East Midlands Gateway Phase 2 (EMG2)

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ENVIRONMENTAL STATEMENT

Technical Appendices

Appendix 1C

Applicant's Scoping Report

October 2025



The East Midlands Gateway Phase 2 and Highway Order 202X and The East Midlands Gateway Rail Freight and Highway (Amendment) Order 202X



SEGRO

East Midlands Gateway Phase 2, Land South of East Midlands Airport, Derby

EIA Scoping Report

August 2024



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1. Introduction and Background

- 1.1. This Environmental Impact Assessment (EIA) Scoping Report has been prepared on behalf of SEGRO Properties Ltd (referred to in this report as 'SEGRO' or the 'applicant'). SEGRO is to apply for a Development Consent Order (DCO) for a second phase of its East Midlands Gateway Logistics Park, which is a nationally significant infrastructure development comprising a rail freight terminal, warehousing and highways improvements authorised by a DCO in 2016¹ and has now been largely built out on land to the north of East Midlands Airport (this existing development is referred to as 'EMG1').
- 1.2. The proposed application site is identified on the Plan at Appendix 1. As explained further in Section 3 of this report, the application site is described with reference to component parts, with the majority of new build development on 'the main site'. The main site (to be known as EMG2) lies to the south of East Midlands Airport. It falls within the 'East Midlands Airport and Gateway Industrial Cluster' (EMAGIC) designated as part of the East Midlands Freeport, which was created in 2022, and is identified on the Plan at Appendix 2. The remaining part of the application site includes land within EMG1 where capacity upgrades to the existing rail freight terminal and utilities are proposed, together with land required for potential highway improvements. This is explained and described further below in Section 3.
- 1.3. In January 2024, SEGRO made an application to the Secretary of State under s.35 of the Planning Act 2008 for a direction to recognise the development as being of national significance for which development consent is required. The Secretary of State issued a direction dated 21 February 2024 (the 's.35 Direction') confirming that the proposed scheme by itself is nationally significant because the proposal would:
 - be likely to have significant economic impact;
 - be important in driving growth in the economy:
 - have an impact on an area wider than a single local authority area;
 - be of a substantial physical size and scale;
 - contribute to delivering the outcomes of the Freeport; and
 - benefit from the application being determined through a single, unified consenting process provided by the Planning Act 2008 which would remove the need to apply and the uncertainty of applying for separate powers and consents.
- 1.4. Prior to securing the s.35 Direction, SEGRO prepared a significant amount of information in anticipation of submitting a planning application on the main site under

¹ The East Midlands Gateway Rail Freight Interchange and Highway Order 2016 (S.I. 2016/17)



the Town and Country Planning Act 1990 to North West Leicestershire District Council (NWLDC) for the development of the main site as a logistics/industrial park. This included the submission of an EIA Scoping request in May 2022 to NWLDC which issued its EIA Scoping Opinion in December 2022, a copy of which is provided at Appendix 3. Based on the agreed EIA scope, the applicant and its consultant team had commenced the necessary assessment work prior to receiving the s.35 Direction. This initial assessment work, supplemented as appropriate, will inform the EIA to support the application for a DCO, which SEGRO is now intending to submit instead of a planning application in order to realise the benefits of this Freeport site as soon as possible.

- 1.5. This EIA Scoping Report is therefore informed by the previous May 2022 EIA Scoping Report and the local planning authority's December 2022 EIA Scoping Opinion. Reference to the previous scoping process and subsequent consultation and liaison with relevant statutory consultees and stakeholders is included within this Scoping Report where appropriate.
- 1.6. This Scoping Report provides a description of the site and the characteristics of the proposed development. It defines the likely significant effects of the development on the environment, the studies necessary to assess them and the level of detail required to enable a decision to be made.

2. EIA Scoping

Context

2.1. The purpose of an EIA is to identify the likely significant environmental effects of a development, both during construction and operation, and how those impacts can be mitigated. The process is designed to inform decision-makers and the public of the environmental consequences of implementing a specific proposal.

