



DESIGN AND ACCESS STATEMENT HANGAR 4, MANCHESTER AIRPORT

Design and Access
Statement

March 2023

020990-RPS-SI-XX-RP-A-0200
P02



0.0 | CONTENTS

1.0 Introduction

2.0 Location and Context

- 2.1 Site Location
- 2.2 Site Location Map
- 2.3 Existing Site
- 2.4 Opportunities and Constraints

3.0 Design Development

4.0 Design Proposals

- 4.1 Proposed Site Layout
- 4.2 Scale Indicative Elevations
- 4.3 Scale Indicative Sections
- 4.4 Appearance
- 4.5 Indicative 3D Visual Overall Scheme
- 4.6 Indicative 3D Visual Proposed Development
- 4.7 Landscaping
- 4.8 Refuse Management

5.0 Access Provision

- 5.1 External Access
- 5.2 Internal Access and Movement

6.0 Sustainability

7.0 Personal Safety and Crime Prevention

8.0 Project Summary



1.0 | INTRODUCTION

1.0 Project Introduction

This Design and Access Statement has been produced by RPS on behalf of CTI, in support of a Full Planning Application for the demolition of existing Hangar 4 unit and erection of an industrial / warehouse building (Use Classes B8) with ancillary office space, landscaping, car parking, servicing and access arrangements.

This document sets out the design development process and details the scheme within this Full Planning Application, and has been written in line with CABE publications 'Design & Access Statements - How to write, read and use them', based on the principles of inclusive design.

Please ensure that this statement is read in conjunction with all the supporting plans and documents, which make up the full planning application.



2.1 Site Location

The surrounding properties fall within the B2 and B8 use classes. Dnata is located immediately to the west of the site. With buildings 401 and 402 in close proximity. To the north is Westgate airside security and to the south east is Hangar 5.



2.0 | LOCATION AND CONTEXT

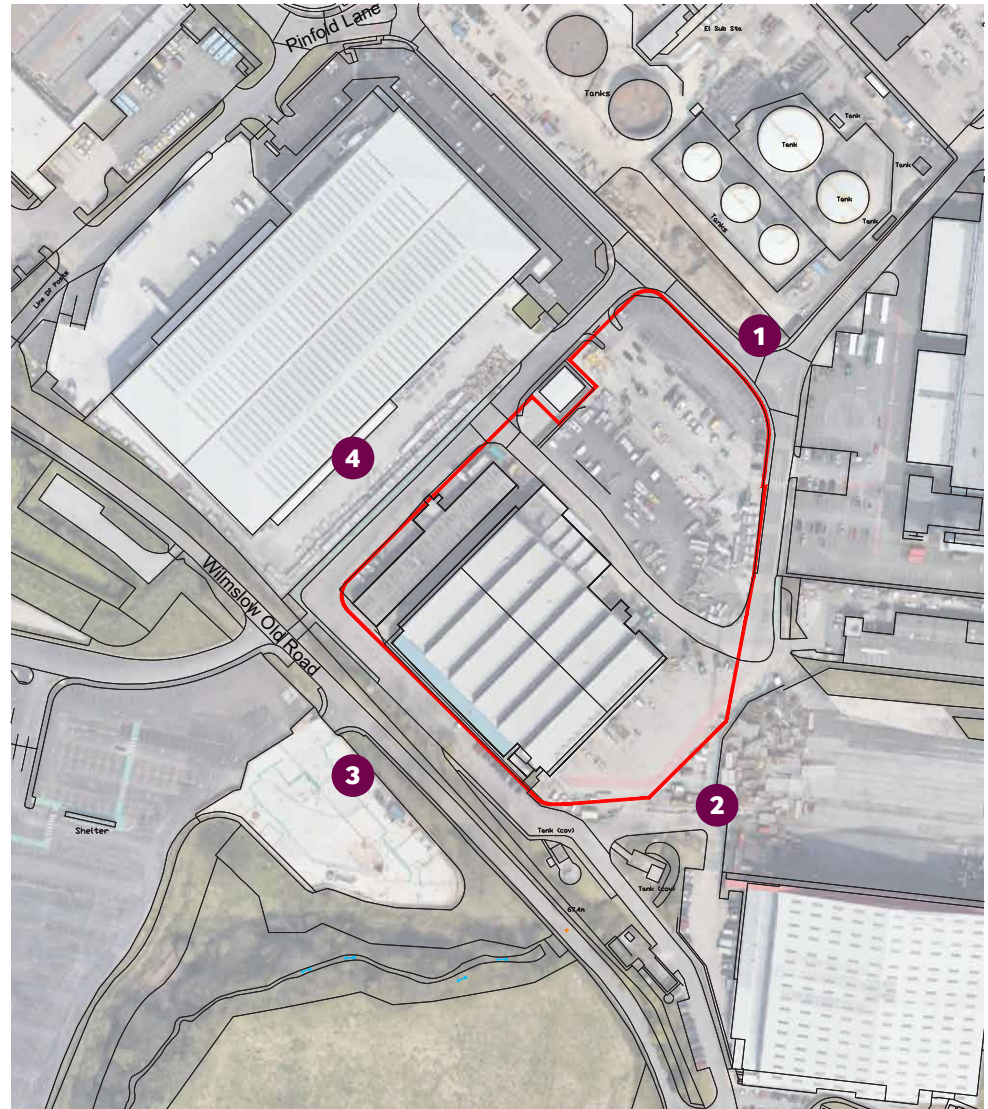
2.2 Site Location Map



2.0 | LOCATION AND CONTEXT

2.3 Existing Site

The site is currently occupied by the existing Hangar 4 building, which is located on the southern half of the site, with parking and storage to the north. The site currently has several access junctions. One to the west and another to the east accessing the yard areas, with a through road connecting the two. Additionally there is another entrance on the western boundary which is used by cars and vans to access the car park.



