#### 8.3 ACHIEVING HQDP 6

The Applicant is committed to delivering the extensive suite of Design Parameters set out in this chapter, including enhancements to the existing public right of way network, new and improved access to significant areas of landscaping and habitats, public realm and recreational spaces, which would ensure that HQDP 6 is achieved and the development ultimately adds social value to the area and its inhabitants and helps to promote and facilitate healthy and active lifestyles.



Public routes to be designed for pedestrians, cyclists and horse riders.



An engaging and legible network of public paths can facilitate a healthy lifestyle.



Attenuation pond can help promote new types of habitats.



A multi-purposeful social space for relaxation and recreation.



#### 8.4 CONFORMITY WITH PLANNING POLICY & GUIDANCE

#### RELEVANT NWLP POLICIES:

- Policy LP14 Landscape
- Policy LP16 Natural Environment
- Policy LP17 Green Infrastructure
- Policy LP22 Open Spaces and Recreational Provision
- Policy LP29 Development Considerations
- Policy LP27 Walking and Cycling
- Policy LP34 Parking

#### RELEVANT DDGC DESIGN PRINCIPLES:

- AV01 Mix of Use (Community Facilities)
- AV02 Public Realm
- SU03 Sustainable Drainage
- SM01 Highways
- SM02 Pedestrian and cycle paths connectivity
- SM04 Cycle parking
- SM05 Legibility and Signage



### 9.0 HQDP 7 CREATION OF A MULTI-FUNCTIONAL GREEN AND BLUE INFRASTRUCTURE NETWORK

- 9.1 Creation of a Multi-Functional Green and Blue Infrastructure Network
- 9.2 Design Approach & Response
- 9.4 Conformity with Planning Policy & Guidance

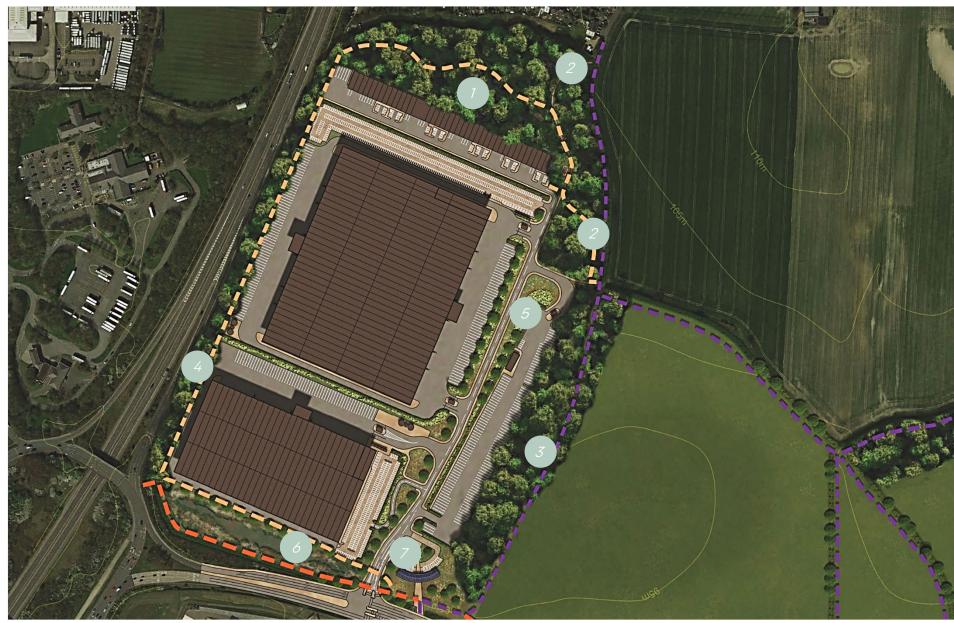


#### 9.1 CREATION OF A MULTI-FUNCTIONAL GREEN AND BLUE INFRASTRUCTURE NETWORK

Creation of a multi-functional green and blue infrastructure network, where valuable landscape features and ecological assets are enhanced, increasing biodiversity and habitat connectivity. Buildings will also contribute towards these networks and will meet the highest standard of sustainability that is practicably achievable.

In addition to the climate change mitigation and resilience initiatives detailed in Section 3, the development would enhance existing landscape features and ecological assets to make a substantial positive impact in biodiversity terms.

- Publicly accessible parkland and naturalistic earth mounds, which would be planted with mixed native trees and understorey, would be located to the north of the development plots to filter views from the settlement edge of Birchmoor and provide recreation opportunities along the proposed fitness trail.
- Recreational routes would be distributed throughout the proposed native woodland planting to encourage exercise and retain existing rural connections between Birchmoor and Watling Street.
- Naturalistic earth mounds and areas of landscaping would be created to the east of the development plots, which would be densely planted with mixed, native trees and understorey to help screen and filter views of the development and to reinforce the sense of separation between the development and the remaining arable farmland to the east. Landscaping in this area would be designed to avoid the high-pressure gas pipeline easement zone.



Indicative Landscape Plan

- Existing native tree and shrub planting along the western boundary of the Site would be reinforced to screen views from the east of Tamworth and beyond.
- Native specimen trees, native hedgerows and ornamental scrub planting would be planted alongside the internal roads to soften the hard landscaping.
- Drainage basins, located near to the entrance of the Site, would comprise of wetland meadow and reed planting. This introduces additional habitat and increases the Site's biodiversity.
- Planting at the Site entrance and adjacent to the Hub Office would be designed to create a softened and attractive frontage to the business park given its gateway location.