Scoping

- 2.2. This EIA Scoping Report is submitted pursuant to Regulation 10(1) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, hereafter referred to as the 'EIA Regulations'. Regulation 10(1) allows a person who proposes to make an application for an order granting development consent to ask the Secretary of State to state in writing their opinion as to the scope and level of detail of the information to be provided in an Environmental Statement (ES). An ES is to be prepared as part of the application in accordance with the EIA Regulations and will contain the findings of the EIA.
- 2.3. The National Significant Infrastructure Projects, Advice Note 7: Environmental Impact Assessment (PINS, June 2020), states that an effective EIA scoping process allows for an early identification of the likely significant effects and provides an opportunity to agree where aspects and matters can be scoped out from further assessment. It goes on to note that ensuring that an ES is appropriately focused on aspects and matters where a likely significant effect may occur is essential and that PINS is keen to ensure that the scoping process is used effectively and that the EIA process is proportionate.
- 2.4. In accordance with Regulation 10(3) of the EIA Regulations, the following must be included with an EIA Scoping Request:
 - a) a plan sufficient to identify the land;
 - b) a brief description of the nature and purpose of the development, including its location and technical capacity;
 - c) an explanation of the likely significant effects of the development on the environment; and
 - d) such other information or representations as the person making the request may wish to provide or make.
- 2.5. Further guidance on the content and structure of a scoping request is provided by PINS Advice Note 7, Insert 2.



- 2.6. In compliance with Regulation 10(3)(a), a Site Location Plan has been included as Appendix 1 which identifies the main site and other components of the proposed development. The site is further described at Section 3 of this report.
- 2.7. Section 4 provides a description of the proposed development including the information required by Regulation 10(3)(b).
- 2.8. Section 5 outlines the approach to the EIA and topic areas to be covered. This includes consideration of cumulative impacts and reasonable alternatives.
- 2.9. An explanation of the likely significant effects, as required by Regulation 10(3)(c), is included at Section 6 on a topic-by-topic basis.

3. Site Description

- 3.1. The site is identified by the red line as shown on the Site Location Plan included as Appendix 1. This boundary line is likely to be refined following further environmental assessment and consultation, ahead of the submission of the DCO application but is unlikely to materially change.
- 3.2. As referred to in Section 1 above, the application site is described by reference to discrete component parts which are set out under the sub-headings below.

The Main Site

- 3.3. The main site comprises land immediately south of East Midlands Airport and to the east of the village of Diseworth. It is located immediately west/north-west of Junction 23A of the M1 motorway and approximately 3 km south of Junction 24.
- 3.4. The main site extends to approximately 105ha and currently comprises undeveloped, predominantly arable, land with hedgerows and trees dividing the various fields. The topography of the site is generally sloping towards the south. The main site overall has a significant fall of approximately 35m from its northern boundary to its southern boundary. An unclassified single track road with an unbound gravel surface, known as Hyam's Lane, dissects the main site from southwest to north-east. It is bound by hedgerows to both sides. A public right of way (footpath L45/1) generally follows the route of Hyam's Lane. There are overhead power cables crossing the western part of the main site in a north to south direction and there is also a drain to the south-east.
- 3.5. The main site is bound to the north by Ashby Road (A453) with East Midlands Airport beyond. Donington Park motorway services and a small copse of trees is located immediately adjacent to the north-east. Wooded areas and an area of mixed scrub surround the services and border the main site to the east. To the south-east lies the A42 and the M1 junction. To the south the main site is bounded by Long Holden, another unclassified road which stops at the A42 boundary to the east. To the southwest is the village of Diseworth. The historic core of Diseworth is designated as a conservation area and includes many listed buildings.
- 3.6. The wider area is influenced by existing industrial development including the Airport and associated infrastructure, Pegasus Business Park and the SEGRO Logistics Park comprising the EMG1 development. Some of these areas also designated as part of the East Midlands Freeport EMAGIC site.

Rail Freight Interchange expansion/upgrade

3.7. The proposed application site for development consent includes the existing EMG1 rail freight terminal, intermodal facility, adjoining undeveloped land and associated



road and utilities infrastructure to the north of East Midlands Airport. The application includes proposed capacity upgrades to the existing rail freight terminal and utilities to enable an expansion of the intermodal facilities as part of this second phase of the East Midlands Gateway development.

3.8. A section of the public footpath (L57) route connecting the village of Castle Donington with EMG1 has also been included within the boundary in order to upgrade this public right of way.

Land for Highway Works

3.9. Land potentially required to undertake highway improvement works to accommodate the proposed development has also been incorporated within the proposed application boundary. At this time, it includes land around the A453 Finger Farm roundabout at Junction 23A of the M1, land along the A453 going north, the EMG1 Gyratory and Junction 24 of the M1. The extent of land required for highways improvements will be reviewed and refined as the transport assessment is finalised.

