

DESIGN AND ACCESS STATEMENT

Penrhyn Road
Knowsley Business Park
Full Planning Application

Document Prepared for:

Graftongate

Rev B February 2022



UMC Architects, Newark Beacon, Cafferata Way,
Newark, Nottinghamshire NG24 2TN
o. +44 (0)1636 653027
f. +44 (0)1636 653010
e. info@umcarchitects.com
w. www.umcarchitects.com

00 CONTENTS

01.0 Introduction

- 01.1 Statement Overview
- 01.2 Report Content and Structure
- 01.3 The Brief

02.0 Site Context

- 02.1 Location
- 02.2 Site Aerial Image
- 02.3 Site Images
- 02.4 Existing Surroundings Description
- 02.5 Existing Site Description

03.0 Key Design Principles

- 03.1 Key Principles
- 03.2 Key Principles Analysis

04.0 Development Proposal

- 04.1 Proposed Scheme
- 04.2 Elevations
- 04.3 CGI Visualisations
- 04.4 Unit Appearance
- 04.5 Illustrative Office Elevation Development
- 04.6 Materials
- 04.7 Colour and Texture
- 04.8 Proposed Use
- 04.9 Proposed Amount
- 04.10 Scale, Height and Massing

05.0 Access

- 05.1 Site Movement
- 05.2 Vehicular Access
- 05.3 Pedestrian and Cycle Access
- 05.4 Pedestrian Access - Internal

06.0 Sustainability and Crime Prevention

- 06.1 Crime Prevention
- 06.2 Access and Movement
- 06.3 Structure
- 06.4 Surveillance
- 06.5 Lighting
- 06.6 Physical Protection
- 06.7 General Maintenance
- 06.8 Sustainability

07.0 Summary

- 07.1 Summary

01 INTRODUCTION



01 INTRODUCTION

01.1 STATEMENT OVERVIEW

This Design and Access Statement has been prepared on behalf of The Applicant **Graftongate** to support a Full Planning Application at Penrhyn Road, Knowsley Business Park, Merseyside.

Description of development - Full planning permission is sought for the erection of a single detached industrial and warehouse unit, with ancillary offices, covering use classes **E(g)(iii), B2 and B8**, providing 18,554 sq m of floorspace (GIFA) with associated vehicle parking, cycle storage, yard space, circulation, lighting, landscaping, and access point off Penrhyn Road.

The Proposed Development Site (hereafter called the Site) is situated in the northern outskirts of Knowsley, 1 mile from the M57 Junction 4.

The site represents an excellent development opportunity and this statement aims to explain how the opportunity and any associated challenges have been addressed within the design proposals presented, and explains the thought processes behind the design strategy presented in this application.

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 - Introduction

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

Section 2.0 - Site Context

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

Section 3.0 - Key Design Principles

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 4.0 - Development Proposals

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

Section 5.0 - Access

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

Section 6.0 - Sustainability

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

Section 7.0 - Summary

Offers a summarising statement for the illustrative proposal.



Location Plan

01 INTRODUCTION

01.3 THE BRIEF

The site is in a strategic employment location to the north of Knowsley. **The Applicant** is keen to ensure that this development works within the context of the site surroundings and maximises the transport link at the M57 Junction 4.

The brief provided by The Applicant comprises of several key components for the built elements:

Consent for the erection of a new employment unit **Use Class E(g)(iii), B2 and B8**, external lighting, landscaping, infrastructure and associated works as indicated on the proposed site layout PO102 which adheres to the following principles:

- The scale of development must consider place making principles through a building design and development frontage.
- Simple, high quality architectural language for the development which should 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 coherent architectural solution.
- A robust approach to Landscaping
- Clear separation of circulation routes for vehicles and pedestrians.



