DESIGN AND ACCESS STATEMENT

Dearne Valley Parkway, Barnsley

Reserved Matters Planning Application Pursuant to Outline Planning Permission 2019/1573

Document Prepared for:

Firethorn Developments Limited

Revision A - 10.12.2021 - MY / DEB
Revision B - 10.12.2021 - MY / DEB
Revision C - 31.03.2021 - CD / BSC

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Firethorn TRUST

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01 INTRODUCTION

01 INTRODUCTION

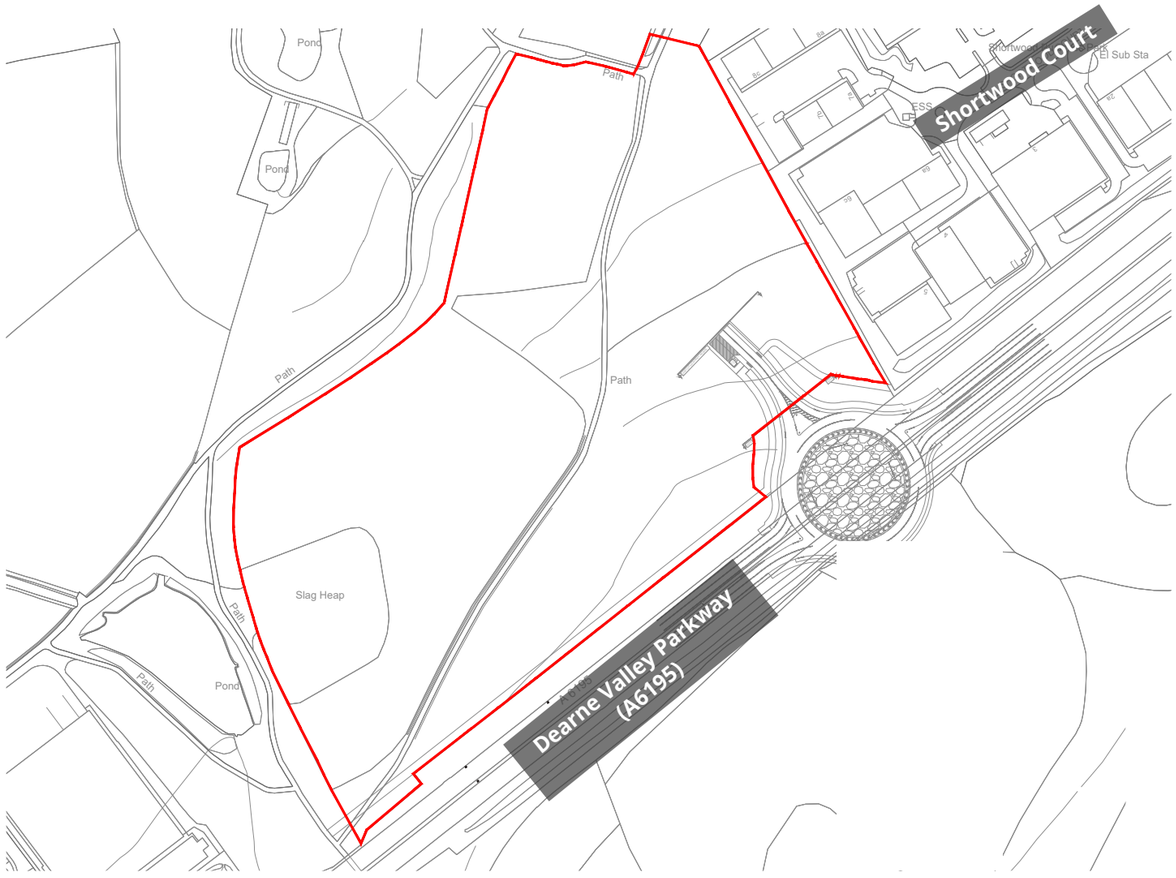
01.1 STATEMENT OVERVIEW

This document has been prepared on behalf of the applicant, **Firethorn Development Limited**, in support of a reserved matters planning application for an employment development on land adjacent to Shortwood Business Park, pursuant to a previously approved outline application (2019/1573).

The application site (North-East to Dearne Valley Parkway) is located close to Junction 36 of the M1 Motorway. The South of Barnsley Town Centre is located 6 miles to. The centre of Rotherham is approximately 9.3 miles to the South-East. Barnsley Roundabout (Junction36, M1) is located approximately 1km to the South-West of the site.

The site (North-East to Dearne Valley Parkway) represents an excellent development opportunity for the continued development of the area following the relevant completion of phase 1 & phase 2 by others, located to south of the site a cross Dearne Valley Parkway road link. This statement aims to explain how the opportunity and any associated challenges have been addressed within the design proposals presented as part of this application.

This statement explains the thought processes behind the design strategy presented in this reserved matters application.



Site Location - Surrounding Context

Reserved Matters Application Boundary

01.2 REPORT CONTENT AND STRUCTURE

This document contains a summary of the site context, analysis of the surrounding areas and an explanation of the design evolution.

This document explores how the physical characteristics of the scheme have been informed by the design process and explains the steps taken in the process, culminating in the proposed design solution.

This is in accordance with the requirements of the planning application processes. The Town and Country Planning (Development Management Procedure) (England) (Amendment) Order 2013 sets out the requirements for Design and Access Statement.

The statement is structured as follows:

Section 1.0
An introduction to the site and outline of the project brief.

Section 2.0
An explanation of the relevant national and local planning policy.

Section 3.0
A site context evaluation, containing a description of the existing site and surroundings.

Section 4.0
An evaluation of the key principles considered in the design stage, including site constraints and opportunities, design principles and a description of the scheme evolution.

Section 5.0
Discusses the development proposals of the proposed design, covering proposed: usage, amount, layout, scale and massing, appearance and landscaping.

Section 6.0
Outlines the vehicular and pedestrian access to and around the site.

Section 7.0
Covers the project's sustainability principles and envisaged crime prevention measures.

Section 8.0
Offers a summarising statement for the detailed proposal.

01.3 THE BRIEF

The brief provided by **Firethorn Developments Limited** comprises of several key components for the built elements:

Reserved Matters consent is sought for single building with usage groups Industrial (Class E(g)(iii)/B2) and Storage & Distribution (Class B8) as indicated on the proposed site layout **P0601[B]** which adheres to the following principles:

- Clear circulation routes for vehicles and pedestrians.
- The scale of development must consider place making principles through a hierarchy of roads, pavements, built form and spaces between buildings.
- High quality architectural language for the industrial development which should allow the buildings to sit comfortably within the surrounding context.
- Building forms should be uncomplicated as well as reflecting and complimenting the area.
- Materials should respect the setting of the buildings and provide consistency across the site.
- Key Landscaping features to increase the quality and success of the development and employees who use the site.
- External compounds need to be sensitively located and screened.

Application Site: Dearne Valley Parkway, Barnsley

Local Authority: Barnsley Metropolitan Borough Council

Site Area: 9.43 hectares (23.30 acres)

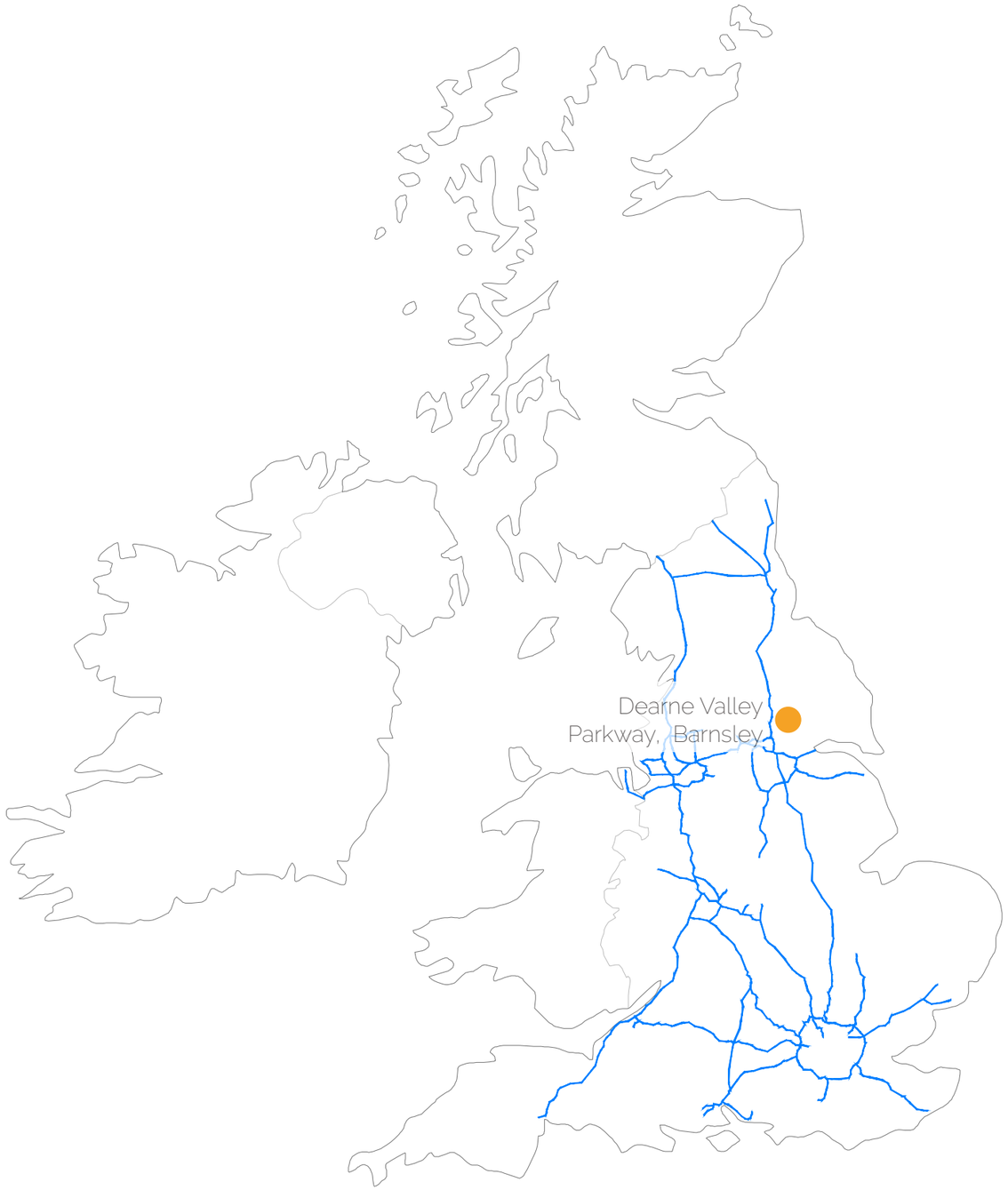
Proposed Use: (Class E(g)(iii)/B2) and Storage & Distribution (Class B8)



Site Location - Immediate Context



Site Location - Wider Context



Site Location - National

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02 PLANNING POLICY

02 PLANNING CONTEXT

02.1 Outline Planning Permission (2019/1573).

1. Detailed permission for earthworks and creation of access points (including new roundabout to access site ES15).

2. Outline permission for up to 1.1 million square foot (102,193sqm) of employment land (use class B1/B2 and B8) with associated internal access roads, landscaping and drainage at sites ES15 and ES17 (land north and south of the Dearne Valley Parkway.

02.2 This permission has been implemented pursuant to the construction of a new roundabout access into the site from the Dearne Valley Parkway including, the construction and occupation of Phase 1 & Phase 2 buildings.

02.3 This application seeks reserved matters approval for the site north-east to Dearne Vally Parkway in pursuant to the outline approval.