3.0 | DESIGN DEVELOPMENT

3.0 Design Evolution - Preliminary Masterplan Options

A large selection of optional layouts were considered leading to the final proposed scheme. The intention of the options was to maximise floor area but produce the most efficient layout which could best satisfy current market demand for a unit of this type, within the constraints of the site:

Scheme 01

Pros

- Single unit option offers good site coverage
- Separate car and HGV entrance
- Office allows views to yard area

Cons

- Office locations does not allow views of Pinfold Lane / Avro Way to the top of the site
- Additional traffic on Pinfold Lane with yard entrance

Scheme 02

Pros

- Separate HGV and car parking entrance
- Maximised floor area

Cons

- Yard configuration to the north compromises building footprint
- Office does not overlook yard areas
- Additional traffic on Pinfold Lane

Scheme 03

Pros

- Flexible two points of entry/exit to the yard giving the site dual access
- Additional yard space to the south with egress

Cons

- Yard configuration to the north compromises building footprint
- Office does not overlook yard areas
- Additional traffic on Pinfold Lane

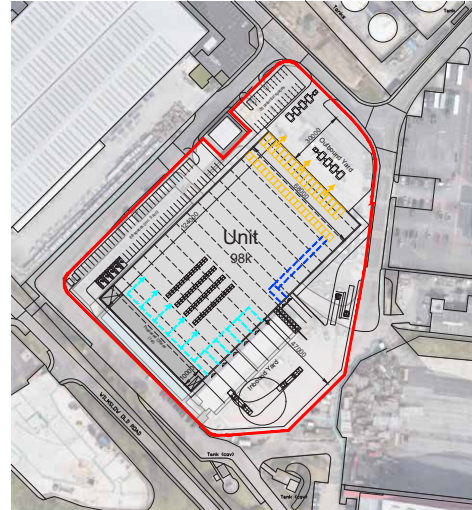
Scheme 04

Pros

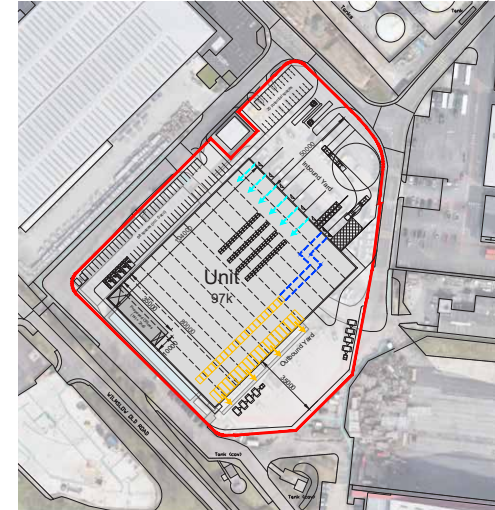
- Multiple access and egress points offering flexibility to the site
- Offices to the front allows views to Pinfold Lane

Cons

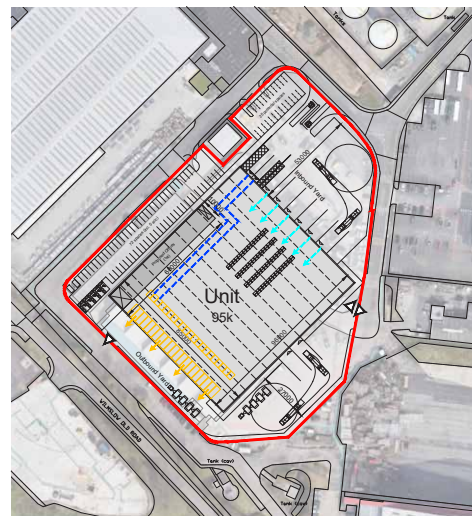
- Floorspace not fully maximised to the south
- Additional traffic on current one way system on Pinfold Lane



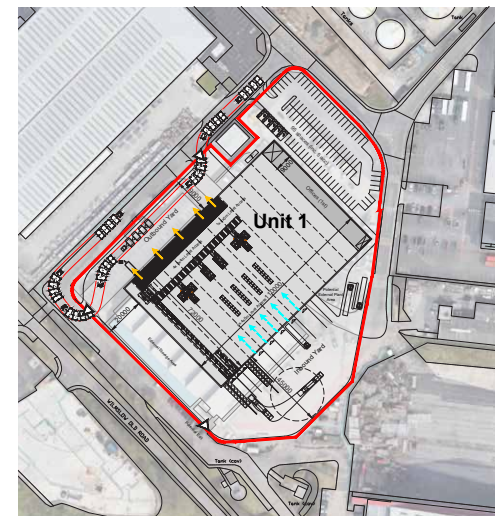
Scheme 01



Scheme 02



Scheme 03



Scheme 04

4.0 | DESIGN PROPOSALS

4.1 Proposed Site Layout

A number of various building footprints and yard configurations have been considered leading up to the masterplan contained within this pre-application document. The preferred solution opposite is considered the best to optimise the site's potential.

For speculative warehouse buildings of this type and size, there are a range of minimum, institutional requirements that must be met to satisfy current and future projected market demand. These include number and type of loading doors, percentage of office content, building footprint proportions (2:1-3:1), clear internal height, daylight, floor strengths, security, vehicle parking, and yard depths.