Site Location - Immediate Context

02 SITE CONTEXT



02 SITE CONTEXT

02.1 SITE LOCATION



Site Location - National

02 SITE CONTEXT

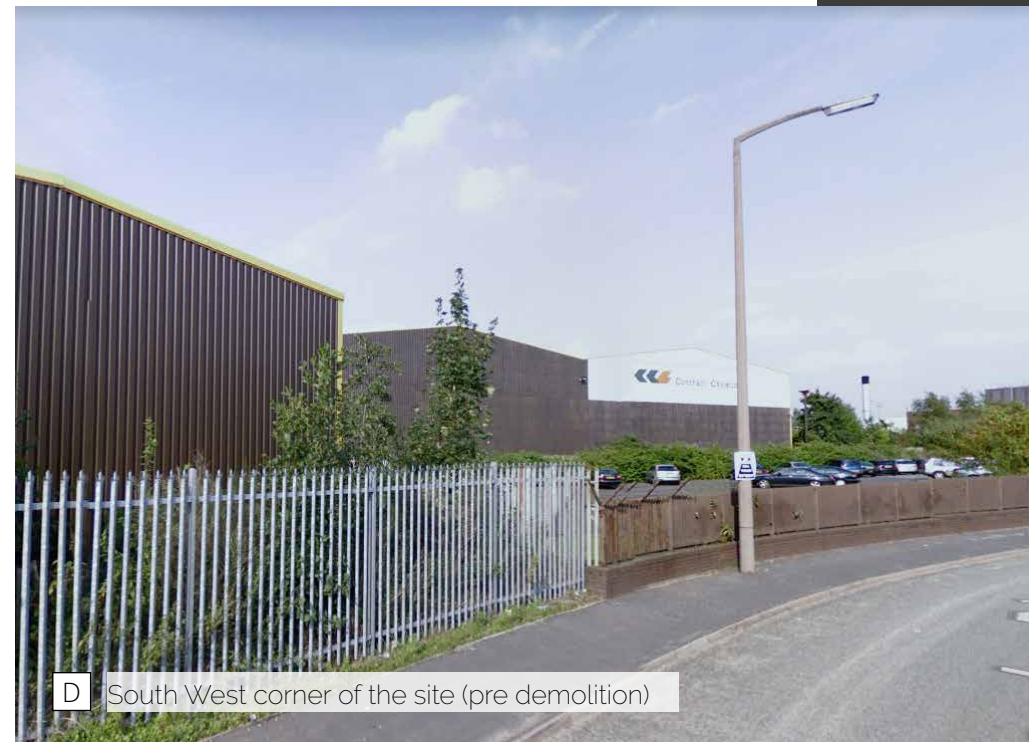
02.2 SITE AERIAL IMAGE



Aerial view from the South looking North towards the proposed site

02 SITE CONTEXT

02.3 SITE IMAGES



02.4 EXISTING SURROUNDINGS DESCRIPTION

The site is located to the north of Knowsley backing onto the A580 on the outskirts of the town.

The plot of land is bound by Penrhyn Road to the south and the A580 to the north. To the west and east are a multi let industrial units and is part of a wider employment area.

02.5 EXISTING SITE DESCRIPTION

The total site area measures approximately 9.38 Acres (3.79 Hectares). The site is relatively flat with spot heights ranging from around 28m AOD at the southern boundary to around 31.0m AOD at the northern boundary

03 KEY DESIGN PRINCIPLES



03 KEY DESIGN PRINCIPLES

03.1 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. The site layout will be designed in accordance with the key principles set out below:

Character

To create an attractive, self-contained and functional building with its own identity, which relates 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 a building with scale and size which relates to the surrounding area and its context and is appropriate for its 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 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.

03.2 KEY PRINCIPLES ANALYSIS

Contribute directly to creating safe, attractive spaces with high quality buildings and landscape.

The proposed design proposals aspire to be sleek and simple in design, with a contemporary colour palette and glazed areas providing a good quality office environment with visitor wayfinding.

Create sustainable, well designed buildings, which are good places to work.

Design will aspire to create a contemporary simplistic aesthetic with high quality materials. Limited and modern colour palette, with offices facing Endeavour Drive creating an attractive façade. and human scale.

The buildings and site layout should fulfil a required level of security and operational functionality.

The yard is 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 areas and separate entrances for cars and HGVs are to be established.

Ensure inclusive design to allow for a good level of accessibility within and between buildings.