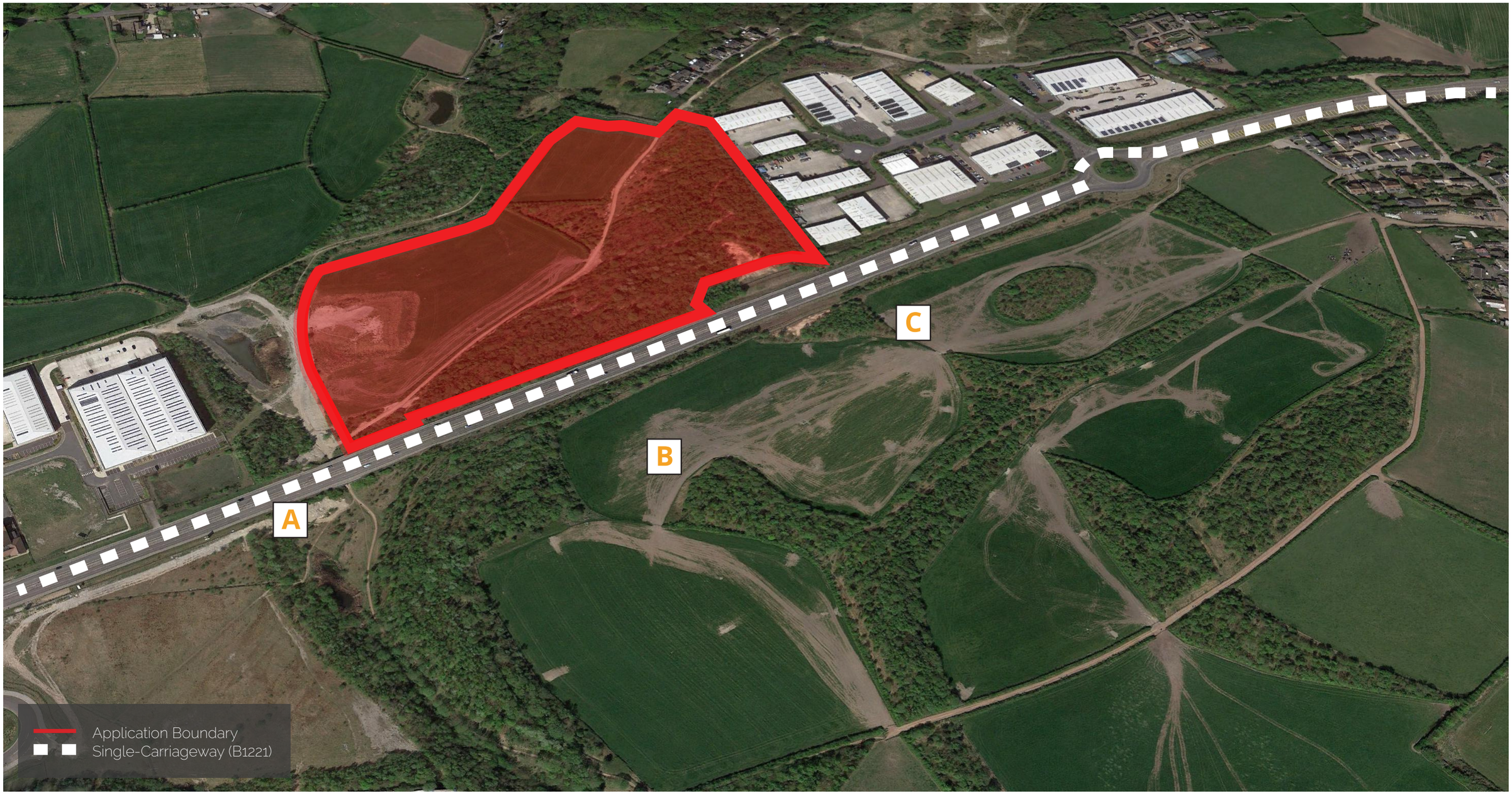
02.4 The reserved matters application boundary lies outside the Hoyland North Masterplan Framework however, the outline planning permission references the colour palette on page 14. The colour palette has been incorporated as part of the design and proposed cladding finishes for the reserved matters application.

Please refer to the Planning Statement prepared by Johnson Mowat Planning Ltd for further information

03 SITE CONTEXT

03 SITE CONTEXT

03.1 SITE AERIAL IMAGE



Aerial view from the South looking North towards the proposed site

03.2 SITE PHOTOGRAPHS



A



B



C

03.3 EXISTING SURROUNDINGS DESCRIPTION

The application site adjacent to the Shortwood Business park an industrial estate located in Barnsley, 1mile from J36 of the M1. To the southern boundary across the Dearne Valley parkway road link lies Phase 1 proposals currently under construction. To the immediate south-west a car dealership and retail area reside. To the north of the site comprises mainly of agricultural land and small plots of residential area.

03.4 EXISTING SITE DESCRIPTION

The application site falls from South-West to North-West by approximately 7 to 10 meters.

The Dearne valley parkway also falls from North East to South West by approximately 5 metres.

This topography is predominantly man made due to the area being extensively surfaced mined between 1991 and 1995, and reinstated as agricultural grazing land with areas of tree planting.

To the northwest was Rockingham Colliery which is marked on various Ordnance Survey editions dating between 1893 to 1961. Silkstone Colliery is also shown on the aforementioned maps.

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03 SITE CONTEXT

03.5 SITE CONSTRAINTS



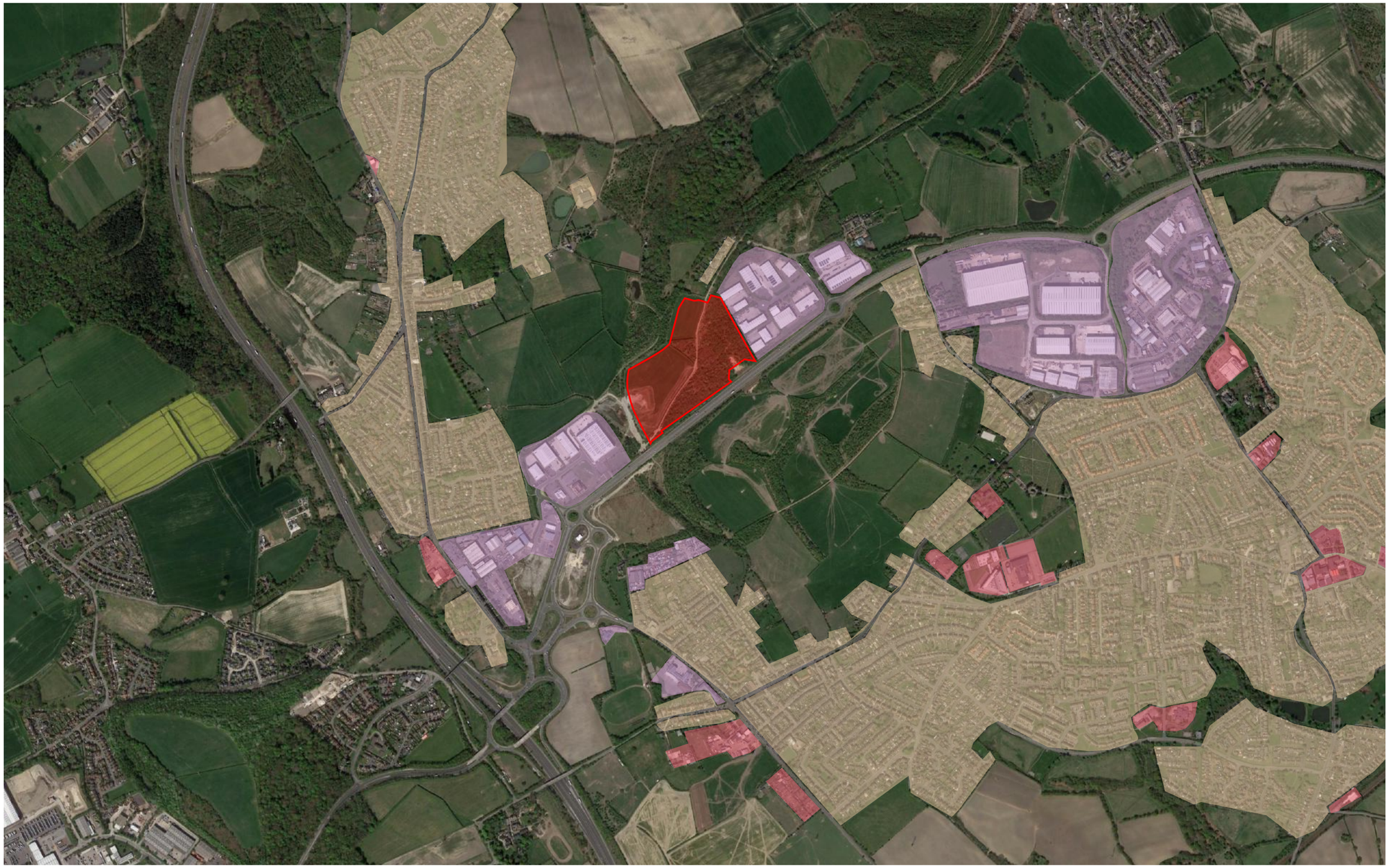
Diagram illustrating the site constraints

03 SITE CONTEXT

03.6 EXISTING LAND AND BUILDING USE

Key:

- Industrial
- Commercial
- Residential
- Application Boundary



Building Use

03 SITE CONTEXT

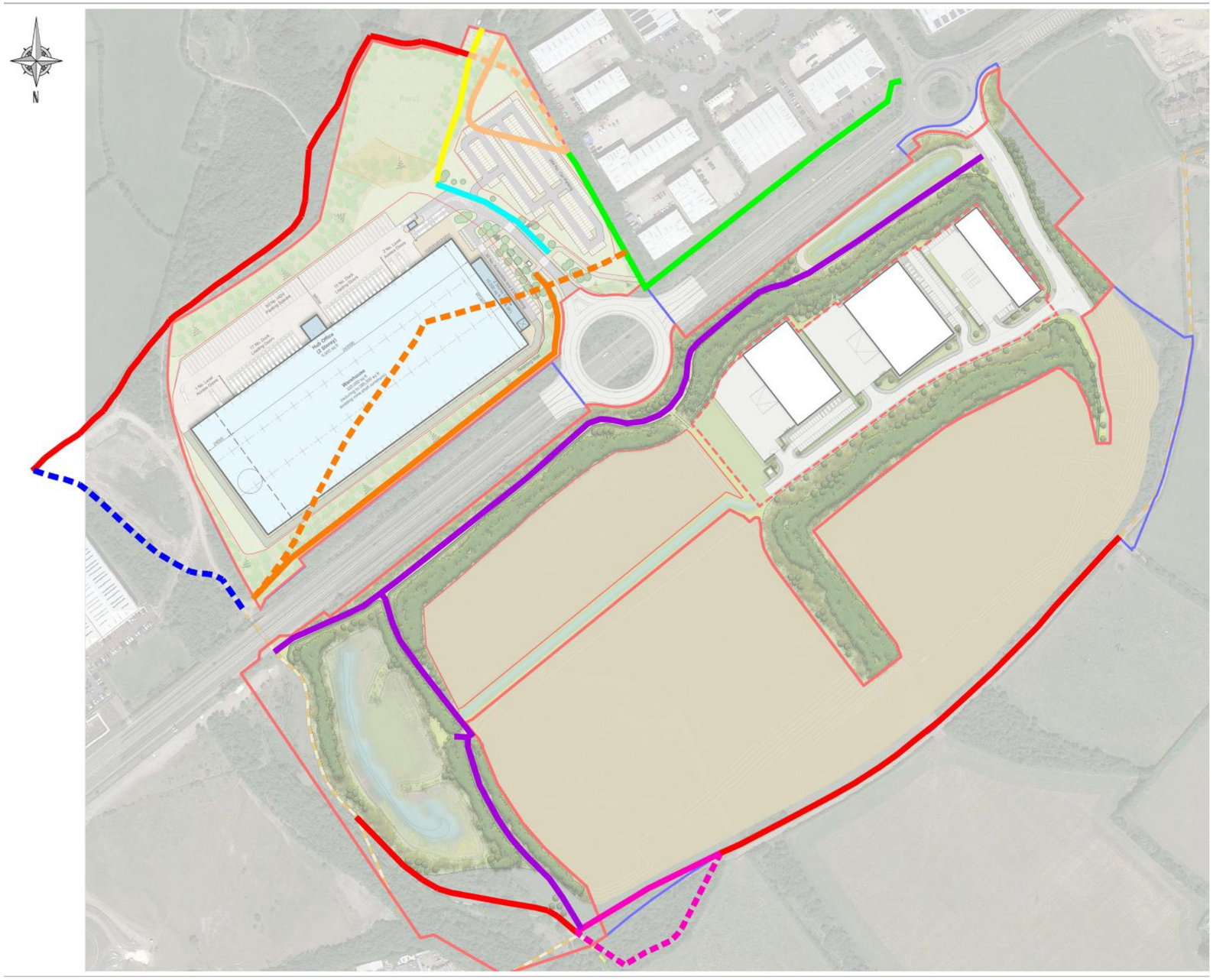
03.7 FOOTPATH DIVERSIONS

dimensions on site.

