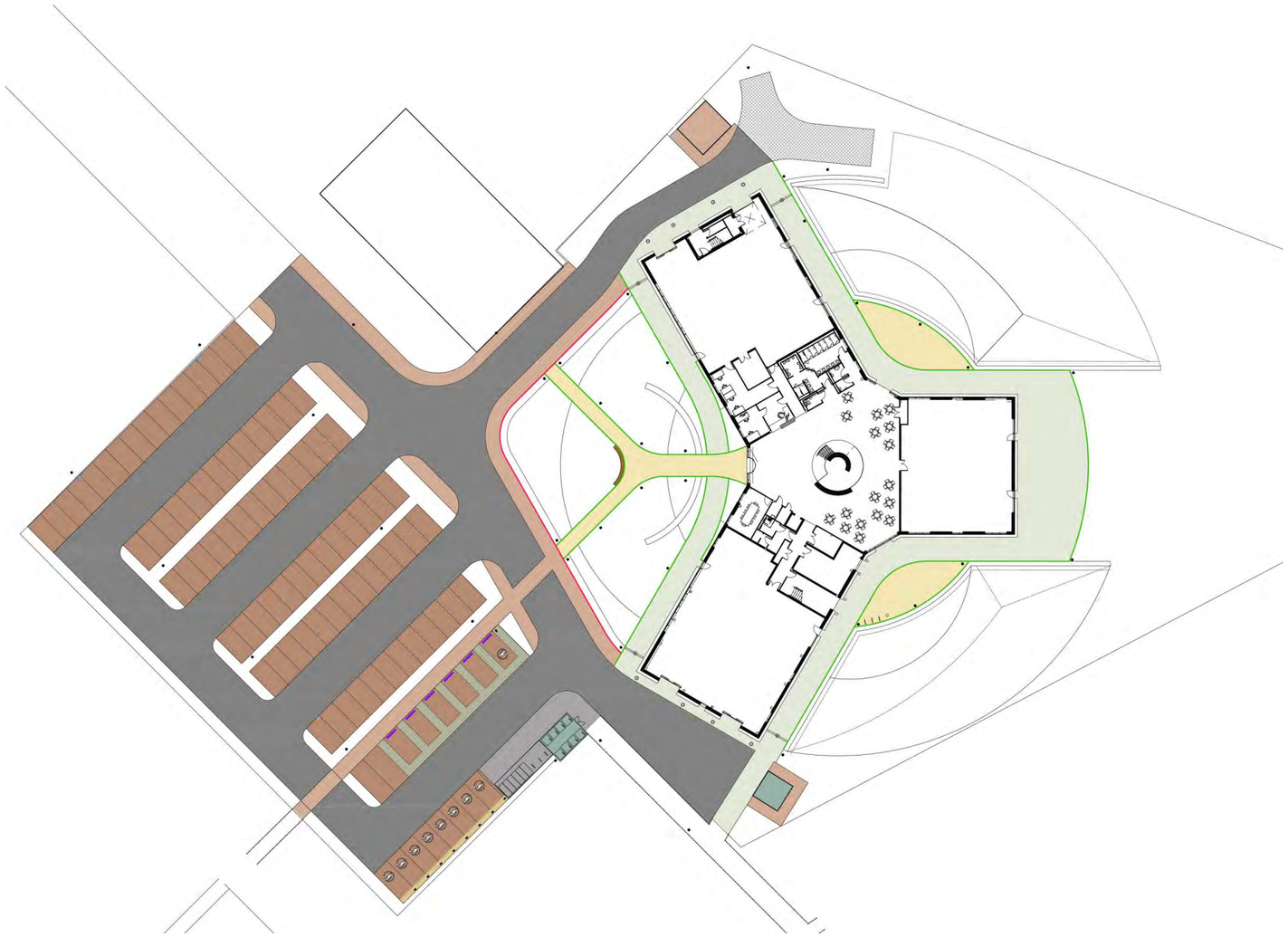
Paving – Tobermore Braemar Jura (300x200mm) in the curtilage of the building, and Tobermore Braemar Alto Silver (100x200mm) for the surrounding pedestrian routes adjacent to the road and car park.

Permeable block paving will be used for car parking areas in Bracken and Natural (to demarcate the accessible bays)

Resin Bound gravel – Sureset Aztec Gold (6mm aggregate) for the spill out spaces and main pedestrian routes to the entrance.