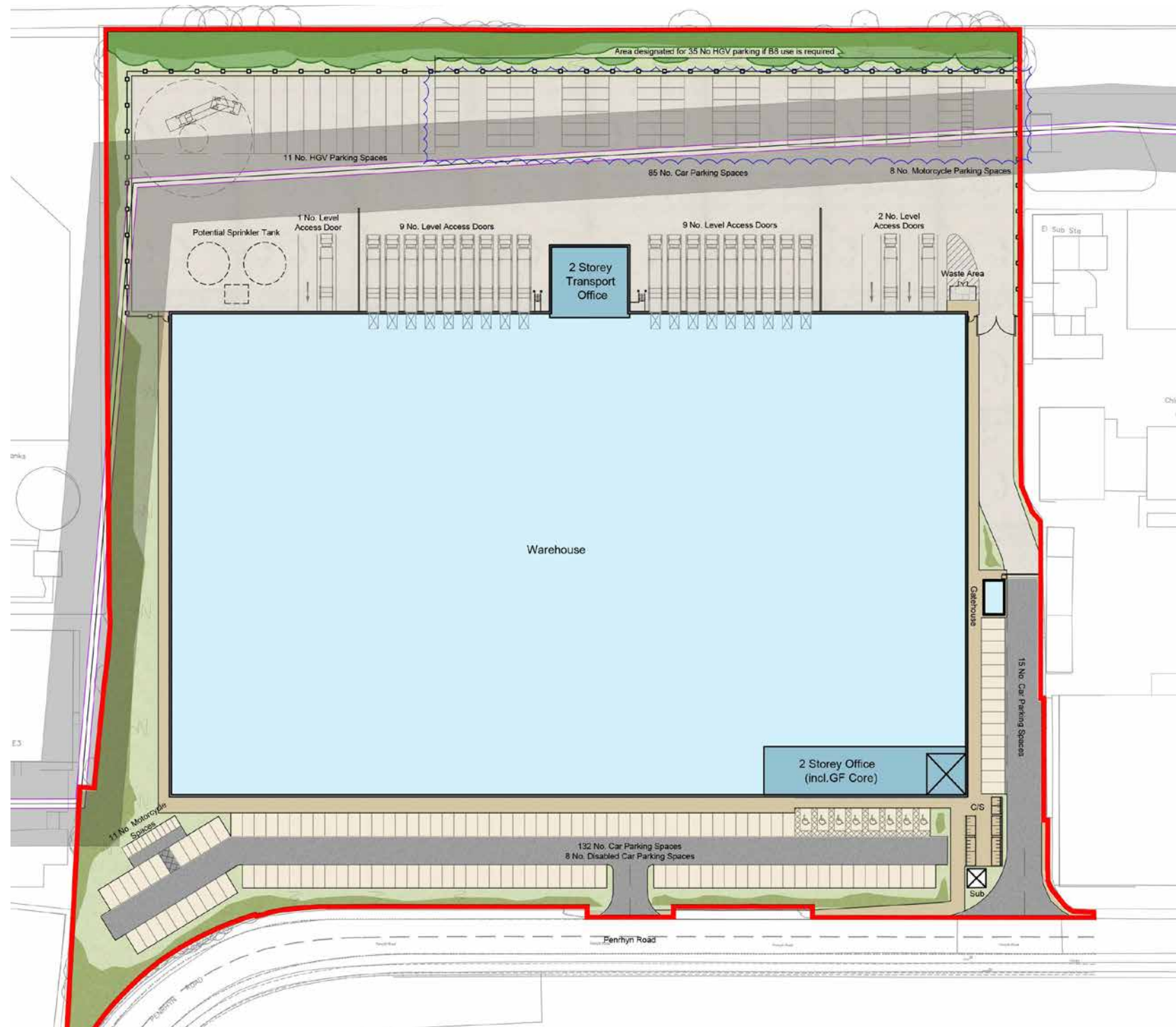
The site layout is to be suitable for both able-bodied and accessible use. The appropriate amount of accessible parking will be allocated and is located close to the level building entrance.

04 DEVELOPMENT PROPOSALS



04 DEVELOPMENT PROPOSAL

04.1 PROPOSED SCHEME



Proposed Layout

The proposed scheme comprises of a single building with an integral office addressing the approach to the site creating a sense of arrival.

The site will be accessed off Penrhyn Road via two access points, one for HGVs and one for cars, which have been suitably separated. Designated parking areas will be provided for the unit.

The frontage to the surrounding roads is to be softened by sensitive use of landscaping and building orientation. This will help to present an interesting and aesthetically pleasing approach to the development as well as aiding with way-finding.

The building has been offset 10m from the A580, with a zone to the north of the building to allow for increased planting to the existing allowing the building to be softened in its appearance when viewed along the A580.

Flexibility within the yard parking has been provided dependent on the use class with B2 parking provision being easily transferable in lieu of HGV parking.