4. Description of Development

- 4.1. SEGRO proposes to build upon the success of EMG1 by extending it as part of development associated with the East Midlands Freeport. An application for Development Consent will deliver additional logistics and manufacturing facilities including a substantial logistics campus and co-located headquarters functions for Maersk on land south of East Midlands Airport. This second phase of East Midlands Gateway (EMG2) will be integrated with improvements and an expansion to the intermodal rail freight terminal at EMG1.
- 4.2. The following sub-headings describe the proposed development within the various components of the application site.

The Main Site

- 4.3. The proposed development within the main site is for a multi-unit logistics/industrial development together with supporting and co-located office functions. In order to respond to occupier demand and the evolving requirements of the logistics industry, it will be essential that flexibility is built into the scheme. Accordingly, the principles of the 'Rochdale Envelope' approach will be followed as set out in the Nationally Significant Infrastructure Projects Advice Note 9: Rochdale Envelope (PINS, July 2018). Put simply, using the 'Rochdale Envelope' means defining the parameters within which the construction and operation of the proposed development would be undertaken, as opposed to a detailed design.
- 4.4. A Development Parameters Plan will be submitted with the DCO application to define the key development principles and will form the basis for the assessment of the development of the 'main site'. The detail of the proposed development will be refined through the EIA process and consultation and additional design or mitigation measures will be included (if required) as the scheme evolves.
- 4.5. The Parameters Plan will include the following key parameters or design principles:
 - a maximum of 300,000 sq.m. of employment floorspace (GIA), with an additional 100,000 sq.m. in the form of mezzanines across the site;
 - a series of Development Zones to the north and south of Hyam's Lane where new employment buildings are proposed to be located together with supporting infrastructure;
 - maximum external building heights for each Development Zone which range from 15 to 24 metres to parapet/ridge. Maximum finished floor levels (FFL) are also specified for each Development Zone;
 - vehicular access from the A453;



- landscaping areas and buffers along the site boundaries including new and retained landscape features which will deliver biodiversity enhancements. This includes a significant landscape screen utilising earthworks bunding on the western and southern part of the site. Hyam's Lane is proposed to be retained and provide pedestrian/cycle connectivity through the middle of the site. The landscape areas would include SUDs features;
- provision of a new estate road serving the Development Zones; and
- a bus interchange terminal at the site entrance which replicates and builds upon the successful sustainable travel strategy for the EMG1 site.
- 4.6. While the application will not seek approval for details of layout or design, an illustrative masterplan will be submitted as part of the application. A draft is enclosed as Appendix 4 to this Scoping Report. It shows how the main site could be developed in accordance with the development parameters to appropriately respond to the requirements of future occupiers and the constraints and features of the main site.

Rail Freight Interchange and EMG1

- 4.7. It is proposed to make alterations to increase capacity at the existing rail freight interchange located within EMG1 to serve EMG2. It is currently envisaged that such alterations will include:
 - Provision of up to 6.4 ha additional warehousing and/or open storage;
 - Improvements to the EMG1 rail freight terminal to increase handling capacity including through the provision of higher gantry cranes;
 - Expansion of the management suite to cater for the additional demand on management facilities resulting from EMG2;
 - Public transport enhancements including provision of EV charging infrastructure for buses and provision of drop-off layby adjacent to transport hub; and
 - Upgrade work to Public Footpath L57.

Highway Works

4.8. A significant amount of strategic and detailed transport modelling work has been undertaken to date to understand the impacts of the EMG2 development on the surrounding highway network. The initial results show that, in the absence of any mitigation, the highway network between M1 Junction 24 and M1 Junction 23A/Finger Farm roundabout, in particular, is expected to experience increased traffic movements leading to potential for congestion and queueing at peak hours.



- 4.9. It is therefore proposed that a mitigation strategy is required, to include physical infrastructure improvements along this section of the network which will create additional capacity to sufficiently accommodate the proposed traffic generation from the site. A number of potential options for improvements work to the wider highway network are being considered and are subject to further discussions with the relevant highways authorities and further modelling and assessment.
- 4.10. It is currently envisaged that, subject to further assessment, safety audits and agreement with highways authorities, the highway works will comprise:
 - provision of site access off the A453;
 - potential improvements to the wider highway network;
 - provision of a shared footpath/cycleway along the A453 connecting the EMG2 main site with facilities at EMG1.
- 4.11. Some elements of the highway works will have some flexibility applied in the form of limits of deviation which, to comply with the regulations, will be shown on the Works Plans to be provided as part of the DCO application. These will provide limited scope within the Order Limits to vary the precise extent of the highway works to reflect any detailed consideration of those works at the time of detailed working drawings being approved post DCO consent.