All elements to be similar or approved

Hard Landscape General Arrangement



- Vehicular Grade Asphalt
- Grass Grid
- Pedestrian Grade Asphalt
- Concrete Paving Type 1
  Tobermore 'Braemar' Ground
  Jura Grey 300x200x80mm *or similar approved*
- Resin Bound Surface Type 1
  Sureset 'Aztec Gold' Natural Aggregate
  6mm *or similar approved*
- Gravel
- Concrete Paving Type 2
  Tobermore 'Braemar' Ground
  Alto Silver 200x100x80mm *or similar approved*
- Permeable Concrete Paving Type 1
  Tobermore 'Hydropave Pedesta'
  Bracken 200x100x80mm *or similar approved*
- Permeable Concrete Paving Type 2
  Tobermore 'Hydropave Pedesta'
  Natural 200x100x80mm *or similar approved*
- Concrete Hardstand
  To bin store
- Seating
  Street Life Rough&Ready Curved Benches
  or similar approved

- Loose Table & Chairs
  TBC.
- Cycle Stands
  6no. Broxap 'Harrogate' Cycle Stand
  Stainless Steel *or similar approved*
- Cycle Shelter
  Broxap Blox A - Cycle Shelter
  Bespoke Length *or similar approved*
- EV Charging Point
  TBC.
- Bin Store
  2.2m High Timber Enclosure with matching gate
- Bespoke Steel Edging
  Kinley ExcelEdge 'Urban'
  150mm height 6mm thickness *or similar approved*
- Concrete Edging Type 1
  Tobermore Fusion Edge
  Silver 150x400x50mm *or similar approved*
- Flat Top Sheffield Stainless Steel Bollard
  by Broxap *or similar approved*
- Wheel Stopper
- Lighting

FOR BUILDING / ROOFPLAN INFORMATION PLEASE REFER TO ARCHITECTS DRAWINGS

Street Furniture

Cycle Shelter

Bin Store

Street furniture will use materials chosen for both visual appearance and robustness and seating areas will create opportunities around the edges of the building for use throughout the day.

All elements to be similar or approved

Cycle Shelter – Broxap Blox A

Individual Cycle Lockers – Broxap Sheffield Horizontal Cycle Lockers with chargers for e-bikes

Cycle Maintenance Stand

Stone Filled Gabion Wall

Stainless Steel Harrogate Cycle Stands

Bin Store – 2.2m high timber clad enclosure with matching gate

Curved Bench – Street Life Rough & Ready with backrests and arm rests

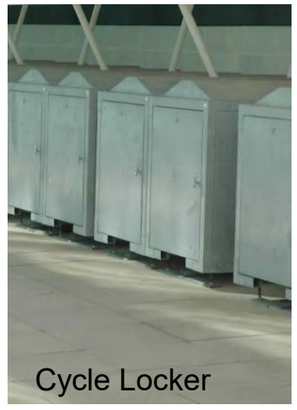
Bollards – Broxap Flat Top Sheffield Stainless Steel (Fixed and Drop Versions)

Harrogate Cycle Stands

Curved Bench

Bollards

Cycle Maintenance Stand



Cycle Locker

Gabion Wall

Landscape General Arrangement

SOFTWORKS

- Ornamental Planting
- Native Hedge
- Wildflower Meadow
- Species Rich Grassland
- Reinforced Grass
- Proposed Trees
- Existing Trees to be retained
- Existing trees to be removed

HARDWORKS

- Vehicular Grade Asphalt
- Grass Grid
- Pedestrian Grade Asphalt
- Paving Type 1
- Resin Bound Surface Type 1
- Gravel
- Paving Type 2
- Permeable Paving Type 1
- Permeable Paving Type 2
- Concrete Hardstand
- Seating
- Loose Table & Chairs
- Cycle Stands
- Vehicle Bollard
- Wheel Stopper
- Lighting

FOR BUILDING / ROOFPLAN INFORMATION PLEASE REFER TO ARCHITECTS DRAWINGS

Summary

The proposals seek to deliver the Hub building to provide a central focus for the Leconfield industrial estate and create stronger links between the businesses located there. A key catalyst building to promote growth in the area and beyond.

The building will add to the overall quality of the area, and it will be visually attractive both from good architectural design and the well-thought-out layout as well as the effective landscaping design. The careful selection and use of building material has been considered and reflects the local character and vernacular of the area, to produce a high-quality building that will promote and maintain a strong sense of place by creating a welcoming and distinctive place to work and visit.

The Hub is envisaged to be the focal point of the Leconfield Industrial Estate, acting as a central facility that brings together different uses to create natural meeting opportunities for people across the CMIQ campus.