- Access Location and Type
- Secure Yards
- Segregation of HGVs/Cars
- Density
- Arrival Aesthetic

04 DEVELOPMENT PROPOSALS

04.2 ELEVATIONS

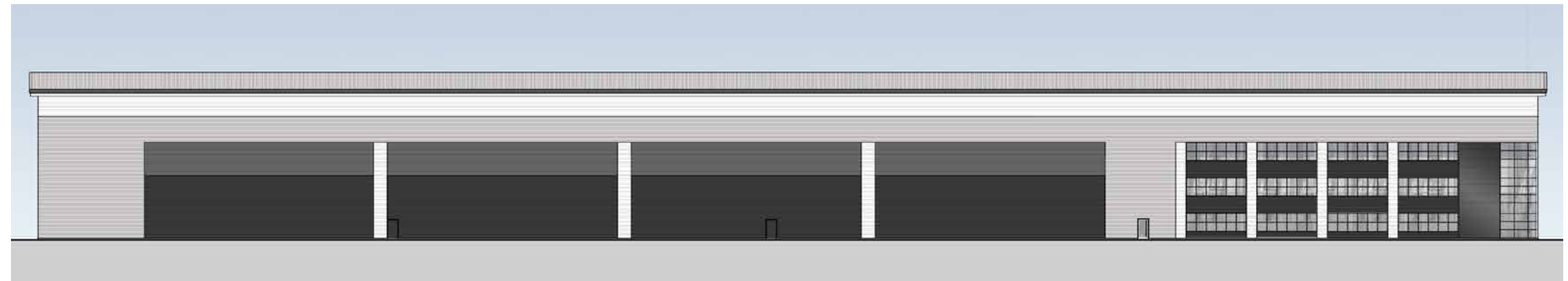
Building Elevations

The adjacent elevations indicate the architectural treatment of the building.

The building is to be 15.3m clear internal to underside of haunch, with a ridge / apex height of 18.9m

The position of the offices on the south east corner presents a positive appearance when approaching site, changes in cladding colour and orientation reduce the scale and mass of the building and avoid long areas of uninterrupted cladding.

Darker cladding materials at lower levels help ground the building within its setting and provide a contemporary building aesthetic, with lighter cladding materials at higher levels assist in reducing the scale of the building when viewed from distance.



South Elevation



North Elevation



West Elevation



East Elevation

04 DEVELOPMENT PROPOSALS

04.3 CGI VISUALISATIONS



04 DEVELOPMENT PROPOSALS

04.3 CGI VISUALISATIONS



04 DEVELOPMENT PROPOSAL

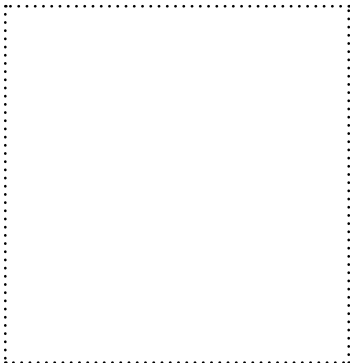
04.4 UNIT APPEARANCE

Offices will be constrained by the floor to ceiling levels, with openings throughout to provide adequate lighting into the office space. Entrances are to be treated differently to the rest of the offices to indicate where the access into the office is, with curtain wall glazing and feature flashing around the entrance offering a high quality material finish.

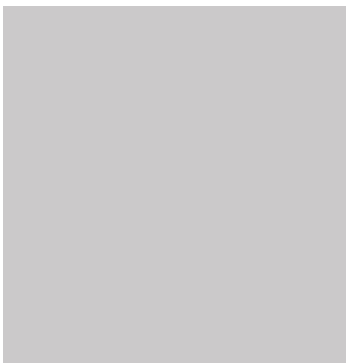
04.5 ILLUSTRATIVE OFFICE ELEVATION DEVELOPMENT



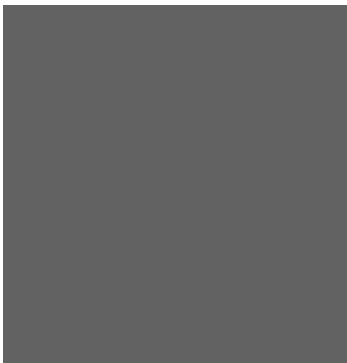
UNIT 1



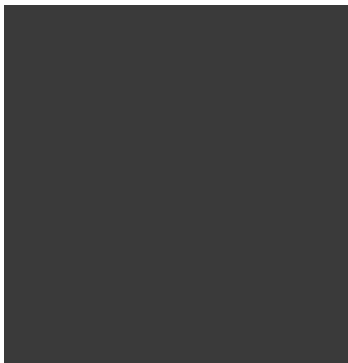
White



Silver



Grey



Anthracite

04.6 MATERIALS

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

- White, silver, grey and anthracite colour cladding
- Predominantly profiled metal cladding with an element of flat panel cladding around the office entrances.
- Large format window and curtain walling systems
- Feature building elements in neutral colours.