5. EIA Approach and Topic Areas

5.1. This section sets out the overall approach to the EIA for the proposed development outlining the topic areas to be considered as part of the EIA and the overarching methodology to be adopted to the assessment. The approach to the assessment has been informed by the EIA Regulations and current best practice guidance set out in PINS Advice Note 7.

ES Content

- 5.2. Schedule 4 of the EIA Regulations specifies the information to be included within an ES. This should comprise a description of the:
 - 1. proposed development;
 - 2. reasonable alternatives studied and main reasons for selecting the chosen option taking the environmental effects into account;
 - 3. relevant aspects of the current state of the environment (baseline scenario);
 - 4. factors specified at Regulation 5(2) likely to be significantly affected by the development;
 - 5. likely significant effects of the development on the environment, covering the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the development;
 - 6. forecasting methods or evidence used to identify and assess the significant effects on the environment:
 - 7. measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements; and
 - 8. expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned.

Description of the proposed development

5.3. The draft proposed development has been briefly described at Section 4 of this EIA Scoping Report. A full description of the proposed development will be included within the ES and will include a description of the construction phase of the project.



Description of the reasonable alternatives

- 5.4. The ES will include a description of reasonable alternatives which have been considered by the applicant. The main alternatives that will be considered are:
 - 'No development' alternative it is envisaged that this scenario would result
 in mainly neutral environmental effects, but would present a missed
 opportunity in realising the very significant economic benefits associated with
 the development of the site within the wider East Midlands Freeport;
 - Alternative sites there are very few locations within the wider sub-region, or region, where a development of the proposed size and scale could be delivered. There are clearly none within the EMAGIC Freeport area or with such close association with existing rail-freight facilities at EMG1, which would allow such a comprehensive integration with, and expansion of, EMG1. As a result, it is proposed that the assessment will look at sub-regional employment land studies to provide an overview of the demand for additional industrial and distribution space and current land supply constraints to demonstrate if there are any potential alternatives;
 - Alternative development scheme (scheme evolution) reference will be made to the alternative approaches to the development of this site, linked directly to the design evolution of the proposals which will also be described in a Design & Access Statement to be submitted with the application.

Baseline

5.5. The ES will include a description of the current baseline scenario against which the environmental effects of the development can be measured. This will involve describing the current state and circumstances of the environment and the identified receptors and changes that might be expected to occur as a result of the proposed development. A brief outline of the main baseline conditions is provided in Section 6 of this Scoping Report.

Factors likely to be significantly affected

5.6. As noted at Section 1 of this Scoping Report, the applicant has previously undertaken an EIA Scoping process with NWLDC in relation to a potential planning application for an industrial/logistics development on the site. The Council issued its Scoping Opinion in December 2022 and this is provided as Appendix 3. The applicant subsequently progressed the surveys to establish the baseline position and progressed an assessment of the likely environmental effects of the proposed development of the main site.



Factors to be 'scoped in'

- 5.7. Having assessed the scope of the ES in the above context, it is considered that the main areas of potential significance for this development requiring consideration through the EIA are:
 - Landscape and visual impacts (including the effects of lighting);
 - Ecology and biodiversity;
 - Traffic and transportation;
 - Air quality;
 - Noise and vibration;
 - Flood risk and drainage;
 - Heritage and Archaeology;
 - · Agriculture and soils;
 - · Climate change; and
 - Socio-economic impacts.
- 5.8. Further consideration to each of these topic areas is given in Section 6 of this Scoping Report.

Factors to be 'scoped out'

- 5.9. Consideration has been given to a number of other environmental aspects, but through the previous scoping process and assessment work undertaken to date, it is concluded that the following matters, whilst of relevance to the development, are unlikely to result in significant environmental effects and can therefore be scoped out of the EIA. These are:
 - Population and human health impacts (outside of those already covered);
 - Ground conditions/contamination;
 - · Minerals safeguarding;
 - · Aerodrome safeguarding;
 - · Material assets; and
 - Vulnerability to major accidents or disasters.
- 5.10. The reasoning behind these factors being 'scoped out' is set out in Table 5.1 below.