Key:

- PRow To be Diverted
- Route to be retained
- 4m Flexipave (Replacement PRoW upgraded to Bridleway)
- 3m Tarmac and 2m Verge (Replacement PRoW upgraded to Bridleway)
- 3m Flexipave (Replacement PRoW upgraded to Bridleway)
- 3m Breedon Gravel (Remain Private)
- Dedicate as Bridleway (Defined Bridleway. Improve where possible and increase head clearance to 3m)
- Create 2m Troden Path (Defined Footpath)
- Upgrade delivered by Hay Green Lane
- Divert PRoW to
- New Bridleway
- Divert Footpath to new Bridleway of

The public right of way across the existing site has been diverted to run directly adjacent to the new development. The diverted path connects to the bridleway to the north of the application boundary. Improvement have been proposed to enhance the existing bridleway.



04 KEY DESIGN PRINCIPLES

04 KEY DESIGN PRINCIPLES

04.1 KEY PRINCIPLES

The design process for the application involved an investigation into a variety of different development configurations and sizes in order to arrange a coherent site layout within the site's constraints. A site layout has been developed based on the key principles below:

Character
To create attractive, self-contained and functional buildings with their own identity, which relate well to the neighbouring context as built.

Quality of the External Realm
To create a welcoming environment for staff and visitors alike. Landscaping and integrated footways and road / cycleways will provide a cohesive development.

Scale, Height and Massing
To establish buildings with scale and size which relates to the rest of the development and its surrounding context and are appropriate for their function. Attention should be given to breaking up large façades and to making references to human scale.

Appearance
To create an attractive appearance through the utilisation of appropriate materials for the locality and building type, which are also robust and will not deteriorate with time. Mid-distant views need to be considered when selecting cladding materials and colours.

Functionality
To provide buildings which will meet the long term needs of the occupiers for running efficient and successful businesses.

Standards
To meet the appropriate standards of safety, accessibility, energy efficiency and institutional standards.

Orientation
Ensuring that the buildings provide appropriate frontage to the access and surrounding roads will allow visitors, staff and lorry drivers a clear orientation and reference point on arrival.

Access
Provide a safe and effective access point into the site from the existing infrastructure, allowing segregation of movement between cars, service vehicles, cyclists and pedestrians entering the site.

Movement
Provide a clear, legible and segregated vehicular movement strategy incorporating all road entrances, loading and vehicular parking areas.

View of the Site
Ensure prominent building elevations are suitably treated to include appropriate materials and sensitive landscape treatment.

04.2 KEY PRINCIPLES ANALYSIS

Contribute directly to creating safe, attractive spaces with high quality buildings and landscape.
All proposed units are sleek and simple in design, with a contemporary colour palette and glazed areas providing a good quality office environment. Key consideration has been given to the landscaping at the site entrance, giving a sense of arrival and a high quality finish to the shared areas.

Create sustainable, well designed buildings, which are good places to work.
Each unit has been designed to create a contemporary simplistic aesthetic with high quality materials. The limited and modern colour palette and feature offices facing the internal road, create an attractive façade and a consistent architectural language throughout the site.

The buildings and illustrative site layout should fulfil a required level of security and operational functionality.
The yards are to be securely contained and shielded with fencing and offer secure car parking away from HGV Vehicles where appropriate. Car parks are overlooked by the office area and separate entrances for cars and HGVs have been established where appropriate.

Ensure inclusive design to allow for a good level of accessibility within and between buildings.
The entire scheme layout is suitable for both able-bodied and accessible use. The appropriate amount of accessible parking has been allocated and is located close to the level building entrance where possible.

04 KEY DESIGN PRINCIPLES

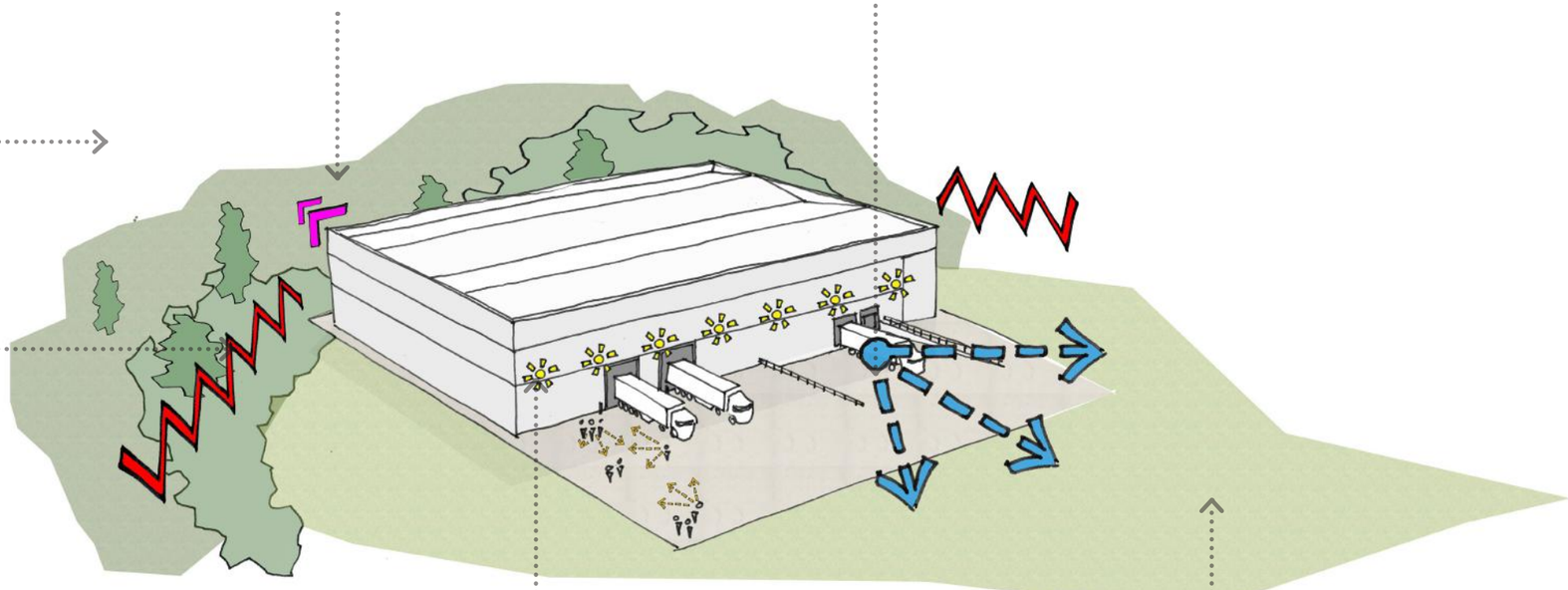
04.3 DESIGN PRINCIPLES

Noise Control
Site yards are often the area in which most noise from machinery and workers is produced. Inward facing site yards limit noise projected into the surround area.

Massing
Hard edges towards site boundaries are mitigated by the orientation of each unit, providing feature corners minimises impact in terms of massing to key views.

Notional Views
Key views around the site have directly effected the overall illustrative layout of units across the site.

Green Buffer
Retention of existing trees and bunds provide natural screening



Lighting
Lighting to service yards will be designed to minimise light spill beyond plot boundaries.

Amenity
The greenspace provided within the site is envisaged to enhance existing landscape.

Key Principles Diagram

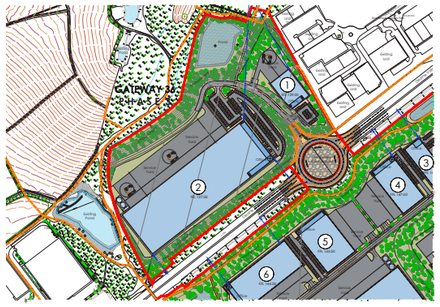
05 DEVELOPMENT PROPOSALS

05 DEVELOPMENT PROPOSALS

05.1 MASTERPLAN EVOLUTION

In order to establish a site layout that compliments and negotiates site and market constraints, several design iterations have been developed. The proposed layout of the development can be tracked by the traffic light system below.

OPT 01.



- Secure Yards
- Segregation of HGV's / Cars
- Density
- Arrival Aesthetic
- Unit Size Variation

OPT 02.



- Secure Yards
- Segregation of HGV's / Cars
- Density
- Arrival Aesthetic
- Unit Size Variation

OPT 03.

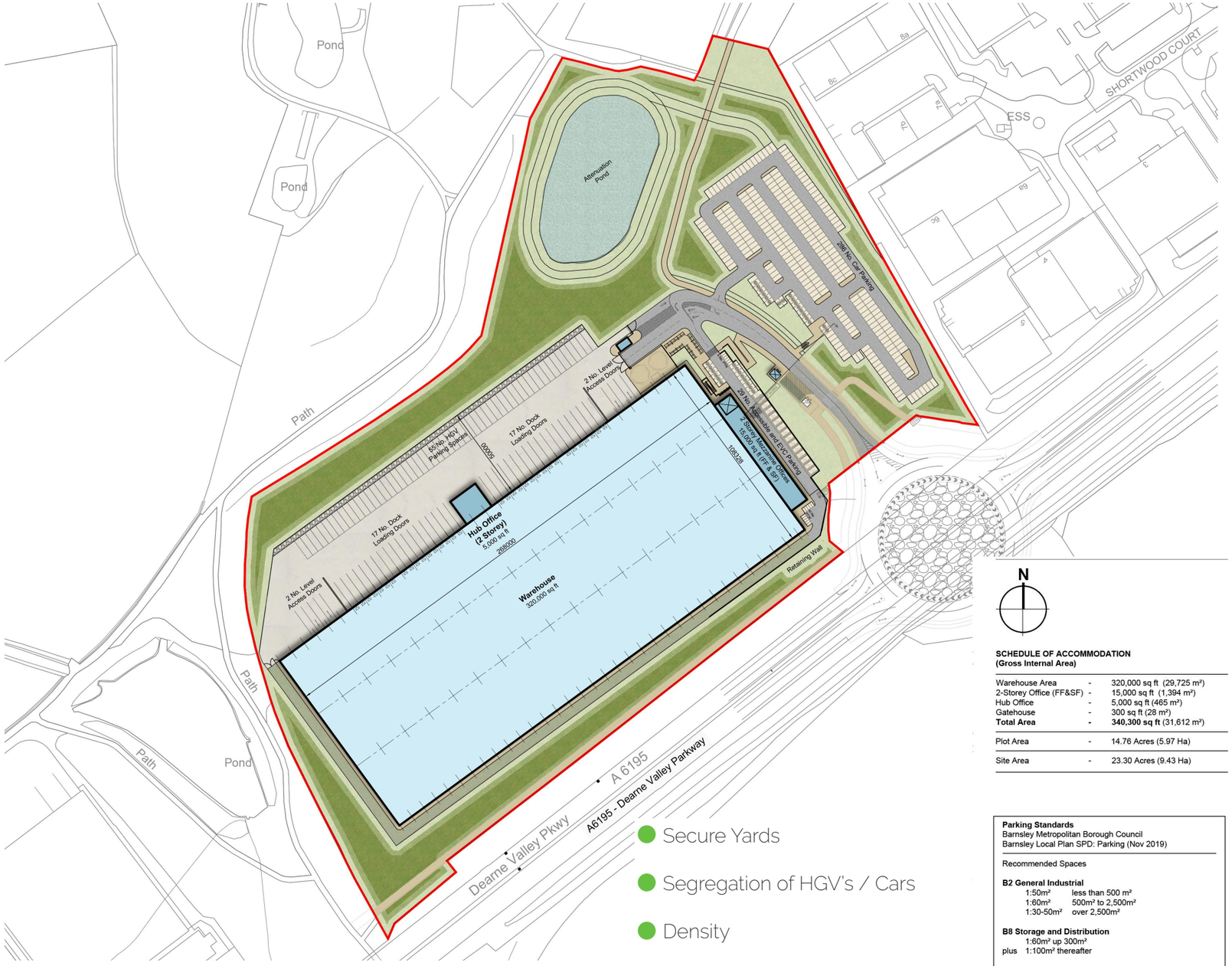


- Secure Yards
- Segregation of HGV's / Cars
- Density
- Arrival Aesthetic
- Unit Size Variation

OPT 04.