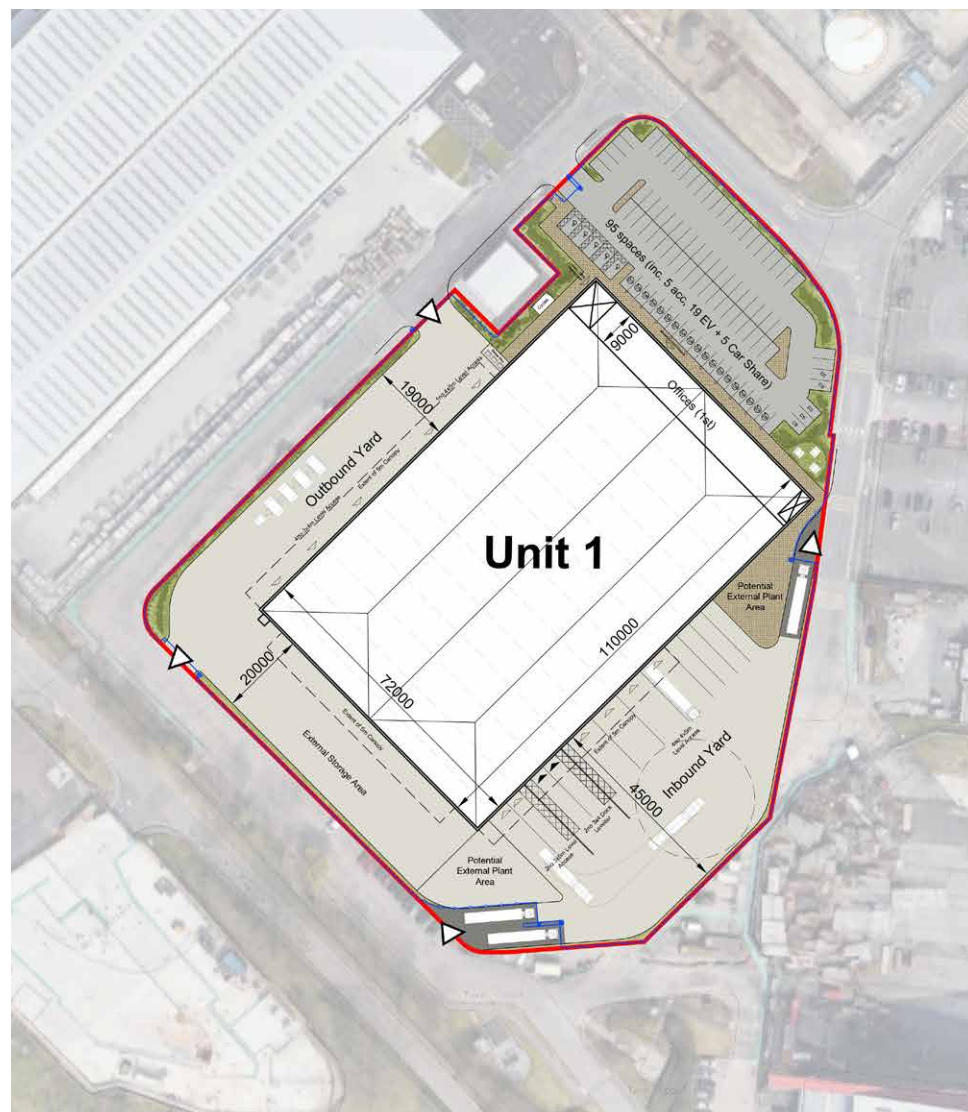
Increased yard depths can improve external flexibility and marketability but need to be carefully balanced against potential loss of floor space and associated rental income. A range of optional yard depths were considered within many of the initial schemes for the site to find the optimum solution.

The proposed development comprises the demolition of the existing Hangar 4 building on the site, and the development of a new modern building of 8,568 sqm (GIA) of Class B2/B8 floorspace. This floorspace is inclusive of ground and first floor office space and storage.

The building is proposed to be 12.5m clear internal in height with a horizontal parapet eaves line. The external parapet height will be c.15m above surrounding ground level. The proposal also includes 11 level access and 2 dock levellers, 95 car parking spaces (including 5 accessible spaces, 19 EV and 5 car share) and 9 cycle parking spaces.

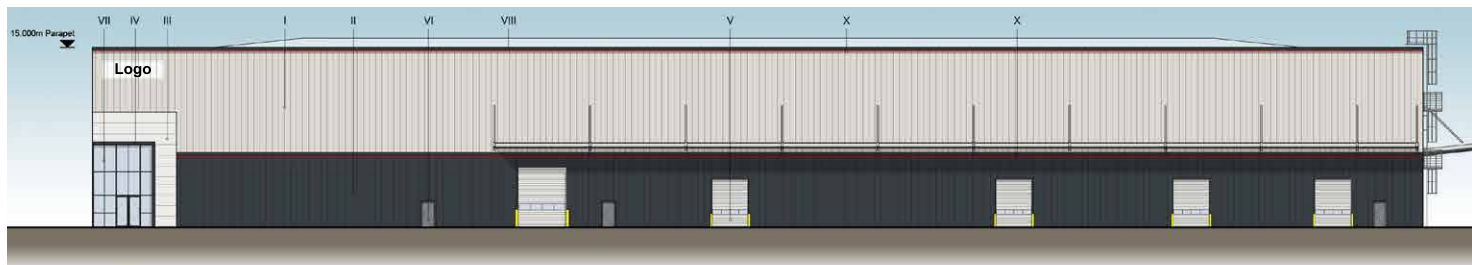
3 new entrances will be proposed and 2 of the existing entrances have been utilised. The new additional entrances improve access for both the inbound and outbound yard and will provide flexibility to the site.

Pedestrians will access the site via the car park entrance on Pinfold Lane, continuing on the footpaths provided to the entrance. Cyclists will use the same entrance, dismounting at the cycle shelters and using the footpaths to the main entrance.