Table 5.1: Scoped out factors

'Scoped out' factors	Reasons
Population and human health	The main issues relating to human health are impacts arising from noise and air quality impacts and these matters will already be covered within the Noise and Air Quality chapters of the ES.
	Issues relating to socio-economic impacts are covered within the Socio-Economic chapter of the ES.
Ground conditions/ contamination	A Ground Investigation has been prepared and is included as Appendix 5 to this EIA Scoping Report.
	It shows that the site is undeveloped agricultural land with no previous known development.
	The historic use of the site for agriculture makes the presence of significant concentrations of potential contaminants or hazardous ground gases highly unlikely with no expected risks to sensitive receptors such as site workers.
	The proposed development is not expected to result in significant indirect effects relating to ground contamination and hazardous ground gases when assessed against human health, the environment and/or the proposed structures.
Minerals safeguarding	An assessment of the potential mineral resources within the site has been undertaken by Fairhurst and the conclusions are enclosed at Appendix 6. It concludes that whilst the site falls within a Minerals Safeguarding Area as per the Leicestershire Minerals and Waste Local Plan, the deposits are of low value and not economically viable for extraction.
Aerodrome safeguarding	The site is not within the flight path of East Midlands Airport, and the Airport benefits from Statutory Aerodrome Safeguarding rules.
	SEGRO has significant experience and familiarity of developing in close proximity to the airport through

'Scoped out' factors	Reasons
	delivery of EMG1 and will consult with the Airport throughout the development process as required.
	The airport's interests will be taken into account through the application, and in particular the drainage design and through a Bird Strike Assessment. Similar to EMG1, protections of the airport operator can be included through the DCO. No significant impacts are envisaged.
Material assets	It is known that there are some existing utilities and services crossing the site including overhead power lines and a drain.
	It is proposed that the power cables will remain in situ and the field drain will be diverted, with the implications of the latter to be covered in the Flood Risk and Drainage chapter of the ES.
	It is therefore considered that there is nothing of an unusually complex nature in this process that would have any significant environmental effects such that they need to be included separately within the ES.
Vulnerability to major accidents or disasters	The proposed development will introduce a logistics and industrial development into a locality which currently supports similar land uses, notably, East Midlands Airport and its associated uses, Pegasus Business Park and SEGRO's Logistics Park, East Midlands Gateway (EMG1).
	The development is therefore in keeping with the surrounding area and is unlikely to produce significantly increased risk of accidents or natural disasters outside of the existing local context.
	In relation to the construction stage, construction practices will adhere to good practice guidance and compliance with building regulations. A Framework Construction Environmental Management Plan (CEMP) will be submitted with the application and adherence to the principle secured through the DCO.



Assessment of Likely Significant Effects

Project Team

- 5.11. In line with Regulation 14(4)(a) of the EIA Regulations, the EIA will be undertaken by a suitably qualified project team and the qualifications and experience of the team will be set out in the ES. The consultant team appointed by SEGRO comprises:
 - Delta Planning A specialist town planning consultancy with expertise in the overall co-ordination of EIAs and editorial of ESs. Delta Planning will lead the overall EIA process and also author the introductory chapters of the ES and prepare the Non-Technical Summary.
 - UMC Architects A national architectural practice with significant experience in major logistics and manufacturing development.
 - FPCR A national firm with expertise in landscape design, Landscape & Visual Impact Assessment (LVIA), ecology and biodiversity. FPCR will undertake the LVIA and assess the ecology and biodiversity impacts of the development.
 - BWB A national engineering and environmental design consultancy who will lead the infrastructure engineering advice to the project team, and also assess the likely environmental impacts of the development on flood risk/ drainage and transport. BWB will be supported by iTP in regard to the public transport strategy.
 - Vanguardia A leading acoustic and environmental consultancy who will undertake the noise, air quality and lighting assessments.
 - RPS A global property services firm and multidisciplinary consultancy whose Archaeology and Heritage Team will lead the built heritage assessment and archaeological investigations on the site. As a multidisciplinary consultancy RPS have also been tasked with undertaking the climate change assessment.
 - LRA A national firm which specialises in all aspects of soil science, land quality and rural land use. LRA will undertake the assessment with regard to agriculture and soils.
 - Savills A global property services firm who will prepare an Employment Land and Market Assessment and consider the socio-economic impacts of the proposed development.
 - Fairhurst A national engineering consultancy which will provide site investigation and some civil engineering support services to the design team.