#### 9.2 DESIGN APPROACH & RESPONSE

Significant biodiversity net gains would be delivered through a significant onsite and offsite landscaping scheme. A mix of juvenile and adolescent trees would be planted to provide immediate effects in terms of biodiversity support, visual screening and carbon capture. Veteran and mature trees and historic hedgerows around the periphery of the Site and in the offsite landscape mitigation measures would be retained and protected.

A substantial area of onsite green infrastructure (over 9ha – over 30% of the Site area) would be created principally to the north, south and east of the development area. This would incorporate significant areas of native woodland planting, as well as public open space, parkland, formal planting, public rights of way, footways and cycleways.

The significant onsite green infrastructure will be supported by an additional 6.51 ha (16 ac) of offsite landscape mitigation measures and enhancements which would comprise native woodland and hedgerow planting, reinstatement of historic field boundaries and footpath enhancements, providing access to members of the public.

The proposed new native woodlands, native shrublands, mixed hedgerows, wildflower meadows, wetland wildflower meadows, ornamental planting and species rich amenity grassland would create a variety of wildlife habitats and new wildlife corridors through the native woodland planting to the north and east of the Site. The inclusion of significant areas of green infrastructure will also provide localised cooling. Climate tolerant species that are resistant to higher temperatures and sustained dry weather would be used within the green infrastructure to mitigate possible future climate change.

#### **DESIGN PARAMETERS**

- Approximately 10,000 trees to be planted in on and offsite locations.
- Over 15.5 hectares (38 acres) of new habitat creation both on and offsite, including native woodlands, native shrublands, mixed hedgerows, wildflower meadows, wetland wildflower meadows, ornamental planting and amenity grassland.
- Significant biodiversity net gains across the Site of +26.5% for habitat biodiversity and +298% for linear biodiversity.
- Creation of + 9 ha of new habitats on site and +6.5 ha offsite.



Wetland features



Native Woodland



Wildflower meadow



#### 9.2 DESIGN APPROACH & RESPONSE

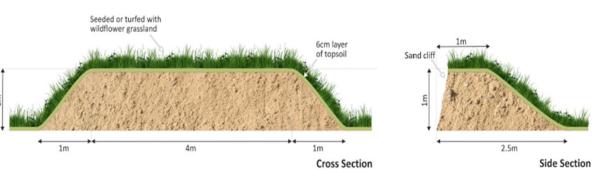
Dark corridors would be retained within the landscaping around the Site edges to create 'dark sky' linear and boundary vegetation areas for wildlife and provide routes through the Site for foraging bats.

Sustainable drainage measures would include SuDS ponds designed to retain a depth of water to provide a wetland feature and enhance biodiversity, particularly for birds, invertebrates and wetland plant species.

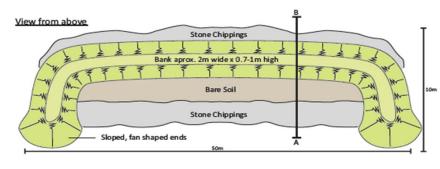
#### **DESIGN PARAMETERS**

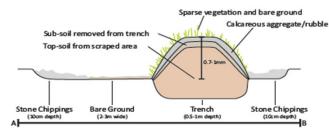
- Bird and bat boxes to promote nesting and roosting.
- 'Insect hotels' to provide refuge in suitable locations throughout natural open space.
- Bee hives and bee bricks for wild bees.
- Butterfly banks, providing breeding opportunities and enhanced connectivity between habitats for a range of butterfly and moth species and other invertebrates.
- Buried logs 'loggery' and log piles, i.e. from dead and decaying wood which form an important habitat for several species of reptiles, beetle and invertebrates.
- Refugia/hibernacula for invertebrates, small mammals, reptiles, and amphibians.
- Maintenance of 'dark corridors' through and around the Site for wildlife (e.g. foraging bats).
- Wildlife information boards tying in with the proposed new footpaths, cycleways and seating areas, to provide education / learning opportunities on notable habitats, species and features.

- Retain and protect existing veteran and mature trees and historic hedgerows around the periphery of the Site and offsite areas.
- Preparation of a Site Habitat Management Plan to ensure the ecological and landscape enhancement are implemented in full and thereafter monitored to ensure benefits are realised.



Sandy banks for ground nesting insects





Butterfly banks



Refugia/hibernacula



Bee hives/bricks/hotels



Buried logs 'loggery'



#### 9.2 DESIGN APPROACH & RESPONSE

A number of measures have been designed in direct response to Appendix E of the Pre-Submission Draft Dordon Neighbourhood Plan, namely:

#### **DESIGN PARAMETERS**

- Where physical retaining is required, crib, gabion and/or green walls will be used to provide greater opportunities for biodiversity enhancement and design quality.
- Flower rich grasses will be used in amenity grassland habitats and woodland fringes.
- Landscape mitigation measures would incorporate adolescent and semimature trees to assist with earlier integration and mitigation of the development with the surroundings.
- Planting of trees, shrubs, and herbaceous plants and sowing of wildflower mixes will comprise native species typical of the region and locally distinctive to the environs of Dordon.



Retaining wall

A Site Habitat Management Plan would ensure the ecological and landscape enhancements are implemented in full and thereafter monitored to ensure their benefits are realised. Furthermore, offsite landscape mitigation measures would be secured in perpetuity through an agreement with North Warwickshire Borough Council.

Ecological enhancements and new habitats would be referenced on information boards, tying in with the proposed new footpaths, cycleways and seating areas, to provide education and learning opportunities about notable habitats, species and features.