4.0 | DESIGN PROPOSALS

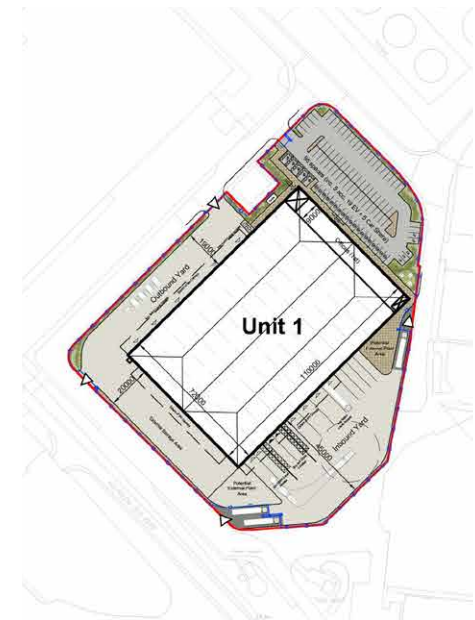
4.2 Scale Indicative Elevations



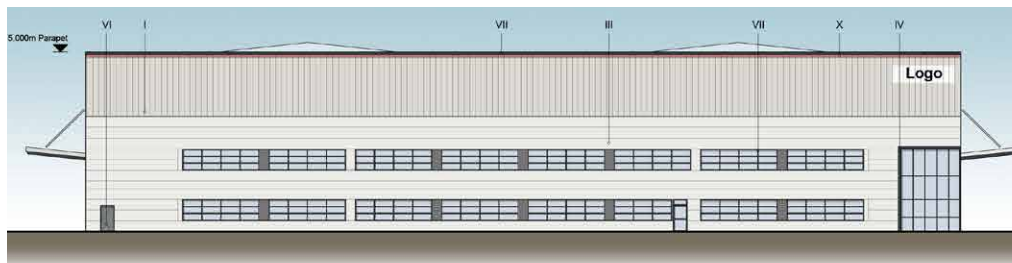
Proposed West Elevation



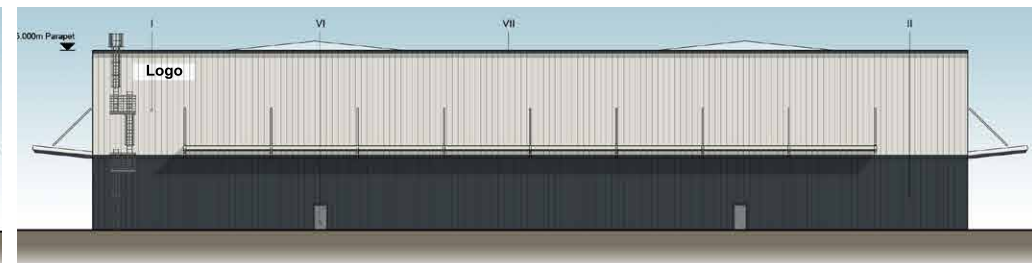
Proposed East Elevation



Key Plan



Proposed South Elevation



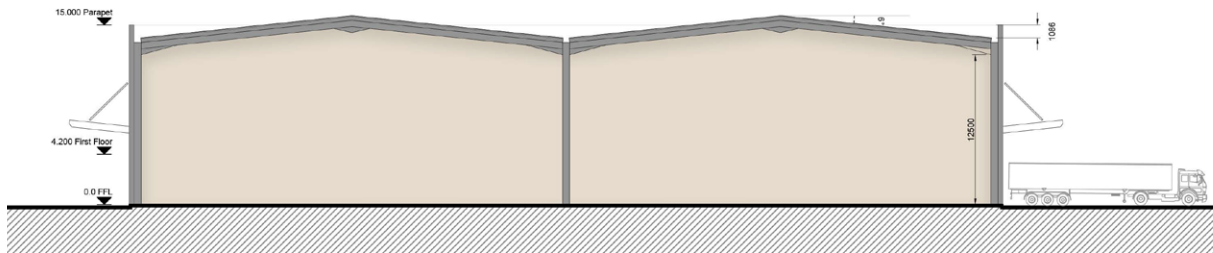
Proposed North Elevation

4.0 | DESIGN PROPOSALS

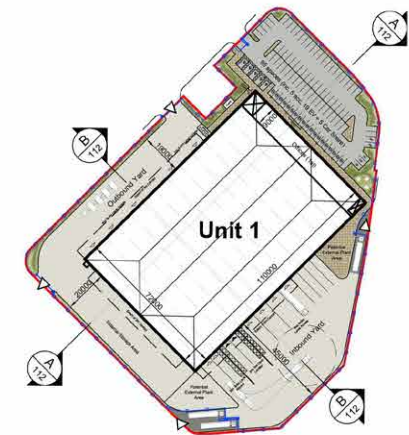
4.3 Scale Indicative Sections



Proposed Section A-A



Proposed Section B-B



Key Plan

4.0 | DESIGN PROPOSALS

4.4 Appearance

The building will be of steel portal framed construction, with insulated metal wall and roof cladding. The roof is designed with low level parapets to disguise the hipped roof behind.

The elevational treatment incorporates that very similar to the Dnata building adjacent to the site. A plinth of Anthracite vertical profiled cladding on the bottom, with Hamlet vertical profiled cladding to the top. The main office will be framed with horizontally laid, composite 'flat appearance' microrib cladding with curtain walling to the entrance corner.

The neutral palette of simplistic grey and cream cladding materials has also been adopted to prevent any potential clashing of colour with end user logos and branding. The colours and materials will help with the design longevity of the building rather than following any current design trends and fads.

Curtain wall glazing has been used on the entrance corner fronting Pinfold Lane. This glazing creates an entrance focal point for the building upon approach and adds visual interest and prestige to the facility on its most prominent elevation. The glazing for the entrance also highlights the entry into the building reducing the need for unnecessary signage and visual clutter.

In order to maximise internal light and reduce energy demand, 15% roof lights are included within the proposed unit design.