- Secure Yards
- Segregation of HGV's / Cars
- Density
- Arrival Aesthetic
- Unit Size Variation



Proposed Site Plan

- Secure Yards
- Segregation of HGV's / Cars
- Density
- Arrival Aesthetic
- Unit Size Variation
- Reserve Matters Application Boundary

N

SCHEDULE OF ACCOMMODATION
(Gross Internal Area)

Warehouse Area	-	320,000 sq ft (29,725 m²)
2-Storey Office (FF&SF)	-	15,000 sq ft (1,394 m²)
Hub Office	-	5,000 sq ft (465 m²)
Gatehouse	-	300 sq ft (28 m²)
Total Area	-	**340,300 sq ft** (31,612 m²)
Plot Area	-	14.76 Acres (5.97 Ha)
Site Area	-	23.30 Acres (9.43 Ha)

Parking Standards
Barnsley Metropolitan Borough Council
Barnsley Local Plan SPD: Parking (Nov 2019)

Recommended Spaces

B2 General Industrial
1:50m² less than 500 m²
1:60m² 500m² to 2,500m²
1:30-50m² over 2,500m²

B8 Storage and Distribution
1:60m² up 300m²
plus 1:100m² thereafter

Charging Bays - 10%

05.2 SITE PLAN

The outline planning scheme proposed a two-unit scheme one of large scale and the other moderate to small size and scale. The reserved matters application proposal deviates from the outline planning scheme to propose a single-unit scheme with a large net developable area with a view to attract high profile tenants, illustrated on UMC drawing "P0601[B]_Site Layout". The amendments to the design principles were based on planning policies, market sector demand and a combination of design standard & potential occupier requirements.

The layouts shown are configured to a B8 use, and if a B2 use is required by an occupier the yard and parking space can be reconfigured.

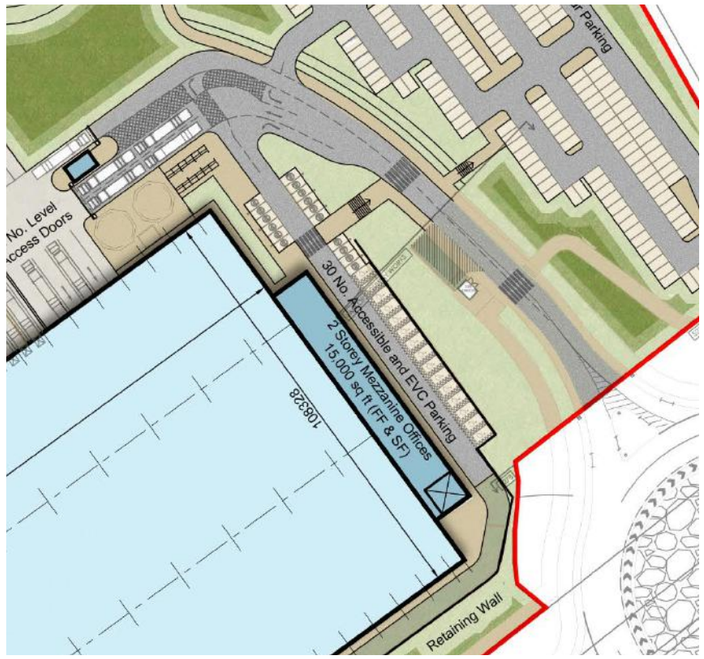
Access to the site will be via the newly constructed roundabout of Dearne Valley Parkway. The unit will have T junction access from the main access road. including its own loading bays, HGV and car parking, as well as ancillary office space. Landscaping is provided to enhances and visual interact with the surround landscape. Element of the landscape proposals allow passive and active engagement particularly around the site boundary and pond area.

The unit is positioned with close proximity to the car parking for ease of access to building office. The service yards and its operations are directed away from Dearne Valley Parkway view to reduce noise emissions. The service yard allows for sufficient circulation for HGV parking and loading for the required number of loading docks.

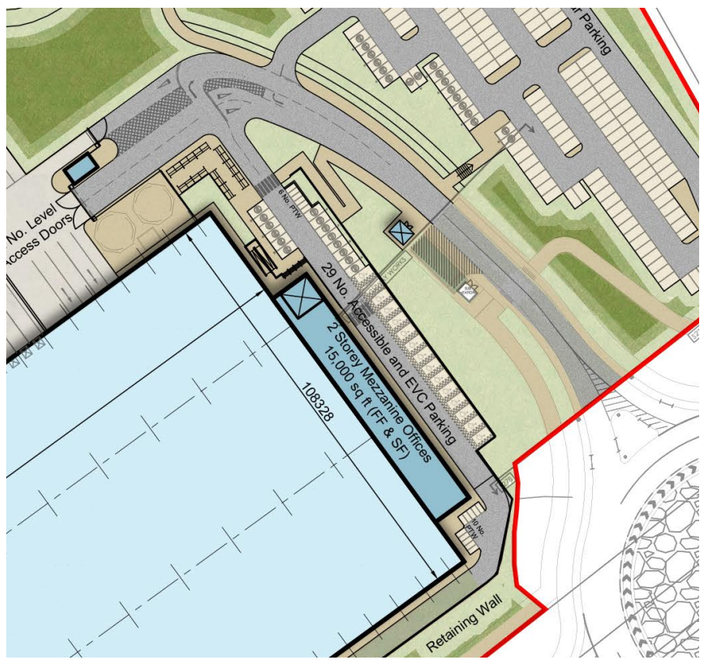
The scheme was discussed with the design panel with a focus on height and impact on visual impact of the building in September 2021. We welcome further engagement with the design panel to discus further details of the scheme.

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Post-submission Changes Made



Site Layout Revision B



Site Layout Revision G

05.2.1 SITE PLAN - POST SUBMISSION CHANGES

The external arrangement to the front of the building has been amended to refine the changes in levels between the site access road/footpath and the building entrance. The new proposal allows for the removal of both the stepped provision and the designated ramped provision by extending the length of the footpath and utilising the space afforded to us by the steeper embankments.

The new proposal will allow a 3m clear route to continue without creating pinch points required for ramp clearance and will also keep pedestrian away from the new access arrangement at the bell mouth to the car park located adjacent to the entrance. Not only does this keep pedestrians safely away from this area, but it also reduces the risk of driver's views being blocked by pedestrians coming to and from the site.

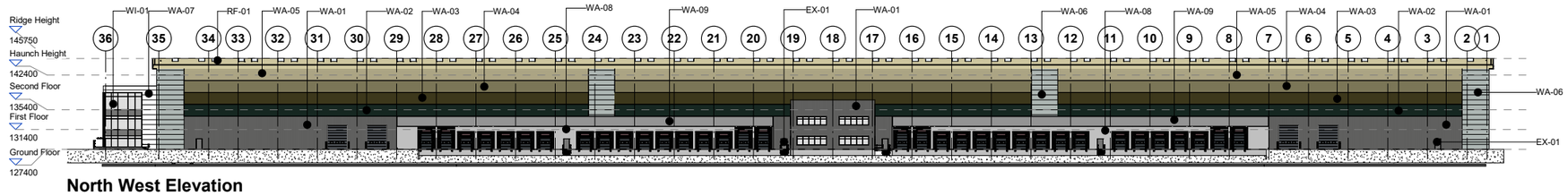
The priorities of traffic entering and exiting the yard and car parks have been reviewed and reconfigured to improve vehicle flow and safety. A give-way has been introduced for vehicles accessing and egressing the service yard at the junction with the southern car park. This serves to give priority to vehicles leaving the car park, which prevents the car park exit being blocked by waiting HGVs and slows approaching vehicles ahead of the junction.

Separate to the reconfigured access design, 16no. Motorcycle parking bay provisions have been made. A bank of parking has been added to the south-eastern corner or the office, and a bank has been shown in place of the proposed substation, which has been relocated to suit the suppliers' requirements. The location of these motorcycle bays has been selected as it provides close access to the building and allows for natural surveillance

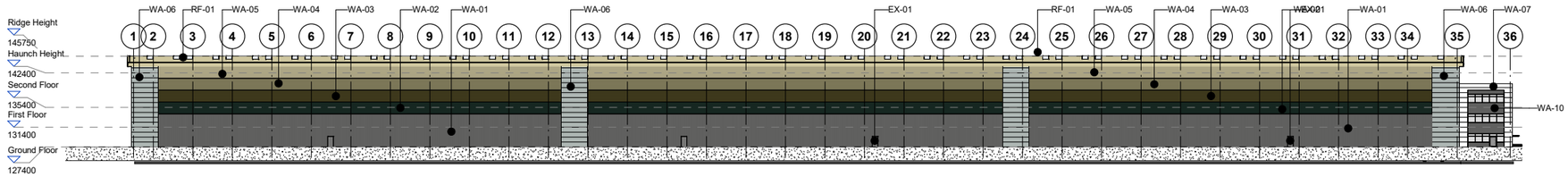
05 DEVELOPMENT PROPOSALS

05.3 BUILDING ELEVATION

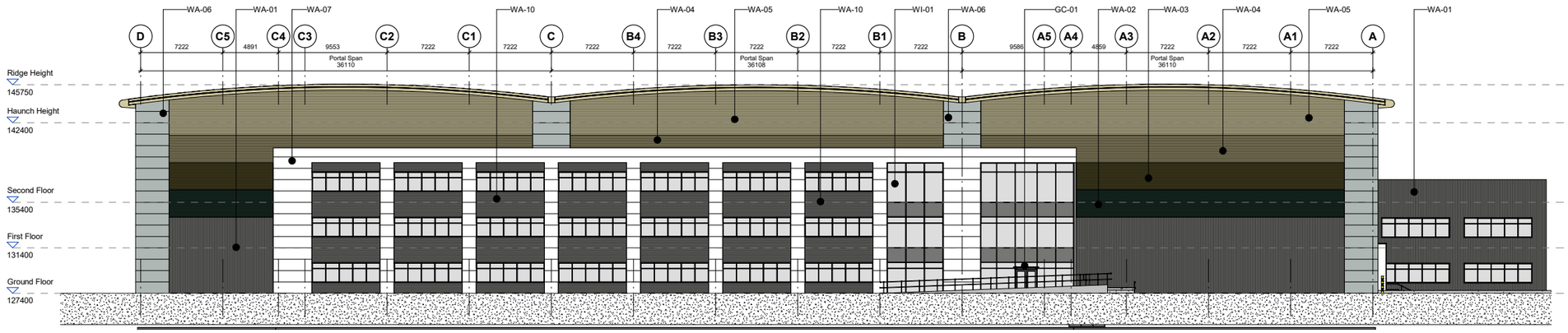
P - Materials Key	
Key Value	Keynote Text
EX-01	Personnel access door Colour: To match adjacent cladding
GC-01	Glazed Canopy
RF-01	Profiled roof cladding Colour: Meadowland RAL 100 80 20
WA-01	Vertically laid Built up profiled wall cladding Colour: Pure Grey RAL 000 55 00
WA-02	Horizontally laid Built up profiled wall cladding Colour: Ivy RAL 170 20 10
WA-03	Horizontally laid Built up profiled wall cladding Colour: Olive Green RAL 100 30 20
WA-04	Horizontally laid Built up profiled wall cladding Colour: Moorland Green RAL 100 60 20
WA-05	Horizontally laid Built up profiled wall cladding Colour: Meadowland RAL 100 80 20
WA-06	Horizontally laid 'flat' composite cladding system Colour: Pure Grey RAL 000 55 00
WA-07	Horizontally laid 'flat' composite cladding system Colour: Pure White RAL 9003
WA-08	Prowall Concrete
WA-09	Translucent Panel Colour: Grey Tinted
WA-10	Vertically laid Built up profiled wall cladding Colour: Pure Grey RAL 000 55 00
WI-01	Glazing system & framing