Bird Box



Information board

# APPLICABLE DESIGN PRINCIPLES FROM THE DDGC

#### SU02 - BIODIVERSITY

- Minimise the impact on the natural environment ensuring that the design and layout of development protects watercourses, ancient woodland, local wildlife sites and hedgerows that provide valuable habitats to protect local wildlife.
- Protect woodlands, hedges, trees and road verges, where possible. Natural tree buffers should also be protected when planning for new developments.
- Avoid abrupt edges to development with little vegetation or landscape on the edge of the settlement and, instead, aim for a comprehensive landscape buffering.
- Include the creation of new habitats and wildlife corridors in the schemes. This could, inter alia, be by installing bird boxes.
- Propose wildlife corridors in the surrounding countryside by proposing new green links and improving the existing ones. This will enable wildlife to travel to and from foraging areas and their dwelling areas.



#### 9.2 DESIGN APPROACH & RESPONSE

# APPLICABLE DESIGN PRINCIPLES FROM THE DDGC

#### SU03 - SUSTAINABLE DRAINAGE

- Creative surface water management such as rills, brooks and ponds to enrich the public realm and help improve a sense of wellbeing and offer an interaction with nature.
- Reduce runoff rates by facilitating infiltration into the ground or by providing attenuation that stores water to help slow its flow down so that it does not overwhelm water courses or the sewer network.
- Integrate into development and improve amenity through early consideration in the development process and good design practices.
- SuDS are often as important in areas that are not directly in an area of flood risk themselves, as they can help reduce downstream flood risk by storing water upstream.
- Some of the most effective SuDS are vegetated, using natural processes to slow and clean the water whilst increasing the biodiversity value of the area.
- Best practice SuDS schemes link the water cycle to make the most efficient use of water resources by reusing surface water.
- SuDS must be designed sensitively to augment the landscape and provide biodiversity and amenity benefits.

#### SU04 - PERMEABLE PAVING

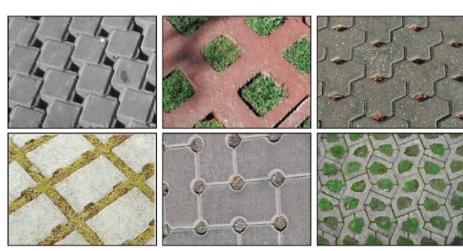
- Permeable pavements offer a solution to maintain soil permeability while performing the function of conventional paving.
- Permeable paving can be used where appropriate on footpaths, public squares, private access roads, driveways, and private areas within the individual development boundaries.

#### SU05 - STORAGE AND SLOW RELEASE

- Rainwater harvesting allowing the capture and storage of rainwater as well as those enabling the reuse in-site of grey water.
- Simple storage solutions, such as water butts, can help provide significant attenuation. To be able to continue to provide benefits, there has to be some headroom within the storage solution. If water is not reused, a slow-release valve allows water from the storage to trickle out, recreating capacity for future rainfall events.
- New digital technologies that predict rainfall events can enable stored water to be released when the sewer has greatest capacity to accept it.
- Conceal tanks by cladding them in complementary materials.
- Use attractive materials or finishing for pipes.
- Combine landscape/planters with water capture systems.
- Underground tanks.
- Utilise water bodies for storage.

#### SU06 - BIO-RETENTION SCHEMES

- Bioretention systems, including soak-aways and rain gardens, can be used within each development, along verges, and in seminatural green spaces.
- Planted spaces are designed to enable water to infiltrate into the ground. Cutting of downpipes and enabling roof water to flow into rain gardens can significantly reduce the runoff into the sewer system.



Common permeable pavement surface materials



SuDS



#### 9.2 DESIGN APPROACH & RESPONSE

# APPLICABLE DESIGN PRINCIPLES FROM THE DDGC

#### LC01 – LANDSCAPE AND GREENSPACE

Any new development should respect landscape assets and future open spaces should be planned with respect to the following principles:

- Design new open space such that it incorporates existing landscape features to create open space with opportunities for natural play and informal recreation.
- Landscape planting should be used to soften the mass of built form at the interfaces with the wider landscape.
- Green buffers can be a satisfactory transition between old and new neighbourhoods. This could take the form of a 'semi-natural' woodland strip, or more formal open space such as playing fields (including those belonging to schools).
- All existing good quality woodland, hedgerows, trees and shrubs to be retained within the layout of the parks and enhanced, with improved management.
- New trees, grassland and shrubs to be planted to supplement existing vegetation;.
- Green spaces to have buildings presenting active frontages that encourage active and passive surveillance of the space.

- Development along the western edge of Dordon should be limited so that the sense of openness is preserved and enhanced.
- Provide allotments or other community garden facilities where appropriate.
- Allow for flexible use of the space including temporary uses with a varied programme of events and use.



Indicative Landscape Plan



Amphitheatre, Sherwood Forest, Mansfield



Connswater Community Greenway, East Belfast



Community driven allotments



#### 9.3 ACHIEVING HQDP 7

The development proposals would enhance the Site's existing ecological assets to make a substantial positive impact to its biodiversity through the extensive list of biodiversity, habitat and landscaping initiatives set out as part of achieving HQDP 7.

The creation of the new and significantly enhanced green and blue infrastructure across the Site and surrounding land would provide protection and habitat for flora and fauna to thrive and deliver a significant biodiversity net gain. Added benefits of this significant biodiversity net gain include improved educational and recreational amenity for people working at the Site and the local community which in turn would help improve engagement with the outdoors and environmental awareness for both current and future generations.