4.0 | DESIGN PROPOSALS

4.5 Indicative 3D Visual Overall Scheme



4.0 | DESIGN PROPOSALS

4.6 Indicative 3D Visual Proposed Development



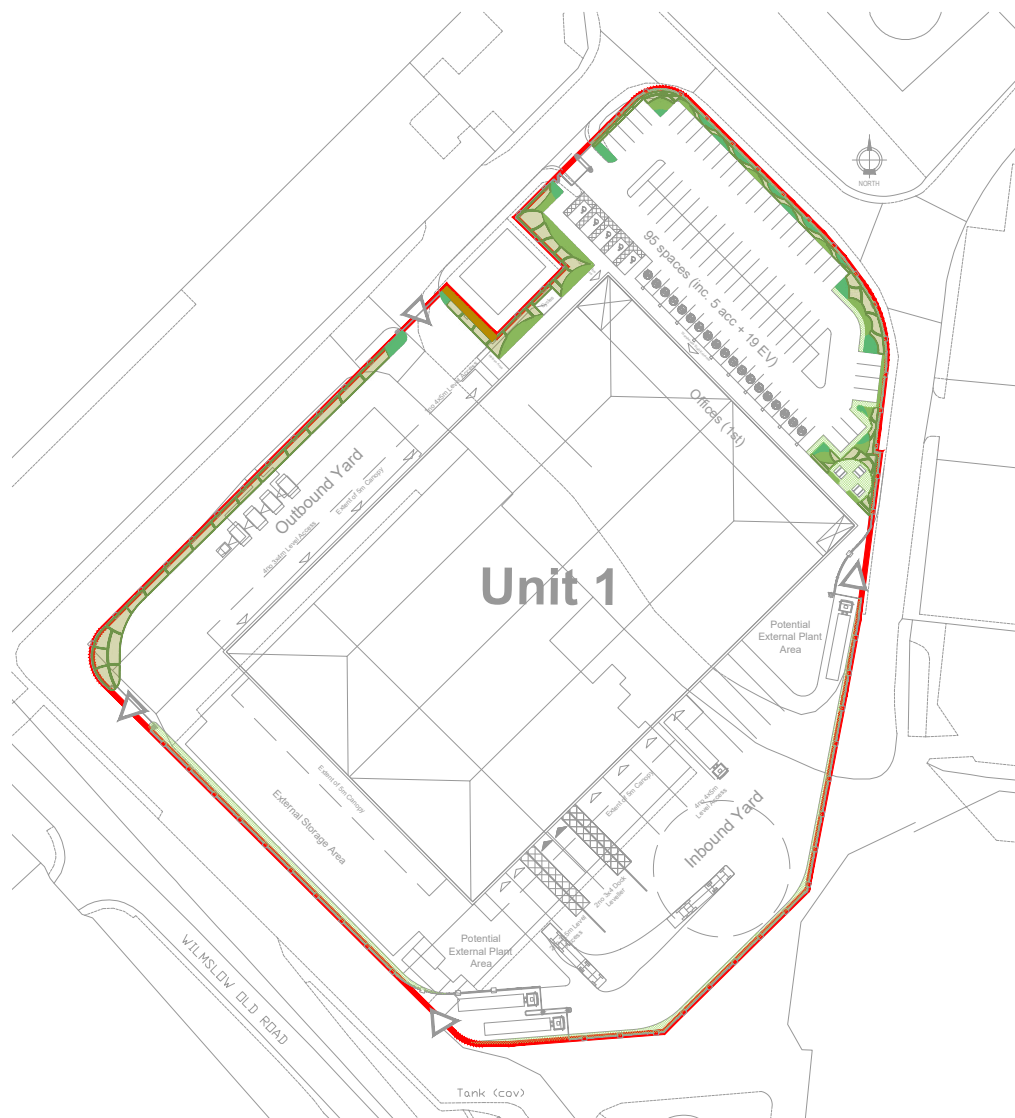
4.0 | DESIGN PROPOSALS

4.7 Landscaping

A coherent and well-connected landscape design has been proposed at Hangar 4 to ensure that the development sits well within its setting and the local street scene. A comprehensive palette of soft landscape materials that complement the character of the development will ensure that users benefit from a welcoming environment.

Opportunities to maximise landscape interventions have been optimised throughout, with the inclusion of shrub, herbaceous and grassland planting providing seasonal interest and an attractive environment for users. The provision of outdoor amenity space with seating offers users the opportunity for outdoor meetings or recreational space surrounded by robust planting.

Herbaceous planting has been added for colour, with species chosen to limit the attraction of birds in this airport location. Similarly, low maintenance, non-fruiting shrubs have been added around the car park and site boundaries to provide screening and colour. Groundcover, low maintenance shrubs are located within potential visibility plays. Careful consideration has been given to the airport location, with an airport grass seed mix and associated maintenance regime proposed along the site boundaries and within the outdoor amenity area.

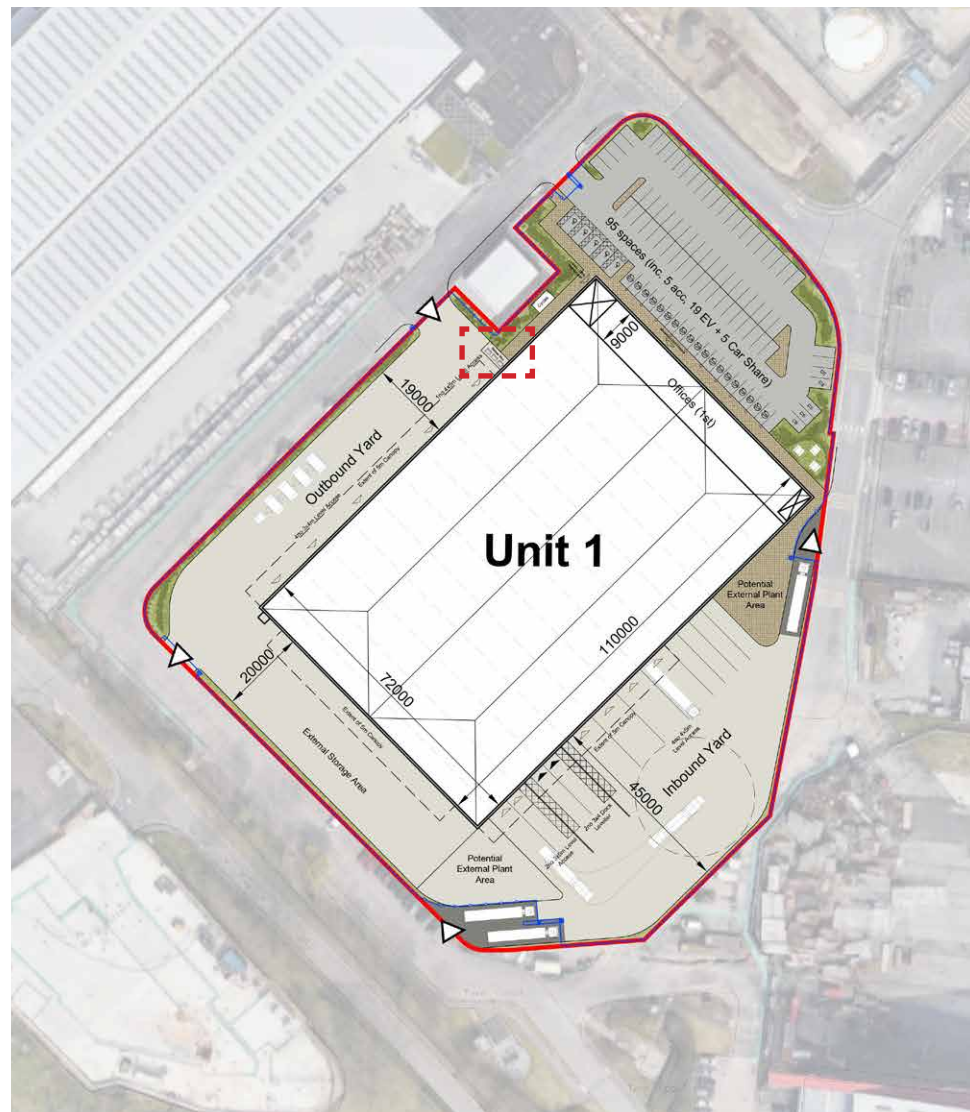
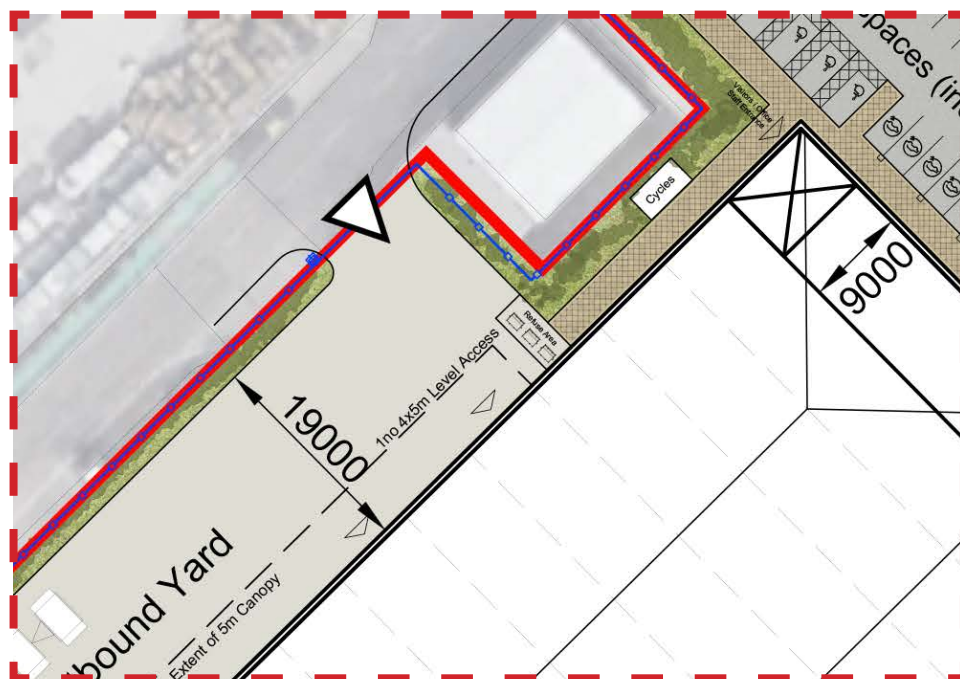