04.7 COLOUR AND TEXTURE

Monochromatic neutral colours are the predominant palette on buildings of this nature and provide a common back drop theme of cladding, windows and roofing. The use of stronger accent colours will be discouraged to avoid conflict in building appearance, however strong signage zones will be encouraged to promote end user identity.

04 DEVELOPMENT PROPOSAL

04.8 PROPOSED USE

As noted previously, the development usages applied for are for the erection of single detached industrial and warehouse unit, with ancillary offices, covering use class **E(g)(iii), B2 and B8**, providing 18,554 sq m of floorspace with associated vehicle parking, cycle storage, yard space, circulation, lighting, landscaping, and access point off Penrhyn Road.

04.9 PROPOSED AMOUNT

Consent is sought to provide 18,554m² (199,720sq ft GIA) of **E(g)(iii), B2 and B8** employment development.

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.

04.10 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. Below is a breakdown of the unit's clear internal height and proposed ridge height.

Unit 1

- Clear Internal Height - 15.300m above finished floor level
- Ridge Height - 18.900m above finished floor level

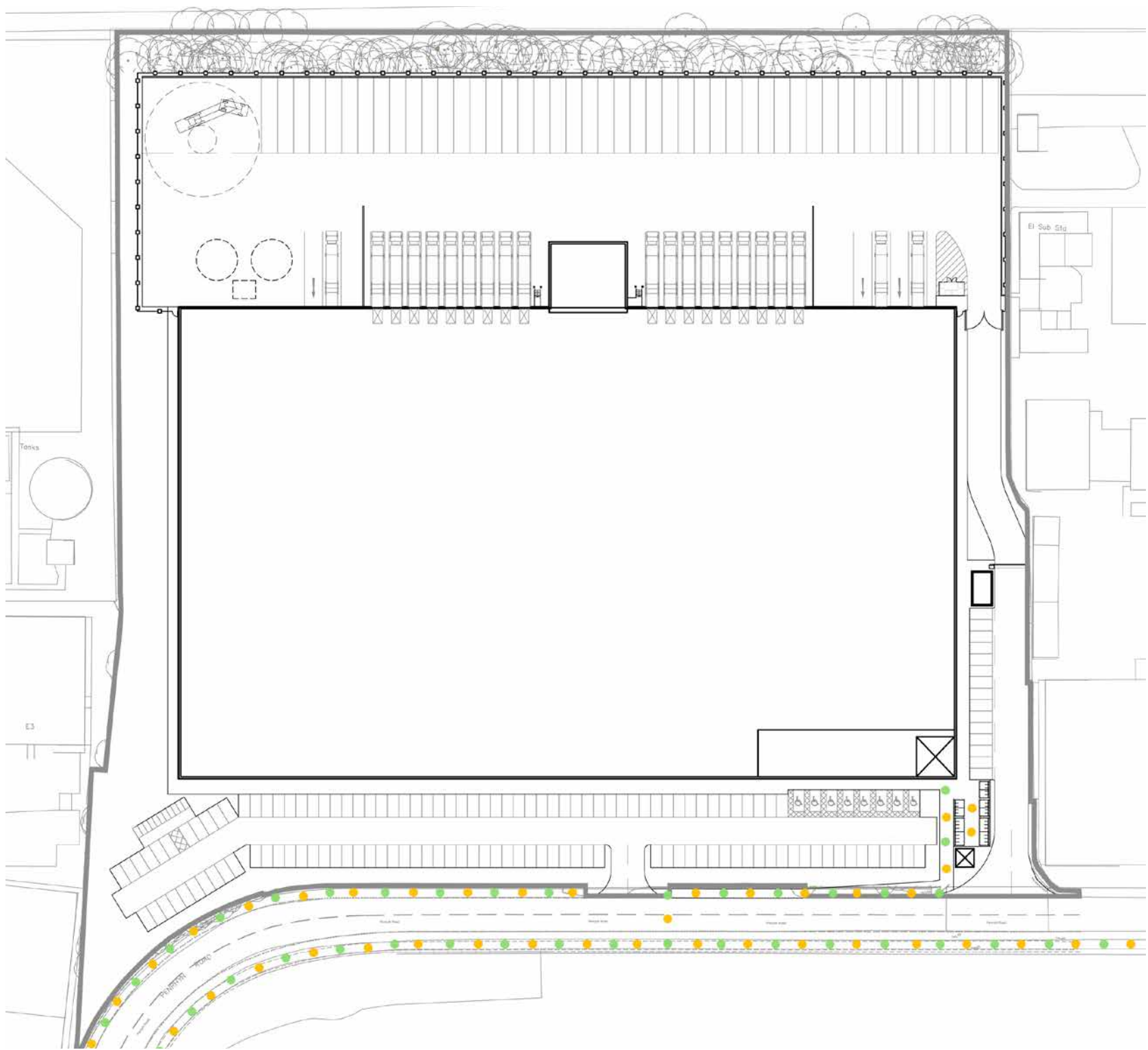
As previously discussed, the unit will be broken up vertically with various elements, and broken horizontally with changes in cladding colours. Large curtain walls will be utilised near the entrances and on important frontages.