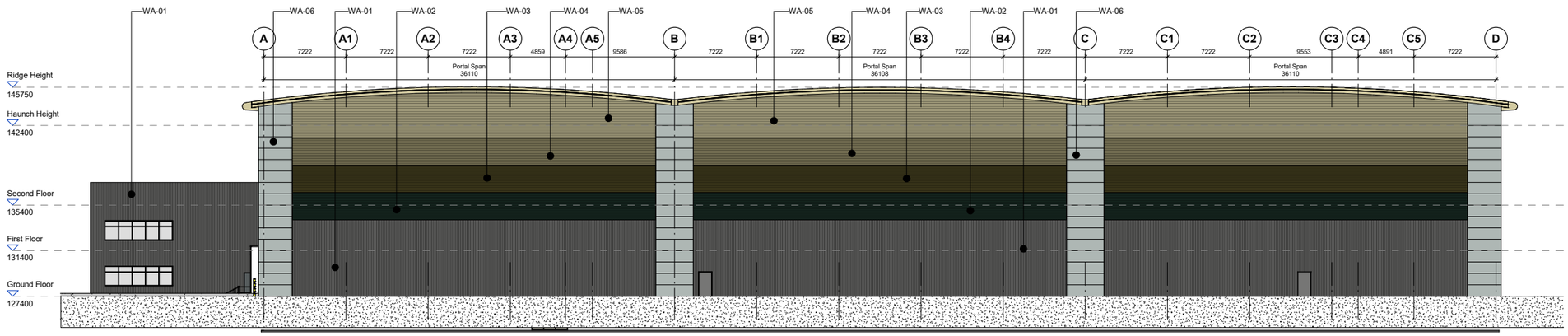
North West Elevation
1 : 500



South East Elevation
1 : 500



North East Elevation
1 : 200



South West Elevation
1 : 200

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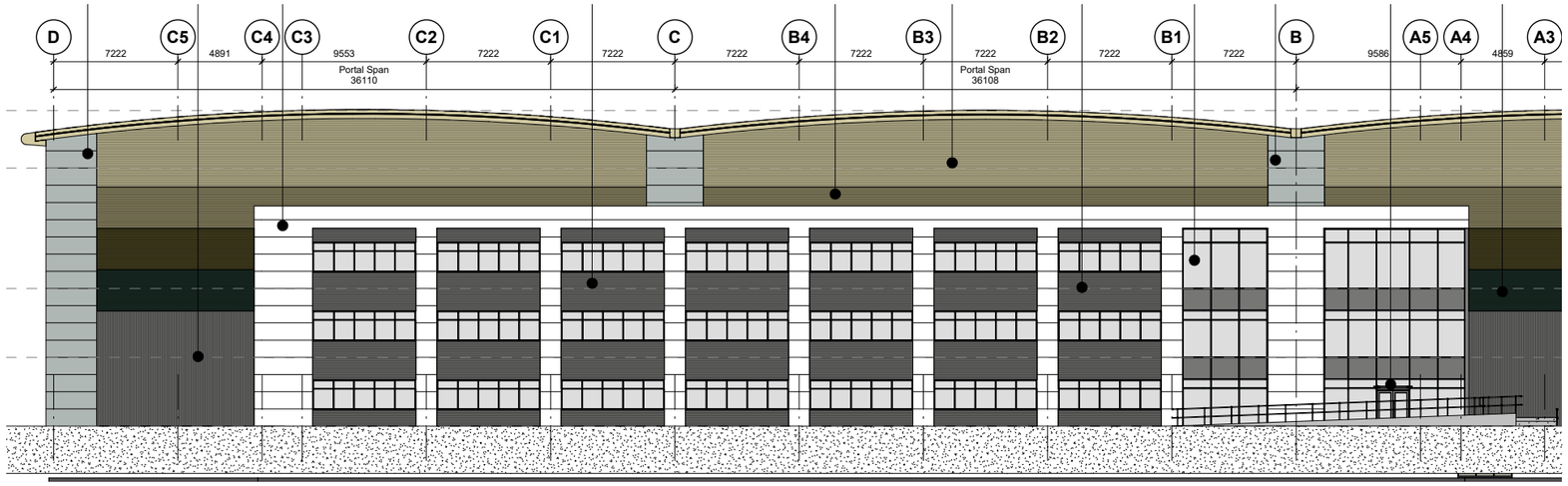
05.4 UNIT APPEARANCE

The appearance of the development incorporates cladding finishes and colours selected to match the colour palette stipulated on the Hoyland North Barnsley Masterplan Framework report published in December 2019, p14.

The chosen colour palette has been selected to minimize visual impact and to adhere to the local authority design guide referenced above. A strong high-quality aesthetic will be employed including coated metal cladding aluminum frame curtain walling. Attention was given to the breakup the large façade and to make reference to human scale when designing. We have avoided the use of metallic colour pallets in order to reduce glare and included a green coloured roof to minimise the impact of distant views.

The offices will be constrained by the floor to ceiling levels, with openings throughout to provide adequate lighting. Entrances are to be treated differently to the rest of the offices to indicate where the access into the office is with a goalpost feature detail.

05.6 OFFICE ELEVATION DEVELOPMENT



Indicative CGI



Pure Grey



Ivy



Moorland Green



Meadowland



Olive Green

Pure White

05.5 MATERIALS

All materials are high quality products for business or industrial applications:

- Palette of green colour cladding for main elevations and roof
- Profiled or flat metal cladding
- Large format window and curtain walling systems
- Feature building elements in strong colours or accent materials
- Translucent glazing, polycarbonates or membrane technology

05.6 COLOUR AND TEXTURE

A palette of green colours with limited elements of grey is used for the main elevations and roof to help blend the building into the landscape particularly in long distance views from the northwest, whilst creating a distinctive appearance for the building itself. The location and form of the outboard office to the building's northeast elevation is deliberately distinguished from the warehouse by use of a contrasting white and grey cladding, which conveys the difference in function of this part of the building and helps orientate visitors towards the entrance.

In specifying this colour, the setting and position of the office has been carefully considered – it is not visible in long distance views from the northwest, it is set down below adjacent ground levels of the Dearne Valley Parkway and site access, where additional landscape planting is also proposed, and is opposite existing and proposed industrial development to the northeast and southeast at higher ground level. This part of the site can accommodate the use of this contrasting colour scheme without detrimental impact to the landscape or views.

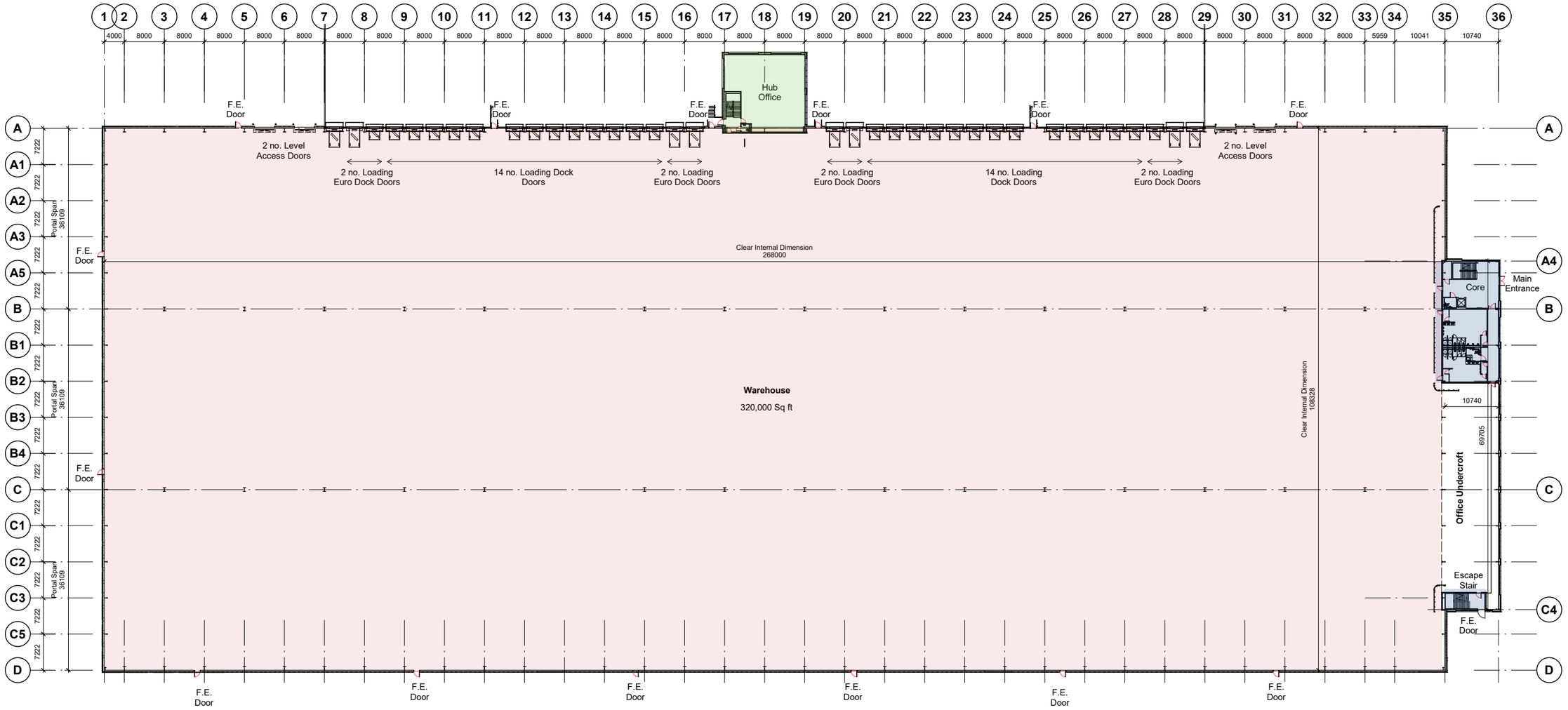
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05 DEVELOPMENT PROPOSAL

05.7 PROPOSED GROUND FLOOR PLAN

SCHEDULE OF ACCOMMODATION
(Gross Internal Area)

Warehouse Area	-	320,000 sq ft (29,725 m²)
2-Storey Office (FF&SF)	-	15,000 sq ft (1,394 m²)
Hub Office	-	5,000 sq ft (465 m²)
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Total Area	**-**	**340,300 sq ft** (31,612 m²)
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05 DEVELOPMENT PROPOSAL

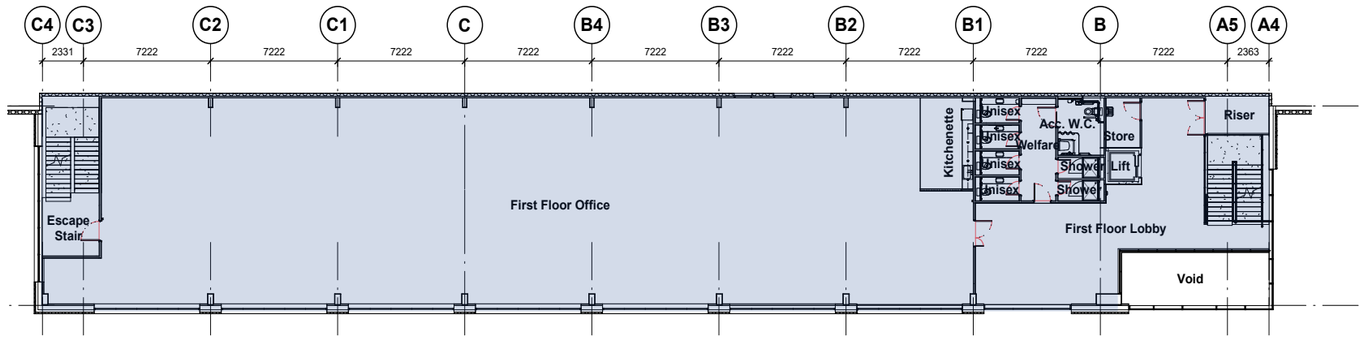
05.8 PROPOSED FIRST FLOOR PLANS

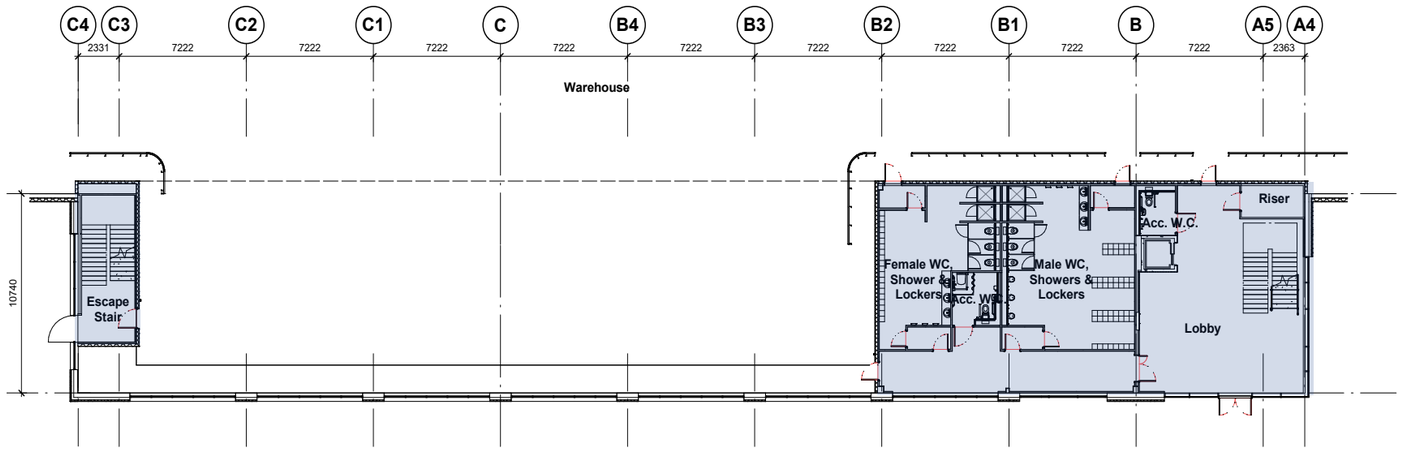
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Hub Office	-	5,000 sq ft (465 m²)
Gatehouse	-	300 sq ft (28 m²)
Total Area	-	**340,300 sq ft** (31,612 m²)
Plot Area	-	14.76 Acres (5.97 Ha)
Site Area	-	23.30 Acres (9.43 Ha)