Methodology

- 5.12. As noted above, the ES is to be prepared by a consultant team and co-ordinated by Delta Planning. In recognition of the consultant team approach, the document will be structured on a topic basis with each of the ES assessment chapters presented in a common format. To ensure this approach appropriately considers interrelated effects, the consultant team will be closely involved in the interpretation and review of each of the assessments where required.
- 5.13. The format of the assessments within each chapter will be to firstly confirm the scope of the assessment and the statutory and planning context within which it has been undertaken, and then set out the baseline conditions for each of the environmental topic areas. Each chapter will then identify the nature, scale and significance of likely impacts, in terms of positive, neutral and negative (or adverse) effects. In relation to negative/adverse effects, the key for EIA is to establish the significance of such impacts and determine what, if any, mitigation measures can be introduced to avoid, reduce or remedy those effects. Taking any identified mitigation measures into account, the EIA will then identify any residual impacts and determine their significance. The related nature of any residual impacts (i.e. the extent to which they are cumulative) will also be considered.
- 5.14. The impact assessment will, where possible, be carried out to a consistent set of impact assessment magnitudes as defined in the tables below. It is acknowledged that some specific disciplines have their own industry standard approaches and where this is the case it will be explained in the ES where necessary.
- 5.15. It is nevertheless broadly accepted that the significance of an effect is determined by the relationship between two factors:
 - The sensitivity, importance or value of the affected resource or receptor; and
 - The actual change taking place to the environment (i.e. the magnitude or severity of an effect).
- 5.16. The sensitivity, importance or value of the resource or receptor will generally be based on its relative importance using the scale set out at Table 5.2:



Table 5.2: Methodology for Determining Sensitivity

Sensitivity	Example of Receptor
High	The receptor/resource has little ability to absorb change without fundamentally altering its present character, or is of international or national importance.
Moderate	The receptor/resource has moderate capacity to absorb change without significantly altering its present character, or is of high importance.
Low	The receptor/resource is tolerant of change without detriment to its character, or is of low or local importance.

5.17. The magnitude of an effect will generally be described using the terminology set out in Table 5.3:

Table 5.3: Methodology for Assessing Magnitude

Magnitude	Criteria for Assessing Impact	
of Impact		
High	Total loss of (or major/substantial alteration) to key elements of the	
	baseline (pre-development) conditions such that the post	
	development character/composition/attributes will be fundamentally	
	changed.	
Moderate	Loss or alteration to one or more key elements/features of the	
	baseline condition such that post development character/	
	composition/attributes of the baseline will be materially changed.	
Low	A minor shift away from the baseline conditions. Change arising	
	from the loss/alteration will be discernible/detectable but not	
	material. The underlying character/ composition/attributes of the	
	baseline condition will be similar to the pre-development	
	circumstance/situation.	
Negligible	Very little change from baseline conditions. Change barely	
	distinguishable, approximating to a 'no change' situation.	

5.18. The significance of an effect will generally be determined using the matrix in Table 5.4 below. The matrix looks at the interaction between receptor sensitivity and impact magnitude:

Table 5.4: Effect Significance Matrix

Magnitude	Sensitivity		
	High	Moderate	Low
High	Major	Major-Moderate	Moderate-Minor
	Adverse/Beneficial*	Adverse/Beneficial*	Adverse/Beneficial
Moderate	Moderate	Moderate-Minor	Minor
	Adverse/Beneficial*	Adverse/Beneficial	Adverse/Beneficial
Low	Moderate-Minor	Minor	Minor-Negligible
	Adverse/Beneficial	Adverse/Beneficial	
Negligible	Negligible	Negligible	Negligible

^{*}These effects are considered significant for the purposes of the EIA Regulations

5.19. The duration of effects will generally be defined as in Table 5.5:

Table 5.5: Duration of Impacts

Duration	Definition
Short Term	The effects would be of short duration and would not last more than 2-
	5 years from the commencement of the works.
Medium Term	The effects would take 5-15 years to be mitigated.
Long Term	The effects would be reasonably mitigated over a long period of time
	(15 years or more).

Cumulative Impacts

- 5.20. Whilst cumulative effects are not defined in the EIA Regulations, it is generally accepted that two types of effects need to be considered:
 - Intra-project effects: combination of individual effects from a development on a particular receptor; and
 - Inter-project effects: effects from other developments which individually might be insignificant, but when considered together could create a significant cumulative effect.

Intra-project effects

5.21. Intra-project effects will be considered as part of the technical assessments and will be outlined as part of the individual ES chapters where relevant.