05 ACCESS



05 ACCESS

05.1 SITE MOVEMENT



Key

- Pedestrian route

- Cycle route

Proposed Highways and Pedestrian Access Plan

05 ACCESS

05.2 VEHICULAR ACCESS

Vehicular access to the development will be via 2 new access points from Penrhyn Road.

Separate dedicated car park entrances will reduce conflict between goods vehicles and car traffic. The car park areas will be constructed in dense bitumen tarmac where car parks are separate from service areas. This will form part of a coordinated hard landscaping strategy. Car parking provision is appropriate for the type and size of units proposed.

Provision has been made for covered secure cycle shelters to be located adjacent to the main office blocks. Similar arrangements have been made for the required accessible parking bays.

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

05.3 PEDESTRIAN AND CYCLE ACCESS

Footpaths will lead 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.

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 office 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. All levels within the car parking areas will have a gradient of less than 1:25, enabling wheelchair access and ambulant disabled to access the site without difficulty.

All main entrances into the unit 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.

05.4 PEDESTRIAN ACCESS - INTERNAL

Reception

The reception area to the main office areas 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 1500mm 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.

Employment Space

The employment space is to be level throughout with clearly defined pedestrian routes. There will be fire exits within the the main employment space between the main offices and the employment space area. External stairs leading to the yards will be provided where necessary with minimum 900mm wide x 1400mm long refuge bays. The landing will be level with the employment space finished floor levels on these exits.

Toilets

Given the manual nature of work undertaken, toilets facilities will be provided in the employment space. In the offices, toilets will be provided for male, female and 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.

06 SUSTAINABILITY AND CRIME PREVENTION



06 SUSTAINABILITY AND CRIME PREVENTION

06.1 CRIME PREVENTION

Consideration has been given to the site layout to ensure personal safety and align with general 'Secured by Design' principles (note no liaison with Secure by Design has been undertaken pre planning). This relates to ensuring that the layout for the development does not create an environment conducive to crime. It is envisaged that additional crime prevention advice will be sought, once an occupier has been identified for the unit, and how occupiers and visitors to the site can move freely without risk of injury.

06.2 ACCESS AND MOVEMENT

Existing Vehicular and Pedestrian Access

The site will be accessed off Penrhyn Road. The access points to the car park and service yard have been segregated for both operational and health and safety reasons.

Pedestrian / Cycle Access

There are dedicated routes into the main parking area and linked through to the main staff entrance areas to enable safe navigation by non-motorised forms of transport.

Inclusive Access

All pedestrian crossing locations will have dropped kerbs and will incorporate contrasting tactile paving to make visually impaired pedestrians aware of the crossing.

The lighting scheme will be designed to ensure suitable illumination levels exist across the scheme ensuring a safe provision for all users in particular the visually impaired.

Accessible DDA compliant parking has been illustrated adjacent to all buildings entrances. Levels will be appropriate to allow safe and convenient access to all.

Car Parking Design

Car parking has been provided on the development site to respond to the use class as well as reflecting the institutional requirements demanded by individual occupiers. The car parking will have block pavers to the circulation routes with tarmacadam parking bays with white bitumastic paint delineation.

The car parking areas will be laid out in aisles to avoid traffic conflicts and congestion in front of the main building entrances. Pedestrian routes through the car parking areas will be arranged to link safely and conveniently with building entrances, with appropriate lighting.

Cycle Parking Design

Covered cycle parking shelters will be provided on the site. Cycle shelters will be conveniently located close to the entrances to provide cyclists a safe, secure and well-lit facility.

Servicing Design

The yards will be surfaced in concrete for robustness and have a secure fence to the full perimeter with appropriate lighting for operational, security and health and safety purposes.