### OPEN SPACE & RECREATION

Landscapes for community and social use, play and recreation.

Natural play
Neighbourhood parkland
Trails
Woodland
Fitness opportunities





# ECOLOGICAL & NATURAL LANDSCAPES

Meadows and forests providing habitats and environmental benefits.

Nature Parks Nature Trails Wildlife Sites Woodland





### BLUE & GREEN INFRASTRUCTURE

Landscapes that capture water, provide flood mitigation and natural drainage.

Retention ponds
Attenuation basins
Swales
Infiltration medians
Green buffers





#### 9.4 CONFORMITY WITH PLANNING POLICY & GUIDANCE

#### RELEVANT NWLP POLICIES:

- Policy LP1 Sustainable Development
- Policy LP14 Landscape
- Policy LP16 Natural Environment
- Policy LP17 Green Infrastructure
- Policy LP22 Open Spaces and Recreational Provision
- Policy LP29 Development Considerations
- Policy LP33 Water and Flood Risk Management
- Policy LP35 Renewable Energy & Energy Efficiency

# RELEVANT DDGC DESIGN PRINCIPLES:

- SU02 Biodiversity
- SU03 Sustainable Drainage
- SU04 Permeable Paving
  - SU05 Storage and Slow Release
- SU06 Bio-Retention Systems
- LC01 Landscape and Green Space



# 10.0 SUMMARY & CONCLUSIONS



### 10.0 SUMMARY AND CONCLUSIONS

This Design Guide supports an outline planning application submitted on behalf of Hodgetts Estates to support ambitious proposals seeking to create "The Greenest Business Park in the West Midlands". This aspiration is derived from its commitment to achieving a very high bar in terms of sustainability and mitigating potential climate change impacts of the proposals.

Driven by the seven HQDPs and implementation of the associated Design Parameters set out in this Design Guide, all future developments at the Site brought forward via reserved matters applications would be required to follow a prescribed set of design guidance and parameters, to ensure compliance with all relevant planning policy and guidance, including the Dordon Design Guidance and Code. In all aspects relevant to sustainability and design (including energy efficiency, renewable energy generation and biodiversity), the future development proposals would either meet or exceed the standards currently required by legislation, policy and guidance.

This Design Guide captures the requirement to provide a flexible yet cohesive development framework that allows for a multitude of future development options for future reserved matters applications. This includes various size large format distribution / warehouse / manufacturing uses as well as the potential for SME units and a secure overnight lorry parking facility, all in response to current and future demand and market indicators.

Application of the HQDPs and Design Parameters within this Design Guide would ensure that all future potential development options at the Site respect the surrounding area and adjacent settlements and would deliver a safe, inclusive and high quality development, which also links in with and enhances connectivity throughout the surrounding environs. Future development would be set within its own comprehensively landscaped surroundings, strengthening the natural perimeters, and enhancing substantially the existing biodiversity value of the Site, whilst allowing for easy, safe and inclusive access for staff, visitors and the local communities for