Inter-project effects

5.22. The first consideration that will be given in relation to inter project effects is the implications of the East Midlands Freeport itself. This area covers three complementary locations: East Midlands Airport and Gateway Industrial Cluster



- (EMAGIC), the redevelopment of the Ratcliffe-on-Soar Power Station site, and the East Midlands Intermodal Park (EMIP) near Derby.
- 5.23. The proposed application site falls within the EMAGIC area. The EMAGIC area includes land within SEGRO's Logistics Park East Midlands Gateway (EMG1) north of the Airport which benefits from approval via a Development Consent Order and has now largely been developed. It also includes two development plots within the Airport boundary itself which would benefit from airport related permitted development rights. Given the relative proximity of these sites and the planning status they have these areas will be considered as part of the cumulative impact assessment of the proposals, specifically with regard to the cumulative impacts of traffic and associated noise/air quality issues.
- 5.24. In respect of the other sites within the Freeport area, namely the Ratcliffe-on-Soar site and EMIP, the principal cumulative impacts would relate to traffic, and therefore these sites are to be included as part of the analysis as part of the Transport Assessment. The traffic modelling will include all planning approvals, commitments and Local Plan allocations within the modelled area together with the draft allocation(s) included within the North West Leicestershire Local Plan Preferred Options document, most notably the proposed new settlement at Isley Woodhouse (Draft Allocation IW1) and housing allocation at Castle Donington (Draft Allocation CD10) amongst numerous other sites.

Structure of the Environmental Statement

- 5.25. The structure of the ES will be as follows:
 - Chapter 1: Introduction
 - Chapter 2: Description of Site and Surroundings;
 - Chapter 3: The Proposed Development;
 - Chapter 4: Planning Policy Context;
 - Chapter 5: Landscape and Visual Impact (including Lighting);
 - Chapter 6: Ecology and Biodiversity;
 - Chapter 7: Traffic and Transportation;
 - Chapter 8: Air Quality;
 - Chapter 9: Noise and Vibration;
 - Chapter 10: Flood Risk, Drainage and Water Quality;
 - Chapter 11: Heritage;
 - Chapter 12: Agricultural and Soils
 - Chapter 13: Climate Change;



- Chapter 14: Socio-Economic Impacts; and
- Chapter 15: Summary and Conclusions.
- 5.26. The technical appendices for the ES will be included in a separate volume identified as the Environment Assessment Technical Appendices and a separate Nontechnical Summary will also be provided.
- 5.27. The following sections of this EIA Scoping Report will identify the aspects of the environment to be considered in the ES (as per chapter headings above). The data required to assess impact and the scope for any mitigation measures will also be discussed.

6. Landscape and Visual Impacts (including Lighting)

Introduction

- 6.1. A Landscape and Visual Impact Assessment (LVIA) will be undertaken by FPCR Environmental and Design Ltd (FPCR). It will establish a baseline for the application site then describe and evaluate the effects of the proposed development on the site and surrounding landscape, as well as the changes to views of the site from its surroundings.
- 6.2. The assessment will consider the various components of the application site as described in Section 3 above.

Scope and Methodology

- 6.3. The proposed scope of the LVIA is as follows:
 - Describe the baseline conditions, the application site and its surroundings covering landscape features, character and value and review the importance within the existing landscape and its sensitivity to change;
 - Assess the landscape character of the application site, its surroundings and context in the wider landscape, predict the landscape effects of the proposed development to assess the likely significance of the landscape effects;
 - Assess the visual amenity of the application site and its surroundings, predict
 the visual effects of the proposed development from identified receptors and
 provide representative viewpoints to assess the significance of the visual
 effects:
 - Review all relevant planning policy and guidance on landscape and visual issues;
 - Identify and evaluate the impacts of the development and provide a mitigation strategy; and
 - · Quantify any residual impacts.
- 6.4. It is also proposed that external lighting will be addressed through this section and will be informed by a detailed lighting assessment prepared by Vanguardia which will form an appendix to Chapter 5 of the ES.
- 6.5. The assessment will be determined both by desktop studies and site visits and will be carried out in accordance with the 'Guidelines for Landscape and Visual Impact Assessment' (2013), published jointly by The Landscape Institute and The Institute of Environmental Management and Assessment.



Baseline Conditions

- 6.6. The preliminary assessment includes a detailed review of the baseline conditions at Section 4 (landscape) and Section 5 (visual) of the report.
- 6.7. In summary, the main site and its immediate context does not lie within a designated landscape or a landscape recognised to be of any identified value or quality. In terms of relevant published landscape character assessments and studies, these typically characterise the wider landscape context of the site as gently rolling with a mix of large-scale developments, transport and other urbanising activities, and more rural uses and features, including parkland areas. Overall existing visibility of the main site is generally concentrated to the south, south-west and west, with visibility from the north, north-west and north-east notably more restricted.
- 6.8. Land included within the order limit boundary at EMG1 is characterised by the existing intermodal rail freight interchange, existing logistics facilities and supporting infrastructure at EMG1.
- 6.9. The LVIA will include land within the application site required for highways works, all of which is currently either within highways ownership, or immediately adjacent to highway infrastructure.