4.0 | DESIGN PROPOSALS

4.8 Refuse Management

As the development is to be speculatively built there are currently no specified end users, thus the estimated volume and type of waste to be produced cannot be accurately predicted. However, we have based the waste storage area on a minimum of at least 2m² per 1000m² of net floor area in line with the BREEAM 2018 recommendations. (Technical Manual SD5076:1.0 - 2018)

The unit will be provided with a fenced enclosure refuse and recycle point which will be located within the service yard. It is envisaged that the unit will be serviced by a private refuse collection.



5.0 | ACCESS PROVISION

5.1 External Site Access

Personal Vehicular Access

The main vehicle entrance for staff personal vehicles will be off the existing junction to the north west of the site from Pinfold Lane.

HGV / Van Access

The inbound yard will be accessed via a new 2 lane junction to the south of the site with a new egress to the north. The outbound yard will be accessed by the existing junction on the western boundary with a new egress junction to the south. All yard entrance and exits will be suitable for HGV traffic as well as van access.

The geometry of the service yard and access roads will comply with the general recommendations and turning performance diagrams for the full range of vehicles, permitted in the UK as set out in the Freight Transport Association document 'Designing for Deliveries'.

Pedestrian/Cycle Access

Pedestrians will enter the site from Pinfold Lane via the proposed footpaths off the estate road. Cyclists would also follow the same route into the site, dismounting at the cycle shelter and proceeding on foot to the main office opposite.

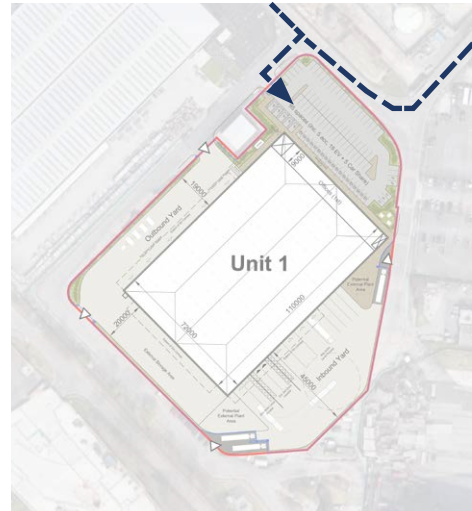
Pedestrian entry to the building will be via the glazed office reception area for office staff and visitors, or via the separate driver/warehouse staff entrance.

Public Transport

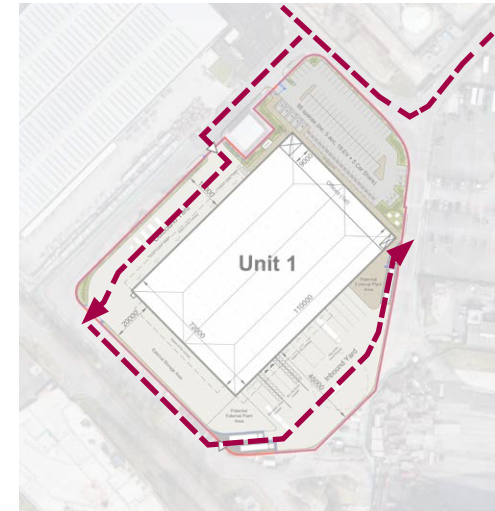
The nearest bus stops are located on Wilmslow Road, services 88 and 288 run from this stop and Argosy Drive where service 313 runs from.

Emergency Access

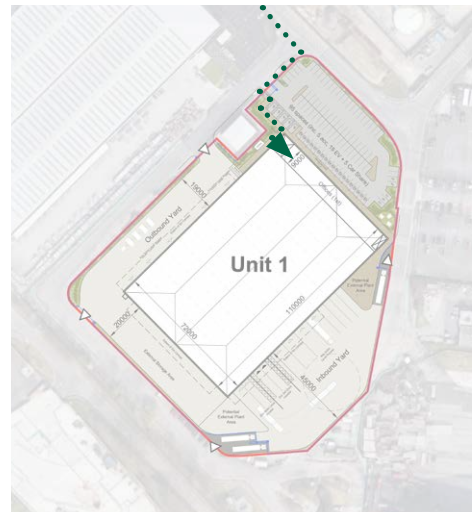
The service yards act as emergency access and egress points giving 50% overall access to the buildings for fire engine vehicles.