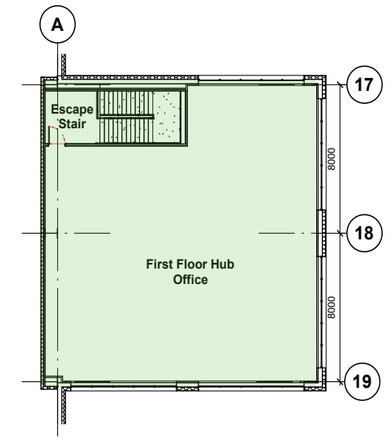


Second Floor Office Plan
1 : 200

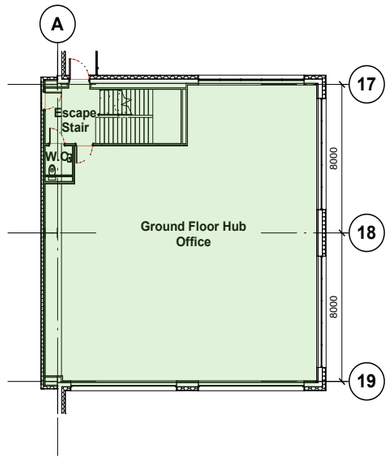




Ground Floor Office Plan
1 : 200



First Floor Hub Office
1 : 200

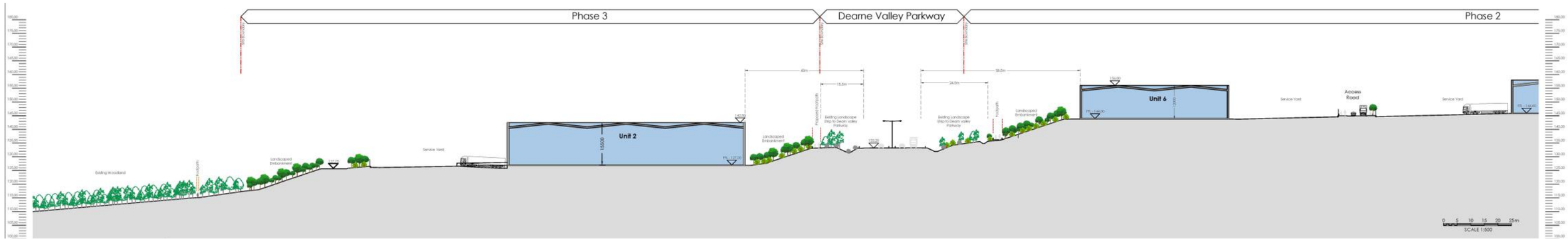


Ground Floor Hub Office
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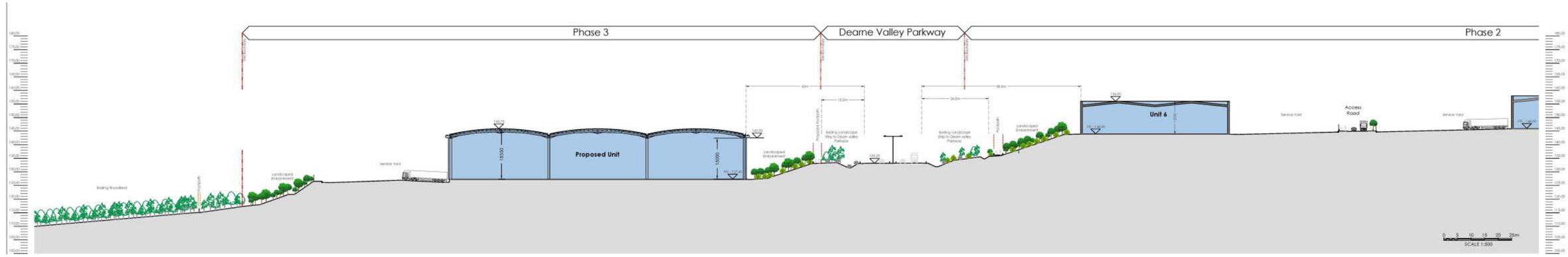
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05 DEVELOPMENT PROPOSAL

05.9 PROPOSED SITE SECTIONS



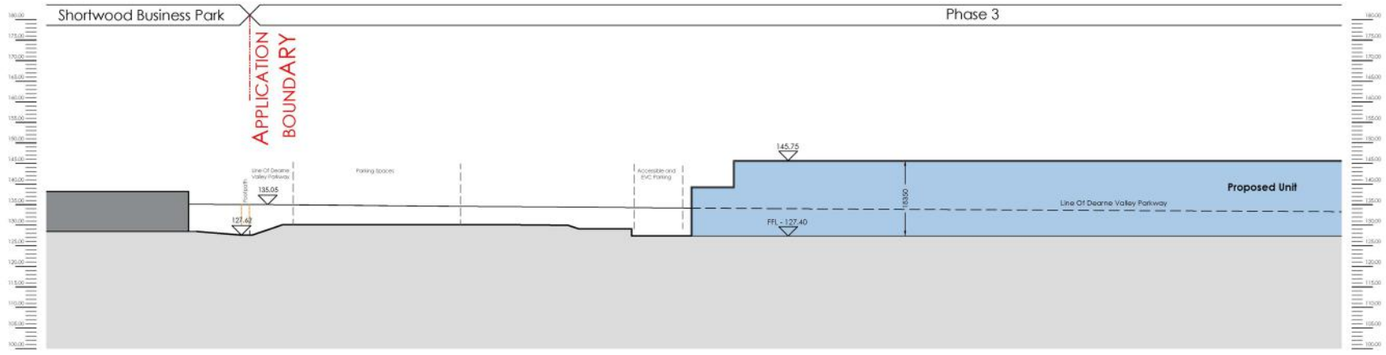
Proposed Section A-A: Outline Permission - 1:500



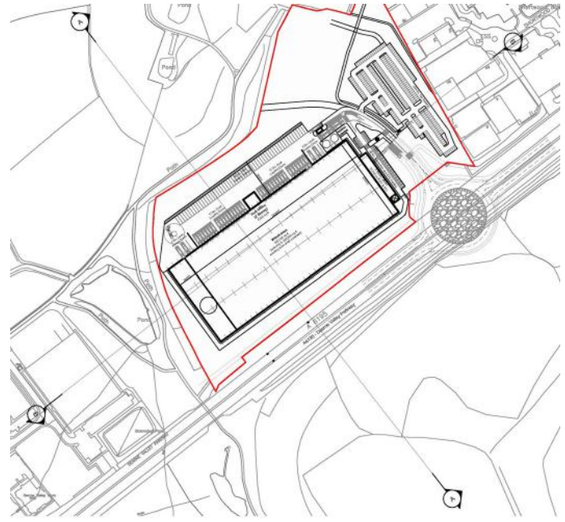
Proposed Section A-A: Proposed Amended Scheme - 1:500

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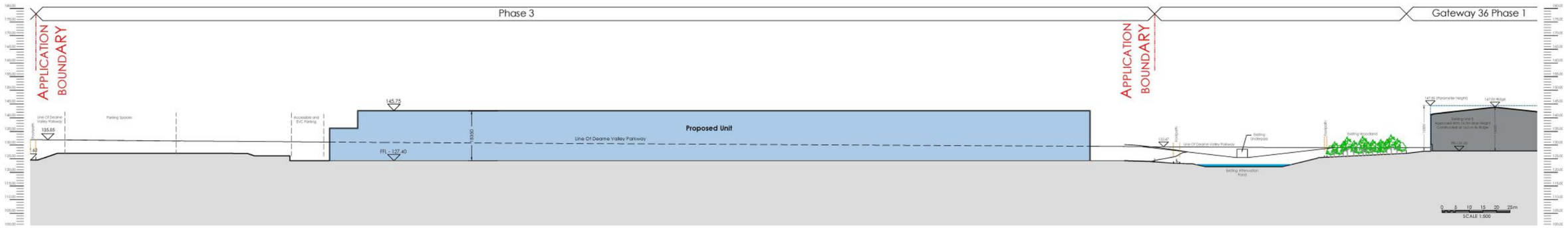
05.9 PROPOSED SITE SECTIONS



Proposed Section B-B: Proposed Scheme - 1:500



Sections Key



Proposed Section B-B: Proposed Scheme - 1:500

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05.10 PROPOSED USE

As noted previously, this is a Reserved Matters application for the construction of a single building with usage groups Industrial (Class E(g)(iii)/B2) and Storage & Distribution (Class B8) together with associated car park, service yard and access

05.11 PROPOSED AMOUNT

Reserved Matters permission is sought to provide Gross Internal Area of 31,612m^2 (340,300ft^2) for single unit scheme.

Adequate space will be provided around the buildings for the necessary vehicle loading manoeuvres. The sizes of these areas are borne out of the dimensions of contemporary articulated vehicles and their turning circles with 35m and 50m yards provided.

05.12 SCALE, HEIGHT AND MASSING

Rooflines and massing of buildings are important and have been considered and analysed in relation to their setting and viewpoint receptors.

The outline planning application gained approval for a two unit scheme with a clear internal height ranging from 10.000m to 12.500m underside of haunch resulting in a apex height of approximately 13.000m and 15.500m above finished floor level.

The building for which Reserved Matters permission is sought for requires clear internal height of 15.000m to underside of haunch resulting in a apex height of approximately 18.350m above finished floor level.

As previously discussed, the units will be broken up vertically with various elements, and broken horizontally with changes in cladding colours. Large curtain walls will be utilised near the entrances and on frontages

05 DEVELOPMENT PROPOSAL

05.13 Landscape Overview

Revise Landscape Overview para:
"The landscape proposals will retain as much of the existing landscape as possible following the earthworks approved under the original outline permission. The proposals seek to supplement and enhance the retained vegetation with new ornamental planting, hedging, woodland-edge scrub and new woodland areas. The proposals have been designed by Urban Wilderness, with ecological input from FPCR and Civil Engineering input from Curtins.

The following site-specific landscape aspirations have been considered during the development of the proposals:

- The establishment of woodland planting to both assist in screening the development and provide enhanced linkages for wildlife;
- The establishment of well managed scrub areas to support a range of wildlife and managed to create a rich mosaic with varied age, species and structure;
- The creation of a sustainable drainage basin for the catchment of water run-off from proposed built form. The basin will be planted with a species mix selected to reflect the surrounding landscape character with suitable tolerances for fluctuating conditions;
- Mature trees will be planted across the site to provide focal features and assist in screening the development as well as providing greater structural diversity at year 0;
- The creation of seating areas adjacent to the SUDS pond planted around the building entrance, vehicular access and car parking areas. These will provide recreational amenity for employees and users of the commercial buildings;
- The realignment of existing Public Rights of Way and footpaths;

The landscape proposals are made up of several Landscape typologies briefly described below:

Retained Landscapes
Existing landscape features have been retained wherever practical. While the existing landform is being substantially remodelled, several existing features will be enhanced with additional planting and connected to the wider tree and hedgerow network.

Woodland
Planted as whips and transplants within a 1m matrix, the proposed woodland mix includes native tree species including Acer campestre (Field Maple), Alnus glutinosa (Common Alder) and Betula pubescens (Downy Birch). These will be located towards the top of the newly created slopes on site to break down the visual massing of proposed built development. They will also help create an attractive landscape setting as well as screen the development through the creation of a fast-growing, dense wooded sections. Woodland areas will include scalloped edges and glades where practicable to increase woodland edge habitat whilst creating several wildlife corridors across the site.

Scrub
Well-managed scrub and its margins will support a range of wildlife. Diverse scrub is the most valuable to wildlife and includes scrub of varied age, species and structure as demonstrated in the Biodiversity Net Gain calculations. The Landscape and Ecological Management Plan (LEMP) will ensure the scrub maintains all stage of growth, from bare ground through young and mature growth to decaying wood. These areas will be designed and specified to ensure the establishment of a diverse mosaic of native scrub which forms the transition between woodland and the ground layer vegetation. Structural diversity within this typology will be incorporated through the inclusion of glades and rides and a varied age structure.

Larger Trees
The use of Extra-heavy standard tree stock will provide instant impact in key areas of the soft landscape proposals. Specimen trees will help provide valuable habitat and connectivity for a range of bat and bird species from an early stage, prior to other habitats establishing.