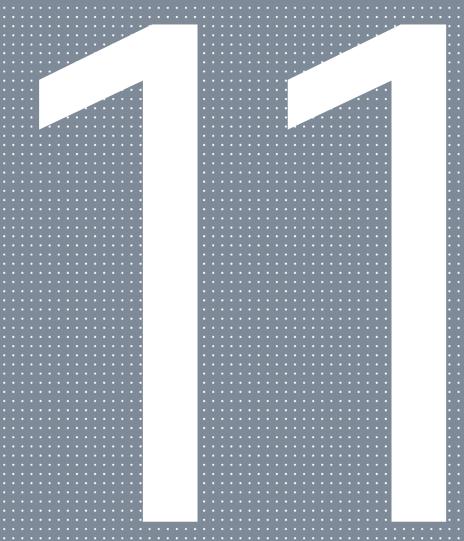
Illustrative CGI

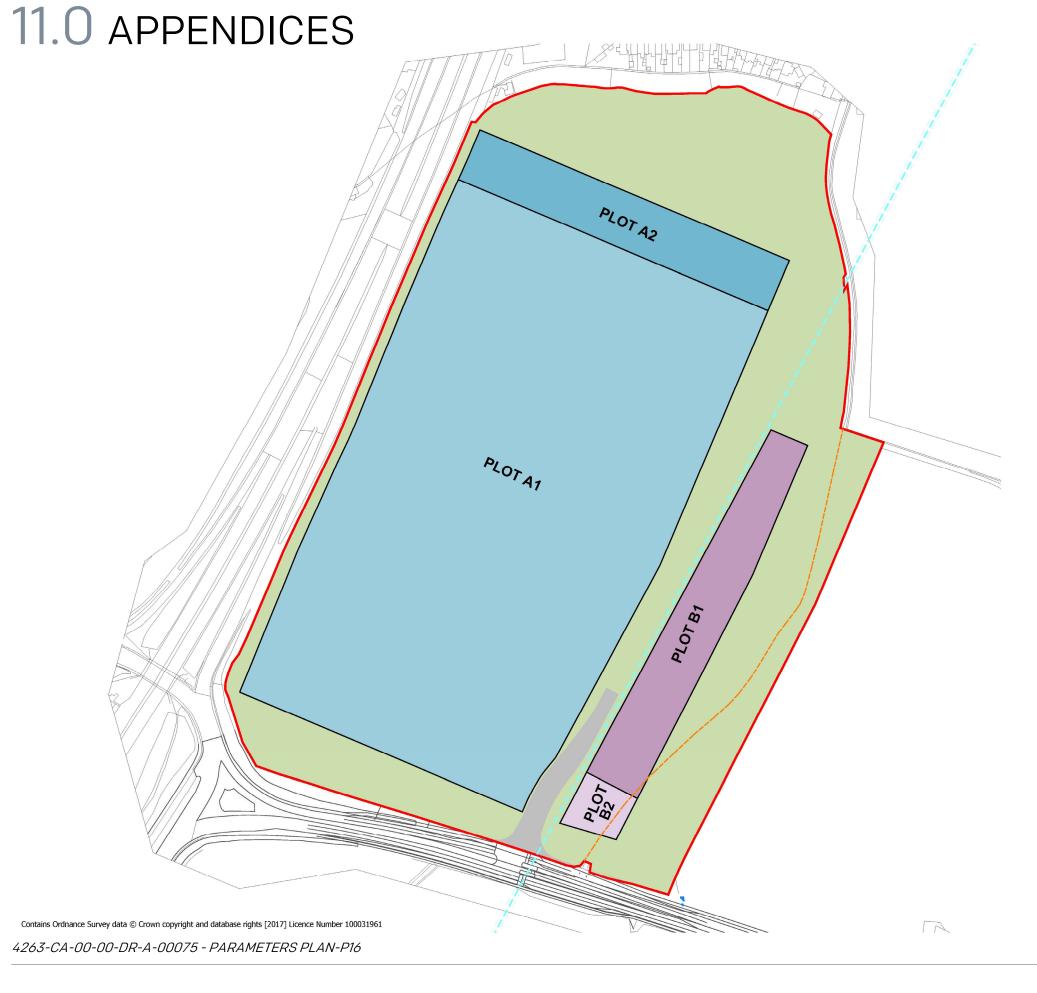
pedestrians and cyclists, as well as harnessing other sustainable modes of transport.

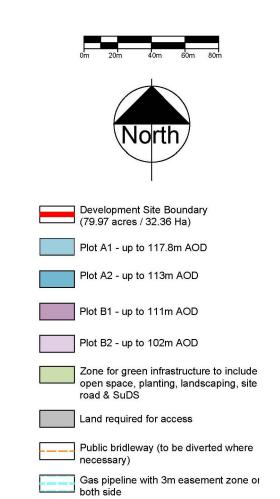
In accordance with NPPF paragraph 128 and the National Design Guide, this Design Guide would act as a development framework for creating beautiful, healthy, greener, enduring, distinctive and successful places with a consistent and high quality standard of design.

It is anticipated that a planning condition could form part of any forthcoming outline planning permission, to require future reserved matters applications to demonstrate compliance with this Design Guide and in doing so facilitate delivery of the substantial scheme benefits set out above.













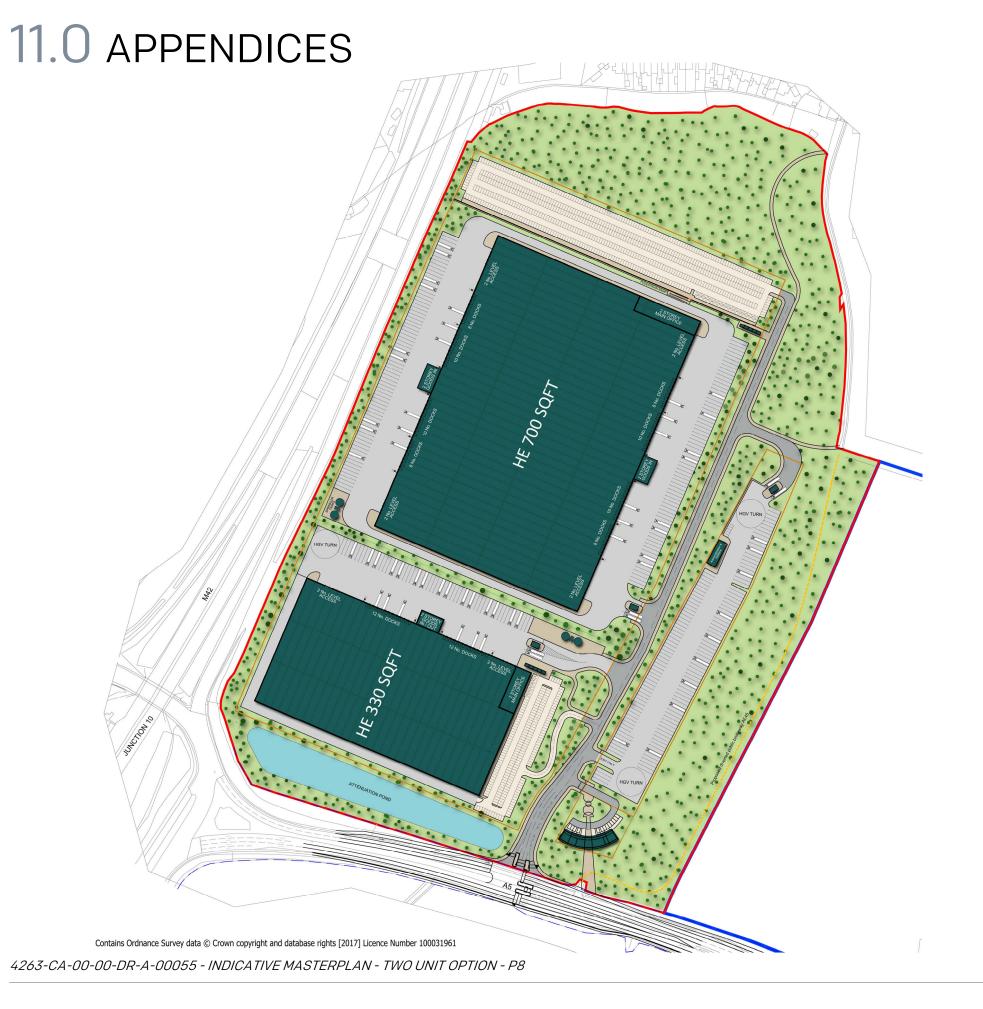


Development Site Boundary (79.97 acres / 32.36 Ha)