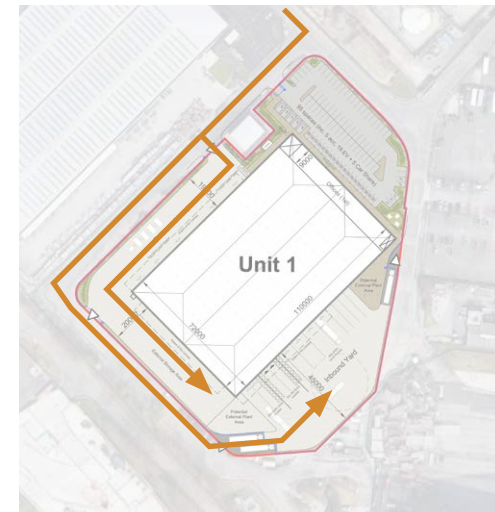
Personal Vehicle Access



HGV / Van Access



Pedestrian/Cycle Access



Emergency Access

5.0 | ACCESS PROVISION

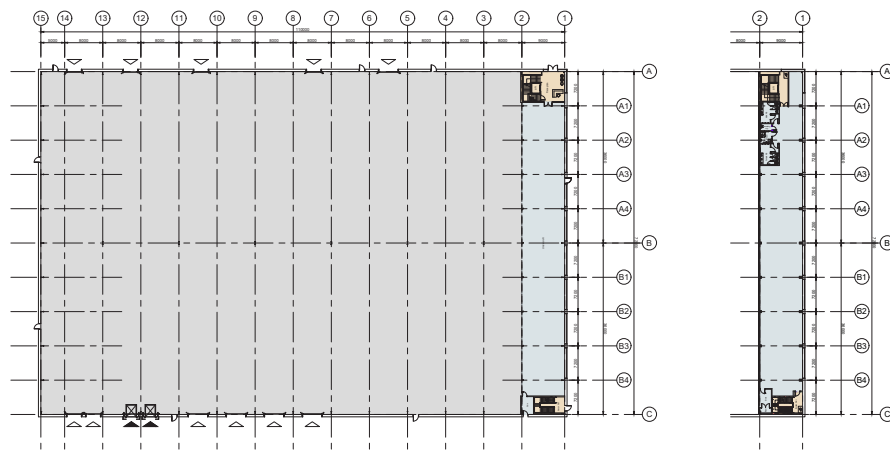
5.2 Internal Access and Movement

5 accessible car parking spaces will be provided near the entrance of the proposed development, which provides safe access to the unit.

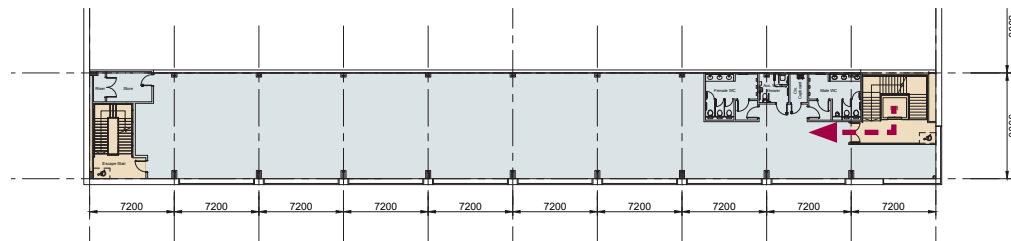
Upon arrival the main office entrance has level access into the reception area with an accessible WC on the entrance floor. The warehouse entrance also has level access as well as all exits.

Vertical circulation is provided by means of a Part M compliant passenger lift to the first floor. The first floor then has an accessible WC shower and kitchenette in line with the current requirements.

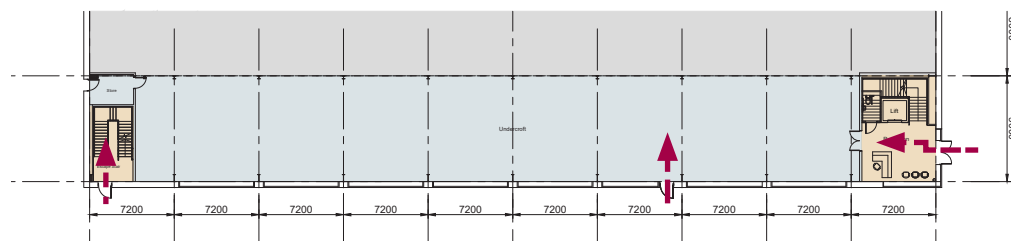
Within the warehouse, WC and accessible WC provision is not currently provided as the project is developed as base build / shell & core. Future tenants will then be able to provide staff WC and accessible facilities in the warehouse element. As an additional scope of work (with a separate building legislation application) by connecting directly into the existing SVPs which back onto the warehouse.



Proposed Building Plan



First Floor Office Plan



Ground Floor Office Plan



Access from Accessible Parking

6.0 | SUSTAINABILITY

6.0 Sustainability

Sustainability and environmental considerations incorporated into the design include:

- Layout and use
- Maximisation of efficient M&E systems to minimise energy usage
- Efficient design to minimise the use of natural resources
- Use of recyclable / recycled materials
- Minimising waste using off-site prefabrication of elements i.e. retaining walls, cladding, steelwork etc
- Design for deconstruction rather than demolition
- Selection of materials considering whole life cycle assessments
- Adaptation of natural materials where appropriate
- Occupant comfort and well-being

A range of proposed eco measures are listed on the adjacent image and will be incorporated as required to achieve the desired Breeam rating.

breeam



Office Features

- 1 Recycled material (DSG) partitions & mineral fibre ceiling tiles
- 2 LED lighting
- 3 Low flush volume WCs
- 4 Low emission, non solvent organic paint
- 5 Timber from FSC (Forest Stewardship Council)
- 6 Recycled yarn carpets
- 7 Spray taps
- 8 Waterless urinals
- 9 Improved daylighting

Site Features

- 1 Local Indigenous vegetation
- 2 Previous paving to office car park areas
- 3 Sustainable Urban Drainage Systems (SUDS)
- 4 Use of recyclable / recycled materials
- 5 Minimising waste using off-site prefabrication of elements i.e. retaining walls, cladding, steelwork etc
- 6 Selection of materials considering whole life cycle assessments
- 7 Consideration of potential future expansion and re-fit
- 8 EV charging points

Warehouse Features

- 1 Photovoltaic installations
- 2 Rain water harvesting
- 3 Roof light optimisation
- 4 Early integration of efficient M&E systems to minimise energy usage
- 5 Efficient design to minimise the use of natural resources
- 6 Design for deconstruction rather than demolition
- 7 Adoption of natural materials where appropriate

7.0 | PERSONAL SAFETY AND CRIME PREVENTION

7.0 Security

Crime Prevention

Consideration has been given to the layout of the proposed 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.