Hedgerow
New hedgerow, both formal clipped and native, will will provide key structural features and are proposed to assist in defining space, enclosing landscape typologies and the creation of wildlife corridors. Hedgerow planting should include pollinator friendly species, increase habitat connectivity and improve long term site-wide biodiversity. Species choice for all informal hedgerow will be exclusively native to reflect local landscape character.

Inundation/Meadow
The attenuation basin area will experience changes in water level due to its role in the sustainable drainage systems on site. This will result in the basin filling during peak events and being dry during periods of drought. The meadow mixture will be varied to ensure that as some species decline others thrive, providing a diverse habitat during the growing season and enclosed space for occasional amenity for local users.

An area towards the northern end of the basin will be excavated to create an area of permanent water, the deepest sections (c.1.5m) will create areas of open water with the graded banks planted with an inundation mix including reed bed species.

Mown Grassland Strips
Mown strips flank pedestrian routes to increase openness and prevent overspill form the neighbouring scrub and woodland areas in between maintenance visits. The close-mown grass also creates the perception of a well-maintained landscape, where more naturalistic planting is stepped back from the main vehicular and pedestrian routes.

Soft Landscape Palette
The palette of tree and shrub species has been chosen based on local native typologies optimised for wildlife and developed between Urban Wilderness and Project Ecologists, FPCR. For detailed proposals please see drawing 411-UW-P-002 rev. D.

The planting approach has three principle purposes: (i) to screen the buildings from nearby and more distant visual receptors (local residents, vehicle drivers and public footpath users); (ii) provide a biodiverse landscape which enhances the habitat value of the site (in accordance with the Biodiversity Net Gain calculations); and (iii) provide a high-quality and appropriate landscape setting to the development.

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05 DEVELOPMENT PROPOSAL

05.14 Landscape Strategy

The design parameters for each purpose often differ, with the woodland screening needing to establish as fast as possible, while the woodland edge scrub needing to develop over time, for example. However, the landscape strategy seeks to marry these different requirements in a holistic and fully coordinated way, ensuring that this development will be fully synchronised with the principles established by the Outline Planning permission for the wider site and that the evolving landscape will always feel actively managed and well-maintained.

Landscape Features

See drawing 441-UW-P-003

The proposals include a realignment of the previous public right of way which crossed the site. The new route will run alongside the Dearne Valley Parkway before crossing through the site and overlooking the attenuation basin before connecting back into the footpath network off site. The route will be surfaced with Flexipave product.

Site wide furniture will provide low-level navigation whilst being sympathetic to the site's rural context. There is an ambition not to clutter the landscape with wayfaring signage and other urbanising interventions. Woodscape benches and timber signage have been chosen to suit the semi-rural character of the site, taking a 'country park' approach to the layout and specification.

Pedestrian Access & Circulation

Proposals include the provision of high-quality, safe and convenient walking and cycling routes ensuring that there is good connectivity between the development and the existing footpath network. Within the site boundary, these are set within a greenspace network where users will predominantly travel along green corridors. Signage, fencing and gates will be installed as required.

KEY

Phase 3 Application Boundary

SOFT LANDSCAPE TYPOLOGIES

See UW dwg. 441-UW-P-002

- Native Woodland Planting
- Native Scrub Planting
- Wildflower Meadow
- Inundation Planting
- Ornamental Planting
- Mown Grass
- Retained Landscape
- Formal Hedgerow
- Native Hedgerow
- Specimen Tree Planting

LANDSCAPE FEATURES

- Attenuation Basin
- Seating Area

PATHS

- Existing Paths (off-site)
- Public Footpath (Retained)
- Public Footpath (Realigned)
- Public Bridleway (Realigned)
- Path (not PROW)
- Maintenance Path. MOT Type 1 substrate surface



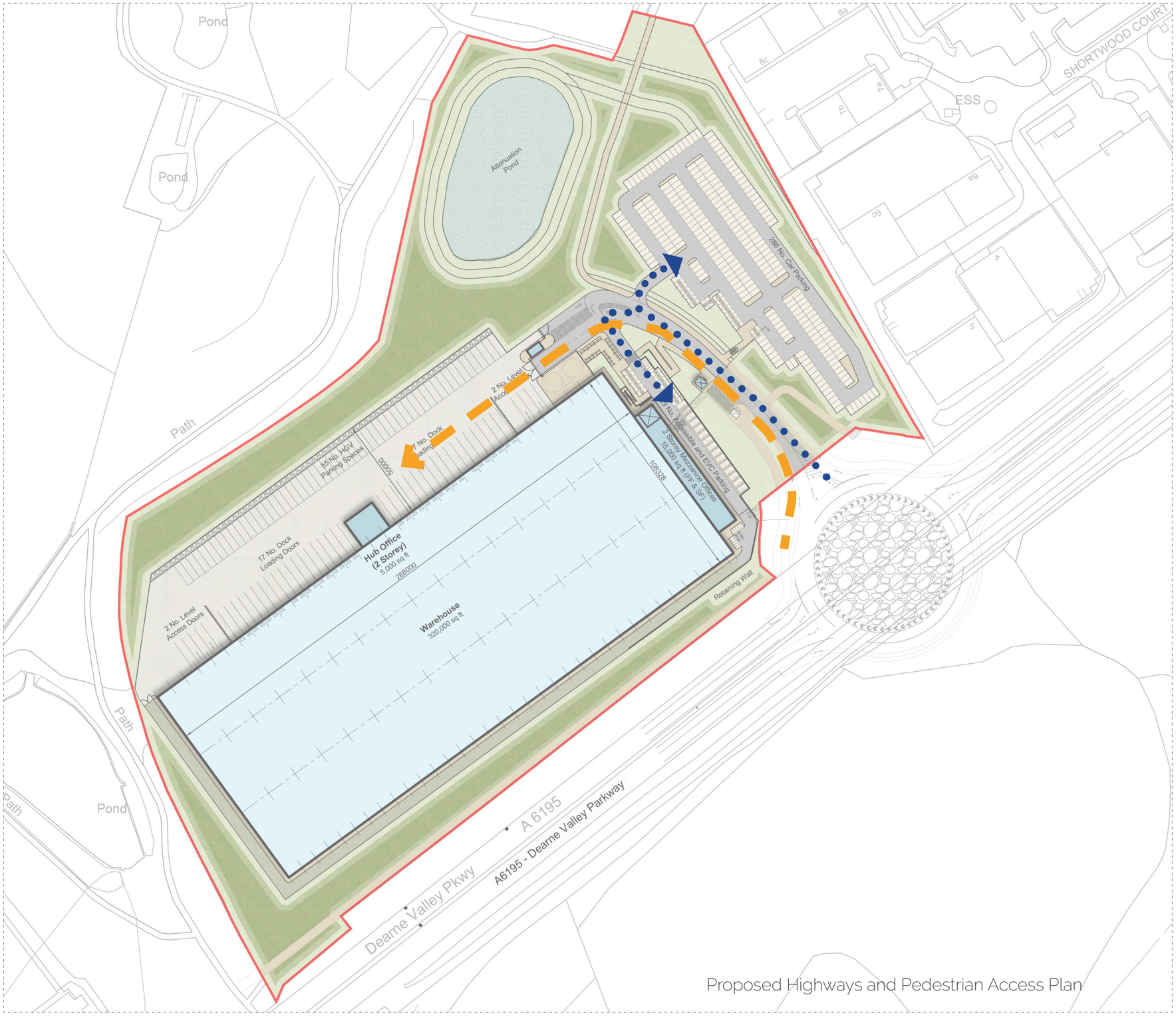
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06 ACCESS

06 ACCESS

06.1 HIGHWAYS ACCESS

Key	
	Site Boundary
	HGV Access
	Car Access



Proposed Highways and Pedestrian Access Plan

06.2 VEHICULAR, PEDESTRIAN AND CYCLE ACCESS

VEHICULAR ACCESS

Vehicular access to the new units will be via a new access road which connects to the roundabout via Dearne Valley Parkway (A6195).

Separate dedicated car park entrances will reduce conflict between goods vehicles and car traffic. The car park areas will be constructed in dense bitumen tarmacadam where car parks are separate from service areas. This will form part of a coordinated hard landscaping strategy.

The current car parking layout are appropriate for B8 only use class only, additional provisions will be required if B2 use is required by occupier.

Service yard areas will be formed in concrete surfacing, to provide a robust base for vehicle manoeuvering.

Adequate space is provided around the building for necessary vehicle loading maneuvers in line with Freight Transport Association guidelines. The sizes of these areas are borne out of the dimensions of modern articulated vehicles with delivery vans and their turning circles.

PEDESTRAIN AND CYCLE ACCESS

Footpaths will lead from the access road, via the car park, up to the office main entrances. Tactile paving and dropped kerbs will be provided at all road junctions, with further paving extended around offices and to the building perimeter.

The diverted public right of way path adjacent to the site allows for footpath access and cyclist access. Where the diverted path connects to the existing bridleway where possible improvements are proposed and an increase to the head clearance to 3m.

Lighting by street lamps during hours of darkness will help to provide a safe and secure environment for the pedestrian / cyclist.

The development will be laid out to achieve accessibility for disabled occupants. All disabled car-parking bays are located as close to the main entrance as possible, with cycle shelters providing security and protection for bicycles. Safe pedestrian routes from these shelters will meet up with the route between car park and the building. o All accessible parking has been provided to the front of the office space, at the closest possible point to the entrance, with a safe crossing point from the bays to the building. o Pedestrian and cycle access from Dearne Valley Parkway and the opposite, will be made by the formation of a path down with a gradient less than 1:20.

All main entrances into the units will be 'wheelchair friendly' level entry, with automatic or manual opening doors. The doors will meet all current Building Regulations Part M requirements, with full height tubular steel handles for ease of opening. The force required to operate the doors will be below the maximum force recommended in the Building Regulations, and the effective opening width of each leaf will be designed to be more than 800mm.

Additional entrances to the operational areas will be provided from the yard areas and, it is assumed, that drivers using the facility will be able bodied. As such, there will be a stepped access to the building, to accommodate the change in levels between warehouse and yard slab. This will, however, be designed in accordance with Approved Document M.

PEDESTRIAN ACCESS - INTERNAL

Reception
The reception area to the main offices will be suitably sized to accommodate wheelchair users.

They will include appropriate space and waiting zones. All floor finishes will be suitable for wheelchair access.

Horizontal circulation
Internal corridors will be a minimum of 1800mm wide at the pinch point. All doors will have a minimum clear opening of 800mm and an opening force below the recommended maximum. Door furniture will contrast with the background colour of the door leaf, and be of either lever type, at 1000mm above floor level, or pull handles, commencing at 1000mm above floor level. Doors in corridors will be fitted with vision panels, commencing at 500mm above floor level.

Vertical circulation
Stairs will provide vertical access around the offices, and a passenger lift will provide access to all floor levels. All staircases and lifts will be designed in accordance with Approved Document M, with recommendations including contrasting nosings, and treads/risers suitable for ambulant disabled members of staff or visitors. Any member of staff, or visitor, with a visual impairment would be actively managed within the building.

Industrial Space
The industrial space is to be level throughout with clearly defined pedestrian routes. There will be fire exits within the warehouse between the main offices and the warehouse area. External stairs leading to the yards will be provided where necessary with minimum 900mm wide x1400mm long refuge bays. The landing will be level with the industrial space finished floor levels on these exits.

Toilets
Given the manual nature of work undertaken, toilets and shower facilities will be provided in the warehouse locker rooms. In the offices, toilets will be provided for male, female and disabled users. A cubicle in each WC will be provided for ambulant disabled users.