Parameter Boundary

Unit Demise Boundary

Public bridleway (to be diverted where necessary)





Development Site Boundary (79.97 acres / 32.36 Ha)

Parameter Boundary

Unit Demise Boundary

Public bridleway (to be diverted where necessary)





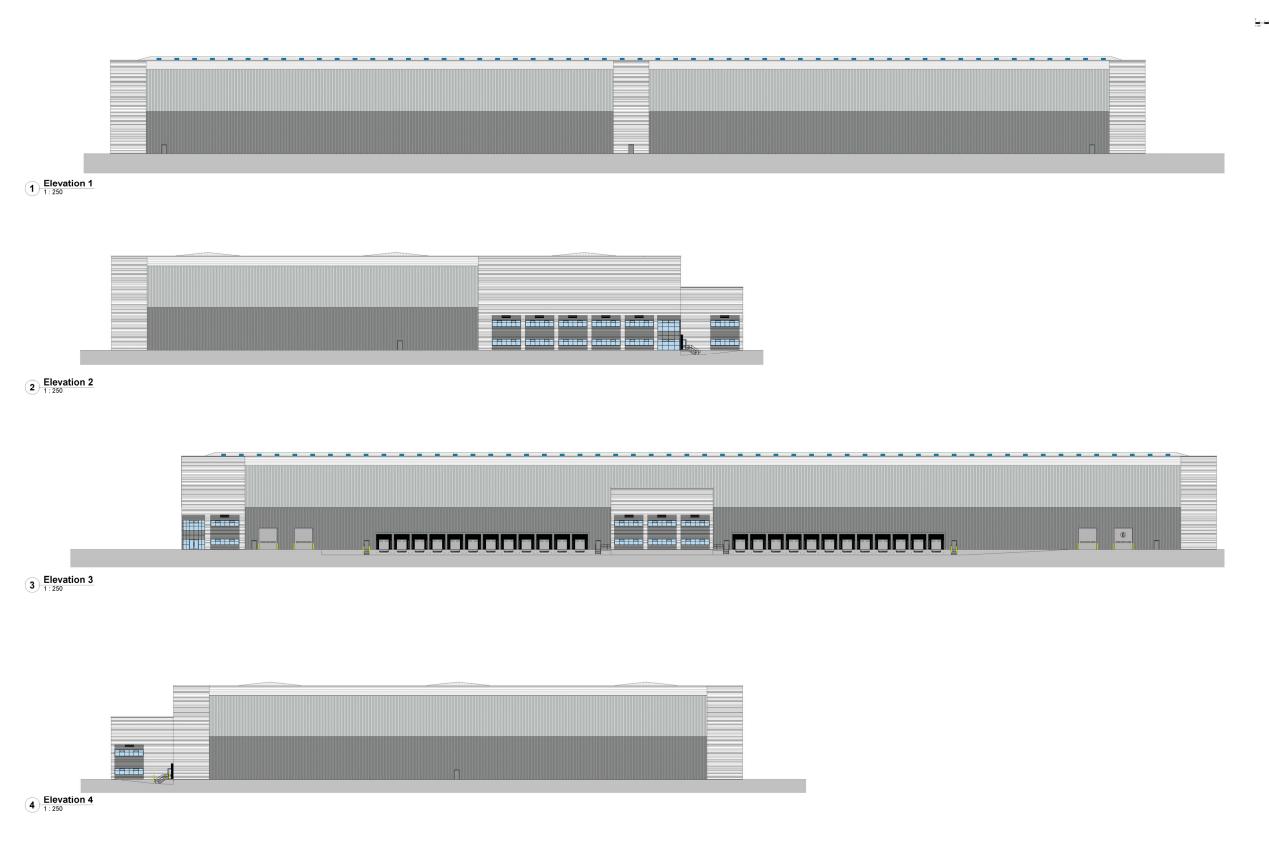


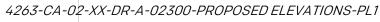
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Parameter Boundary