06.3 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 design and layout will minimise visual obstacles and eliminate places of concealment and any potential dark areas will be well lit.

06.4 SURVEILLANCE

Formal Surveillance

At present there is no specific occupier for the building and therefore any formal surveillance solution will need to be agreed at a future time.

However it is acknowledged that presence of staff and CCTV provides reassurance and a deterrent to potential offenders.

Staff need to be located in prominent positions so they can oversee and be seen. The effectiveness of CCTV depends on the number and location of cameras, the quality of the image and the monitoring in place.

Examples of good practice include:

- The use of windows on all habitable spaces within the main offices to all units
- Regular monitoring and patrolling if required by security staff
- The use of high visibility vests
- The placement of CCTV cameras so they cover each other to deter vandalism
- Alarming of the CCTV system
- Placement of the CCTV so that their view is unobstructed and well illuminated.
- Identification and highlighting of CCTV positions.
- Quick and efficient maintenance and repair of CCTV systems.

Informal Surveillance

Through informal surveillance staff can both see and be seen by passers-by, road users, residents and any other local workers.

Examples of good practice include:

- Good illumination throughout the site
- Low level planting to avoid dark or obscured areas
- The use of windows on all habitable spaces within the main and hub offices
- Location of high risk areas such as bicycle and motorcycle parking close to the main entrance to the buildings with the highest pedestrian traffic flows.

06 SUSTAINABILITY AND CRIME PREVENTION

06.5 LIGHTING

Exterior lighting will be designed taking into account the following standards:

BS 5489-1:2013 Code of Practice for the Design of Road Lighting

BS EN 12464-2:2014 Light and Lighting – Lighting of work places

GN01:2011 Institution of Lighting Professionals (ILP) Guidance Note for the Reduction of Obtrusive Light

Lighting and the Environment – A Guide to Good Urban Lighting, Chartered Institution of Building Services Engineers (CIBSE)

Bat Conservation Trust (2014) Artificial Lighting and Wildlife. Interim Guidance: Recommendations to help minimise the impact of artificial lighting. In addition the following criteria will be utilized as a basis for the scheme:

The estate road, car park and service area will be illuminated during the hours of darkness to an appropriate lighting level for both operation and safety.

The lighting lux levels will be kept to a minimum when adjacent any natural habitats, and will avoid direct light spill into sensitive locations.

Lighting will be a combination of building mounted and column mounted lighting units. The lighting design will utilise good quality, attractive 'dark sky' fittings, directed downwards and with no spillage above the horizontal to avoid light pollution.

The mounting height of lighting units should be no greater than 12 m.

For the access roads and car parking areas all mounting heights will be 8 to 10 m.

Lighting impacts on all receptors will be minimised by careful design. If needed, baffles and shields can be attached to lighting units to further reduce lighting effects.

06.6 PHYSICAL PROTECTION

General

It is important that any development responds to the issues relating to security, such as criminal and anti-social behaviour, by incorporating such physical design features as listed below:

- Barriers to the service area entrance to provide out of hours security.
- Secure parking for cycles located in highly visible and supervisable locations.
- Buildings of robust construction as illustrated within the submitted documents
- All external doors fitted with secure frames and locks.
- 2.4m high security fencing including access gates to the full perimeter of the service area.

06.7 GENERAL MAINTENANCE

General

In the absences of any confirmed occupiers, we can offer examples of the management and maintenance that will be put forward as good practice:

- Regular storage of plant, machinery, materials and supplies should not be permitted outside of the confines of the secured service area.
- The CCTV, lighting and alarm system should be regularly maintained and immediately repaired / replaced if faulty to ensure the safety and security of the development and its users.
- Access controls to the external and internal door sets, gates and barriers are essential to the security of this scheme and it is most important that these systems are regularly maintained.
- Cleaning, litter picking, removal of graffiti and repair of damage arising from vandalism should be carried out promptly to maintain a culture of care and respect. A lack of maintenance often attracts further abuse.



Cycle Storage



Security Fencing

06 SUSTAINABILITY

06.8 SUSTAINABILITY

This section sets out the main sustainable features relevant to the application and is restricted principally to the 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 occupier's 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 CO₂ 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.

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 could be provided within the main offices. These amenities could be available for all personnel based at the facility, thus providing for those who choose to cycle to work.