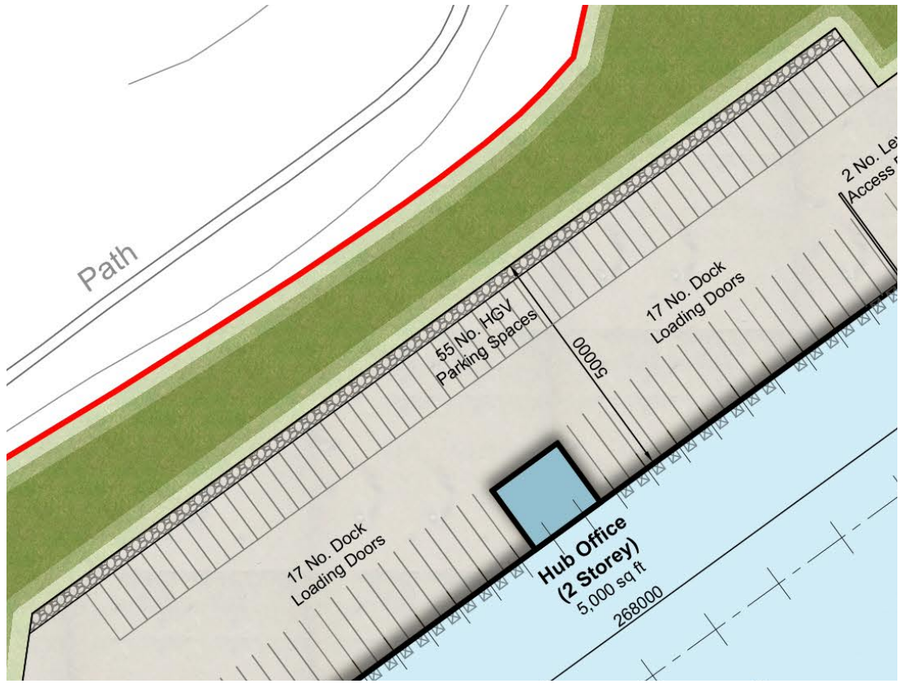
Finishes
All floor finishes are to be of a non-slip type, with carpets being of a shallow dense pile, allowing easy passage for wheelchair users. The walls, wall coverings and paint finishes are to be suitably contrasting with the joinery of the doors and low surrounds. Where wall tiles are to be used, they are to have a satin finish to reduce glare.

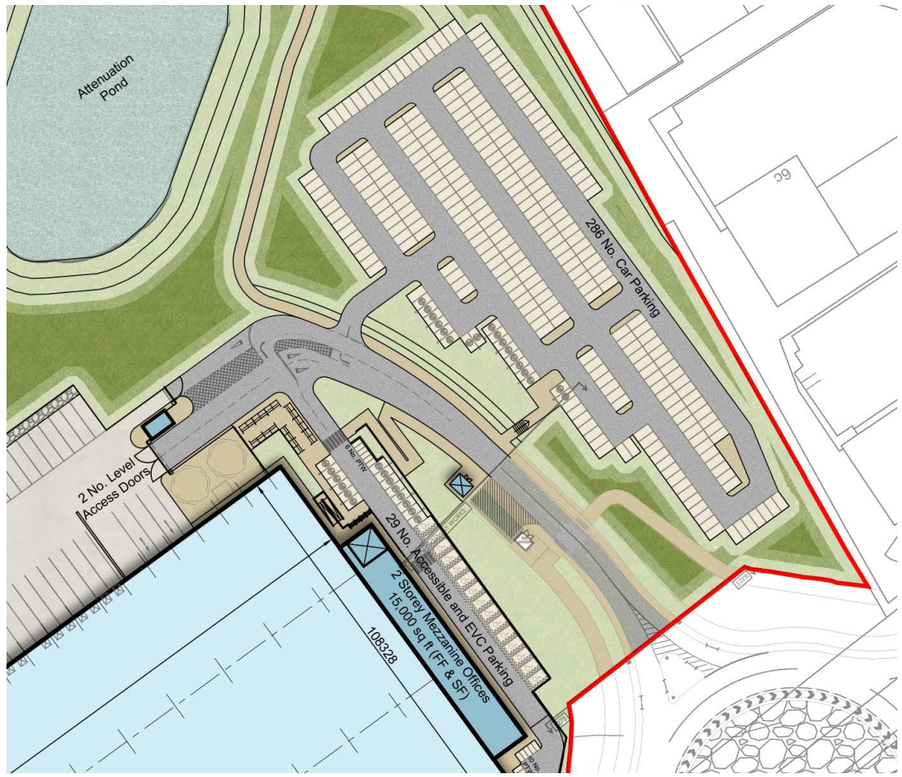
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06.3 VEHICULAR PARKING NUMBERS

Parking Spaces

Car Parking	-	No. 286
Electric Vehicle	-	No. 32
Acc.Parking	-	No. 15
Motorcycle Parking	-	No. 16
Total Parking	**-**	**No. 349**
HGV Parking	-	No. 55





07 SUSTAINABILITY AND CRIME PREVENTION

07 SUSTAINABILITY AND CRIME PREVENTION

07.1 CRIME PREVENTION

Consideration has been given with the scheme layout of the development to ensure personal safety. This relates not only to ensuring that the layout of the development does not create an environment conducive to crime, but also to how occupiers and visitors to the site can move freely without risk of injury.

07.2 ACCESS AND MOVEMENT

Spaces and pedestrian routes are currently well defined with easy to recognise entrances; this provides convenient movement without compromising security. Proposed car parking is provided in the most prominent locations possible.

07.3 STRUCTURE

Natural surveillance will be a key factor in the overall design of the site and the positioning of the offices overlooking proposed car parking will offer a high degree of visual control. The building's designs and layouts will be considered to minimise visual obstacles and eliminate places of concealment and any potential dark areas will be well lit.

Formal surveillance will be in the form of an extensive CCTV system provided in line with the occupier's requirements.

07.4 PHYSICAL PROTECTION

Boundary protection will be provided to all service yard areas, but will be considered to maximise natural surveillance.



Indicative Plot Frontages



Indicative Security Fencing

07.5 SUSTAINABILITY

This section sets out the main sustainable features relevant to the application and is restricted principally to the future buildings and the physical features of the site, rather than encompassing the wider sustainable development issues of the site location and its surrounding infrastructure.

The issues in relation to sustainable design can be complex and drawing the right balance between all considerations is often difficult. This type of development requires an understanding of the occupiers operational requirements as the demands placed upon such buildings are not necessarily the same as for other types of development, such as domestic properties. However, the fundamental principles still apply, particularly in reducing the impact on the environment and the use of finite resources.

For a development such as this, the most significant impacts relate to material usage (principally for aggregates, concrete and steel) and the power consumed during its operation.

Elsewhere the scheme will focus on various aspects of sustainable design, potentially including all or some of the following:

Energy Efficiency:
In order to deliver environmentally responsible building stock, an exemplar approach is being proposed based on low energy design principles. In summary, this approach involves energy demand minimisation through effective building form and orientation, good envelope design and proficient use of services; such that the buildings themselves are being used as the primary environmental modifier.

The general construction design standards to be adopted must exceed the requirements of the current (2013 Edition) Part L Building Regulations which stipulate an improvement on the CO_2 emissions of an aggregated 9% against 2010 standards The building envelopes will be designed to ensure that the fabric and form of the spaces encompasses low energy sustainability principles

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07 SUSTAINABILITY AND CRIME PREVENTION

BREEAM Certification

The building will be targeting BREEAM Very Good with a strong aspiration to target BREEAM Excellent rating. BREEAM Very Good Certification (2018) represents the top 25% of BREEAM certified buildings in the UK. At outline planning application stage, a strategy was developed to target Very Good certification. The BREEAM strategy going forward is aiming for an Excellent certification will be progressed further thought the design and construction process.

Net Carbon Zero

The development will be constructed to net zero carbon in line with the UK Green Building Council's (UKGBC) Net Zero Carbon Buildings Framework. By mitigating the embodied carbon generated from the development programme by funding high-quality, accredited and verified offset schemes. The Offset scheme selected is in line with the current principles set out in UKGBC's net zero framework. This is to enhance nature and wellbeing, as well as create a positive socio-economic impact in all the local communities in which the group assets are located.

Water Efficiency

There are various measures that will be incorporated to reduce water consumption and demand. The specification of water efficient appliances such as spray taps and low volume W/C's will assist. In addition to toilets, shower rooms with changing and locker areas will be provided within the main offices. These amenities will be available for all personnel based at the facility, thus providing for those who choose to cycle to work.

Further considerations would include:

Waste Strategy

Dedicated areas for refuse will be provided to allow for adequate bin storage / compactors to suit the occupiers operations. The refuse area will not exceed 10m from the main footpath and sufficient turning areas will be provided for refuse vehicles.

Waste Management

The proposed development can provide for the careful and sustainable disposal of waste during and post construction. Modern methods of design and construction using pre-fabricated units will help to keep waste arising to a minimum. Post construction, the buildings will be provided with a dedicated area within the building for the provision of refuse and re-cycling facilities, tailored to operational requirements.

Provision of a 'Green Roof'

Green roofs have been considered on the scheme and discounted on the basis of-

a) The base to support the "green roof" system would have to comprise of a concrete panel and / or cement particle board.

b) The dead load generated by a "green roof" (including an allowance for the concrete / cement bases noted above) would be at least 30 times heavier than the insulated cladding system. For comparative purposes, the insulated cladding system weighs in the order of 15 kg/m2, whereas a green roof system with all its component parts, would generate a loading of 450 kg/m2.

c) The corresponding structure required to support the "green roof" would result in a series of closely centred columns and owing to the height of the building, internal lateral stability bracing would be required to counter the imposed horizontal forces generated by the elevated dead load from the roof make-up. Notwithstanding the extent of internal structural members which would compromise internal operations, the cost to both the structure and foundations would render the building uneconomical.

Further costs in generating a "green roof" would be achieving a watertight and resilient fabric which is essential to protect stored product. This would comprise of membranes glued to the concrete / cement based substrate, prior to forming the overlying system.

Facilitating electric vehicles

Active and passive electric charging points will be provided within the car parks of each building to provide employees with the infrastructure to charge their EV's. The use of EVs (both cars and cycles) will also be encouraged.

Solar Generation

An area has been identified on the roof for mounted photovoltaic energy generation panels in order to achieve operational net zero carbon, revised in a NZC study as part of the ambition of the scheme to achieve BREEAM Very Good.

Natural Daylight/Rooflights

High levels of natural daylight will be provided, wherever possible, through effective window design.

Cycle Store

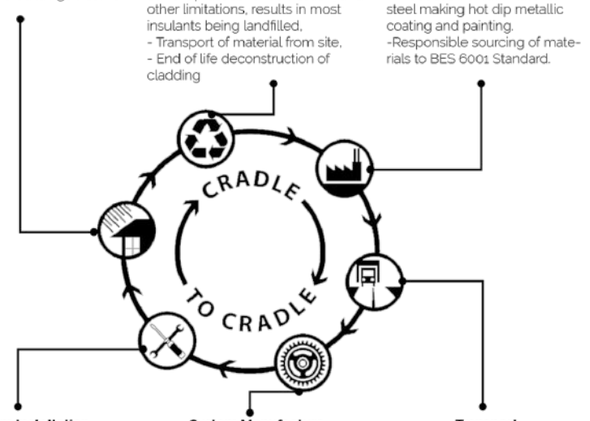
To encourage staff to cycle to work, lockable cycle stores are proposed.

Material Management

Use
More durable pre-finished steel products, such as Colorcoat HPS200 Ultra and Colorcoat Prisma reduce maintenance and lengthen the useful life before system replacement,reducing the overa;ll environmental emissions over the buildings lifetime.

End of Life
Includes impacts from:
- Built-up system and composite panel steel content 79% recycled, 15% reused, 6% landfill.
- All insulation to landfill (foam and mineral wool). Although they have the potential to be recycled, current practice for demolition, and other limitations, results in most insulants being landfilled,
- Transport of material from site,
- End of life deconstruction of cladding

Production of System Components
Includes impacts from:
- Production of pre-finished steel and spacer bars.
- Production of insulation.
- Production of fixings and plastic components.
- Production of raw material steel making hot dip metallic coating and painting.
-Responsible sourcing of materials to BES 6001 Standard.



System Installation
Includes impacts from:
Allowances made for cladding side and end laps.
Installation process and use.

System Manufacture
Includes impacts from:
- Profiling of pre-finished steel for cladding both liner and outersheet.
- Composite Panel manufacture (foam and mineral wool) and allowances made for different U-value requirements for each system.
- 6% of foam filled composite panel blowing agent lost in manufacture.

Transport
Includes impacts from:
- Delivery from TATA steel of system manufacturer.
- Delivery to site.
- Delivery of insulation and other system components to site.
- Full allowance for lorry capacity.

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UKAS ENVIRONMENTAL MANAGEMENT 005

08 SUMMARY

08 SUMMARY

08.1 SUMMARY

This document seeks to demonstrate that the development of this site will result in a well designed, high quality scheme that is an asset to the area, and will provide a desirable development. It is anticipated that the scheme will act as a catalyst for new jobs and bring welcome investment to the local community.

The development represents a substantial investment to the area and will help to promote and support employment growth and stimulate economic regeneration to the area, cohesive with regional and local aspirations.

The design seeks to minimise the impact on its surroundings; providing an opportunity for the development of attractive, contemporary and cohesive buildings that are fit for purpose and safe for all to use.

All design proposals contained within this report have been designed to meet the required design and sustainability polices of Barnsley Metropolitan Borough Council

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