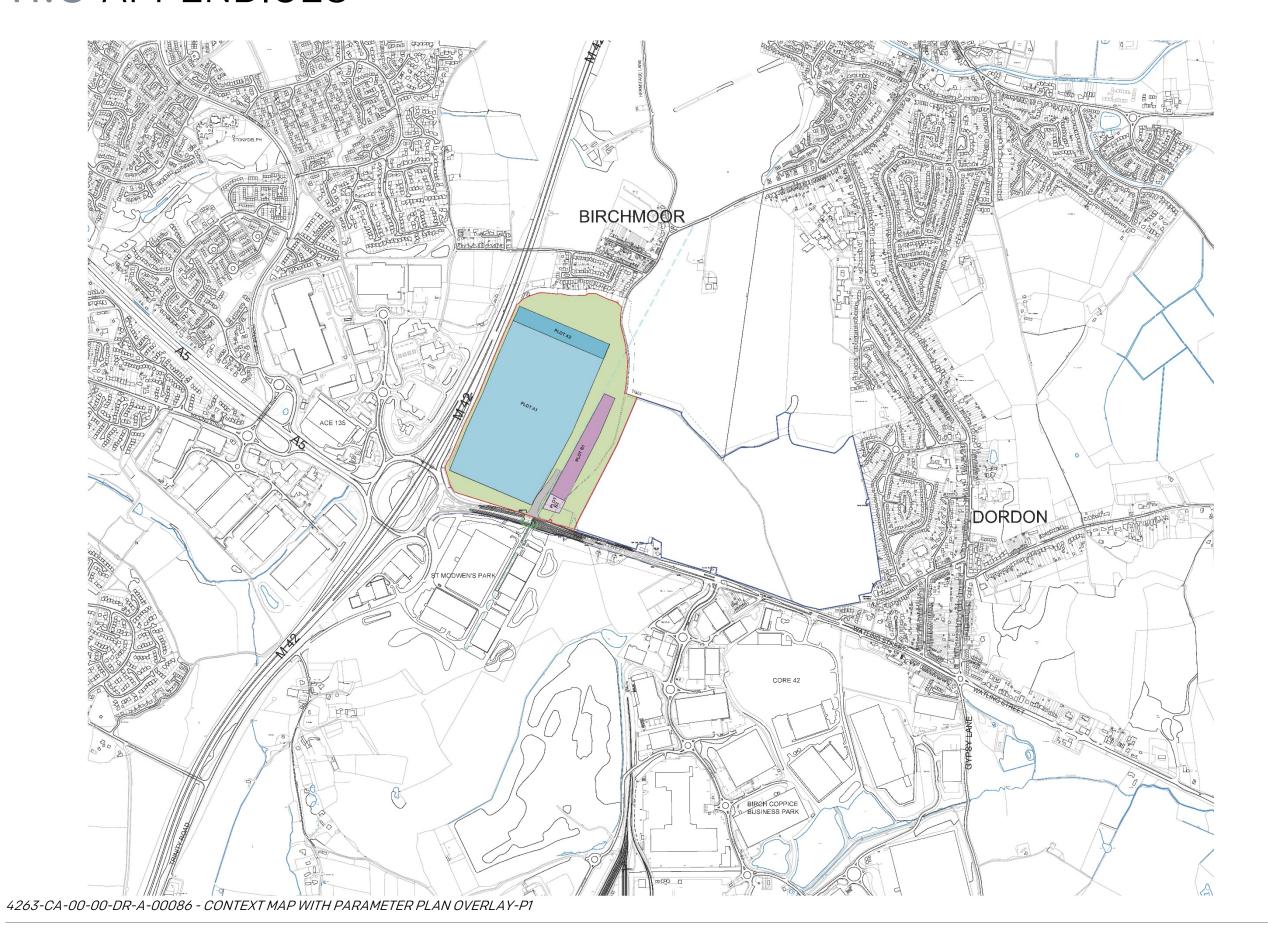
Unit Demise Boundary

Public bridleway (to be diverted where necessary)