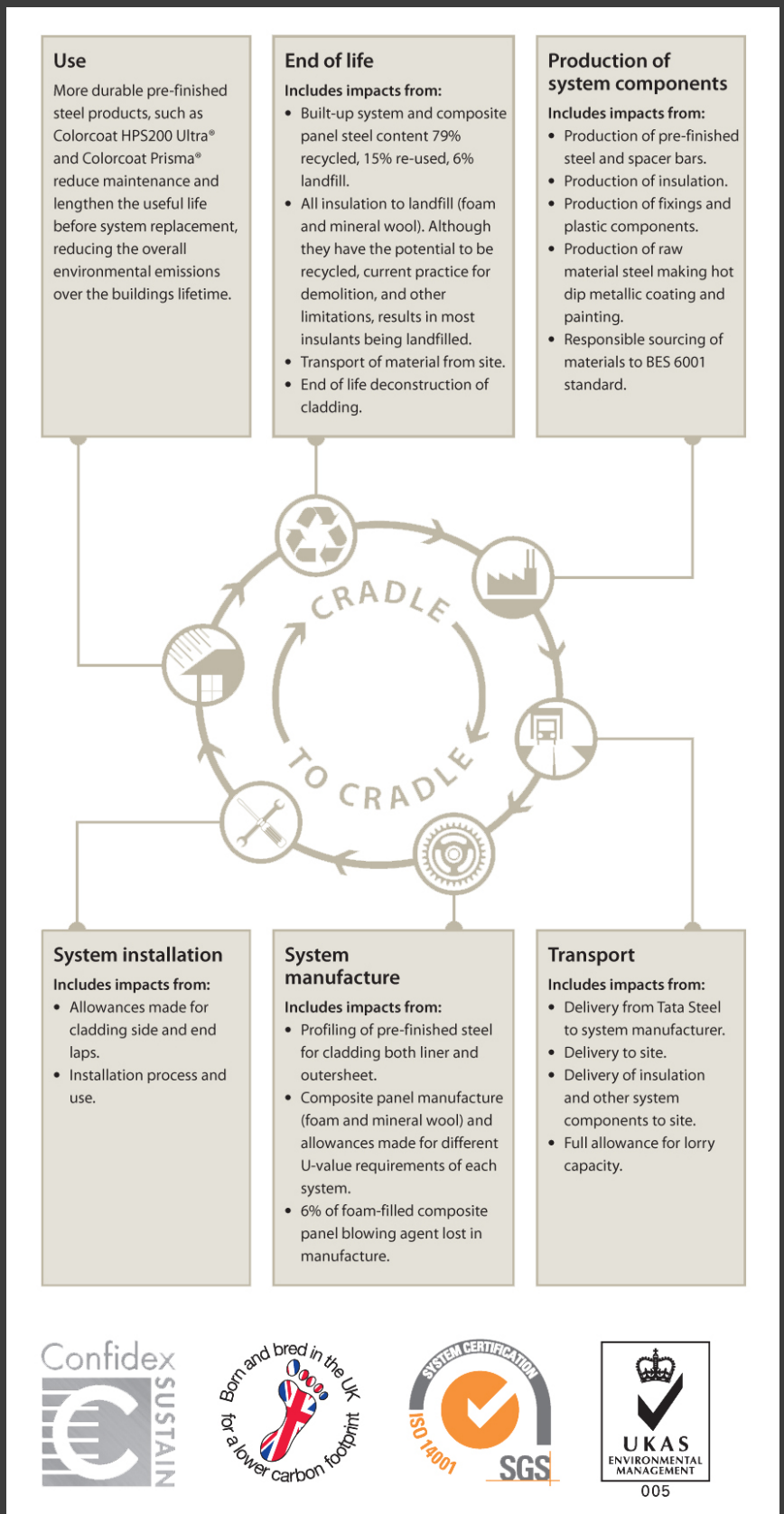
Further considerations would include:

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.



07 SUMMARY



07 SUMMARY

07.1 SUMMARY

The design proposals have been developed with due regard to the existing site, its context and surroundings, to create a carefully sited, appropriately sized building which meets the client's brief. The proposals also allow for the best possible access by all modes of transport and encourage travel to the site by means other than car.

The design seeks to minimise the impact on its surroundings; providing an attractive, contemporary and cohesive design that is 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 policies of Knowsley Council.

The proposals represent a high quality development and a substantial investment, which will help to promote and support employment growth and stimulate continued economic investment to the area, cohesive with regional and local aspirations. It is anticipated that the development will act as a catalyst for further development to create additional new jobs and investment for the local community.