Structure

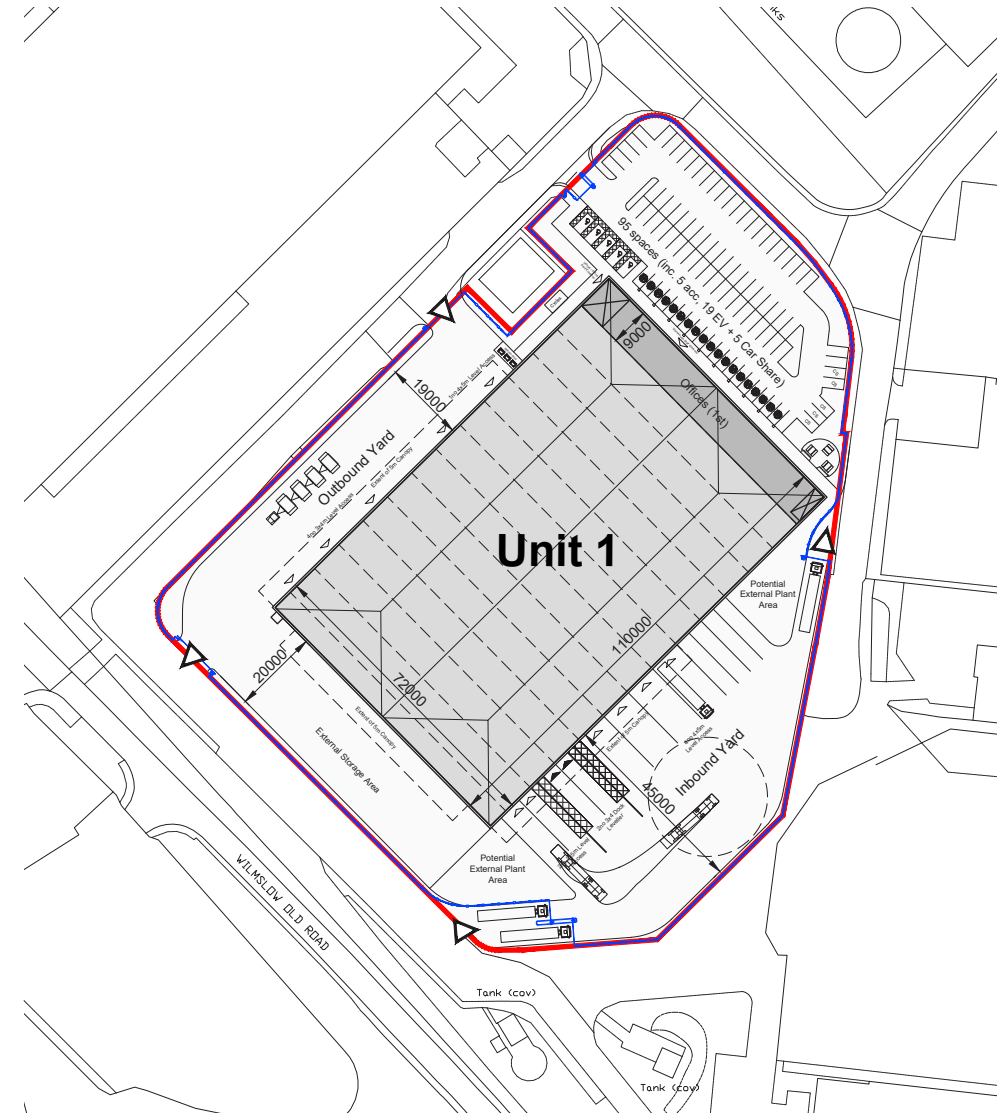
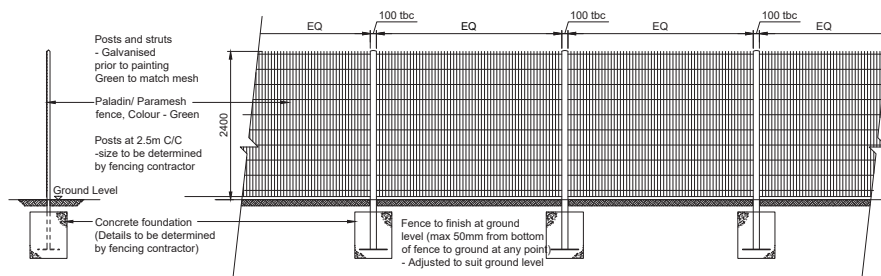
The building will be designed in robust materials – metal-faced cladding panels on a steel frame. Where appropriate, glazing will be toughened laminated sections. Where possible all windows and doors will be certified secure products.

Surveillance

Natural surveillance was a key factor in the overall design of the site. The buildings design and layout has been considered to minimise visual obstacles and eliminate places of concealment and any potential dark areas will be well lit.

Physical Protection

Boundary protection to the service yard of the proposed development has been provided via 2.4m high paladin fences which have been considered to maximise natural surveillance, as well as being aesthetically pleasing.



8.0 | PROJECT SUMMARY

8.0 Project Summary

The existing site occupies a prime location off Avro Way within the World Freight Terminal of Manchester Airport. The existing Hangar 4 site is in much need of redevelopment to maximise it to its full potential and optimise its strategic location for aviation related uses.

The proposed masterplan has been designed to suit current market demand for logistics users and maximise its appeal for potential occupiers. The design will make full potential of the site, demolishing the existing building and making way for a brand new, modern commercial distribution development.

The chosen site will offer a single highly specified unit of 92,225 sqft (8,568 sqm), optional designs were considered but this unit size and configuration has been chosen to attract potential occupiers, based on specific and detailed agents advice.

The design has been carefully considered to suit the surrounding context of the airport, opting for similar elevational treatment to Dnata and Building 401, which are both located next to the site. A modern use of the materials and a contemporary colour palette have been chosen to create consistency between the sites and enhance the development.