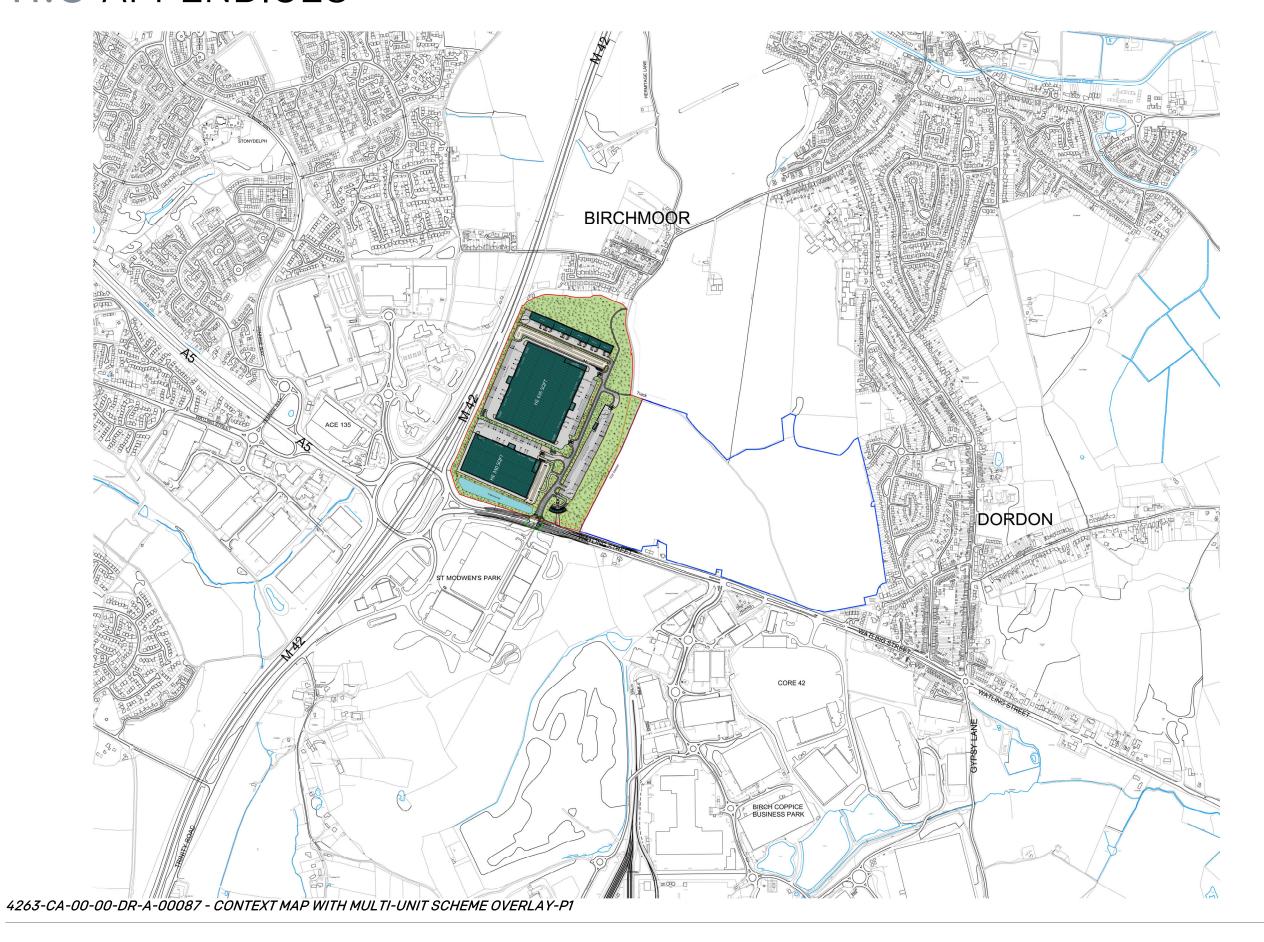






79.97 acres / 32.36 Ha

OTHER LAND UNDER THE CONTROL OF THE APPLICAT







# HQDPs & DESIGN

HDGP 2

# 11.0 APPENDICES

#### PLANTING SPECIES LISTS

Native Woodland	
Quercus robur	Pedunculate Oak
Sorbus aucuparia	Rowan
Rosa canina	Dog-rose
Prunus spinosa	Blackthorn
Prunus avium	Wild Cherry
Crataegus monogyna	Hawthorn
Corylus avellana	Hazel
Cornus sanguinea	Dogwood
Betula pendula	Silver Birch
Acer campestre	Field Maple
Mixe	d and/or hornbeam hedgerows
Acer campestre	Field Maple
Corylus avellana	Hazel
Crataegus monogyna	Hawthorn
Ligustrum vulgare	Wild Privet
Prunus spinosa	Blackthorn
Viburnum lantana	Wayfaring-tree
Viburnum opulus	Guelder-rose
Carpinus betulus	Hornbeam
	Native Shrub Planting
Cornus sanguinea	Dogwood
Corylus avellana	Hazel
Crataegus monogyna	Hawthorn
Prunus spinosa	Blackthorn
Rosa canina	Dog-rose
llex aquifolium	Holly
	Grasses/Wildflower
Wildflower Meadows:	
Emorsgate EM1 General Purpose N	Meadow Grass Mix or Similar sown at a rate of 4g/m2
Wetland Meadows:	
Emorsgate EM8 Meadow Mix for W	Vetlands or Similar sown at a rate of 4g/m2
Amenity Grasslands:	
	or similar sown at a rate of 4g/m2
Emorsgate EL1 Flowering Lawn Mix	

Ornamental Shrubs			
Ornamental Shrub Mix 2 – Small	Ornamental Shrub Mix 1 – Medium		
Berberis frikartii 'Amstelveen'	Ceanothus 'Blue Mound'		
Ceanothus thyrsiflorus repens	Choisya ternate		
Genista lydia	Escallonia 'Apple Blossom'		
Hebe albicans	Photinia fraseri 'Red Robin'		
Lonicera pileata	Prunus laurocerasus 'Otto Luyken'		
Potentilla fruticosa 'Elizabeth'	Pyracantha coccinea 'Red Cushion'		
Skimmia confusa 'Kew Green'	Viburnum davidii		
Spiraea japonica 'Goldflame'	Cornus sanguinea 'Midwinter Fire'		
Ornamental Groundcover Mix	Ornamental and Feature Shrubs		
Hedera helix	Cornus stolonifera 'Kelsey Gold'		
Hypericum moserianum	Aucuba japonica 'Rozannie'		
Hebe rakaiensis	Spiraea japonica 'Golden Princess'		
Potentilla fruticosa 'Elizabeth'	Hebe rakaiensis		
Lonicera nitida 'May Green'	Prunus laurocerasus 'Otto Luyken'		
	Euonymus fortunei 'Silver Queen'		
	Elaeagnus ebbingei 'Gilt Edge'		
	Viburnum tinus 'Variegatum'		
	Photinia fraseri 'Red Robin'		
	Ornamental Trees		
Tilia cordata 'Rancho'	Small-leaved Lime		
Betula albosinensis var. septentrionalis	Chinese Red Birch		
Carpinus betulus 'Purpurea'	Hornbeam		
Betula ermanii	Erman's Birch		
Quercus robur	Pedunculate Oak		
Acer campestre	Field Maple		
Acer campestre 'Elsrijk'	Field Maple		
Sorbus torminalis	Wild Service-tree		
Sorbus aria 'Majestica'	Whitebeam		
Prunus avium	Wild Cherry		
Alnus glutinosa	Alder		
Malus sylvestris	Crab Apple		
Sorbus aucuparia	Rowan		
Crataegus monogyna	Hawthorn		
Betula pendula	Silver Birch		



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