Potential impacts

- 6.10. A preliminary assessment of the likely landscape and visual issues, changes and effects of the future employment development within the main site has been undertaken. A report detailing the findings of this preliminary assessment was submitted with representations to the North West Leicestershire Local Plan Preferred Options consultation in March 2024. A copy of the report is enclosed as Appendix 7 to this EIA Scoping Report.
- 6.11. An assessment of the landscape and visual effects of the proposed development including proposals for the main site, rail freight interchange expansion and highway works has commenced with the following landscape and visual effects considered to be potentially significant:
 - Commencement of the construction period will have an immediate effect on the character of the landscape within the development site;
 - The landscape character and landscape features of the site will change during the construction period due to construction activities on the site including vegetation removal and earthworks;
 - Public footpaths might have to be temporary closed or diverted to facilitate construction activities on the site;



- Construction activities are likely to be seen in different locations of the site at different time and result in visual effects;
- Change to the landscape character and features of the site due to new built development, traffic and lighting;
- Potential adverse visual effects on visual receptors, particularly upon views in close proximity to new built development;
- Potential adverse visual effects (including lighting) arising from the installation of taller gantry cranes and expansion of facilities at the rail freight interchange.

Avoidance or mitigation measures

- 6.12. The development proposals for the main site as detailed in this EIA Scoping Report have evolved through an iterative process with significant input from FPCR to ensure that landscape and visual effects are avoided, minimised and mitigated as appropriate.
- 6.13. In landscape and visual terms, the following design principles or features have been incorporated as part of the proposed development:
 - Establish an extensive and robust landscape framework for the proposed development including a broad landscape area and 'buffer' to Diseworth. This should comprise a cohesive arrangement of strategic landscape and habitat areas and corridors, within which the future buildings and infrastructure would be sited. This will form the landscape and green infrastructure setting to the proposed built development;
 - Include earthworks and mounding proposals that contribute positively towards a robust landscape and mitigation strategy. This is likely to include earthworks and mounding proposals within the southern and western parts of the site to support the mitigation of potential landscape and visual effects upon Diseworth. Allied to the earthworks and mounding proposals will be the inclusion of extensive new woodland, trees and other habitat proposals;
 - The extensive planting and habitat proposals will draw upon relevant guidelines and strategies and will comprise substantially native and suitable locally occurring species. The new planting and habitats will be devised to maximise landscape, visual amenity and biodiversity benefits and to contribute more broadly to the local landscape;
 - Conserve existing hedgerows and trees largely to the perimeter of the site and reinforce this existing planting through new native planting and habitats and long-term management;
 - Retain Hyam's Lane through the scheme as a key public access route and PROW. This should also include the conservation of the existing hedgerows



- and trees along this route where possible and reinforcement with other new native planting and habitats along this corridor;
- Include new public access and associated amenity and informal recreational areas within the 'outer' landscape areas close to Diseworth in the west and south-west of the site. Include other new publicly accessible routes, within and around the site to improve connectivity and offer more walking and/or cycling routes;
- Establish a high-quality landscape treatment to the main vehicular entrances and routes through the site and to the building frontages and surrounds;
- Maximise biodiversity opportunities and wildlife corridors and connections; including attention to the sustainable drainage proposals to deliver landscape and wildlife benefits; and
- Commit to and deliver a long-term landscape and biodiversity management plan.
- 6.14. Where likely significant adverse effects are identified and cannot be avoided or mitigated, additional mitigation measures will be considered.

Anticipated residual effects

- 6.15. In landscape and visual terms, there will inevitably be some notable adverse effects that will arise as a result of the proposed development. Following the mitigation described above, the main residual adverse impacts of the development are considered likely to be:
 - Immediate short-term impacts on landscape character and landscape features resulting from the removal of existing landscape features, earthworks and re-profiling of existing topography, temporary plant and storage areas, construction activities and associated lighting;
 - Immediate short-term visual impacts arising from the gradual appearance of large built structures during construction and the limited initial mitigating effect of new planting;
 - Potential adverse impacts on landscape character and features within the site and its immediate context;
 - Potential adverse visual effects on visual receptors to the south, south-west and west and a number of Public Rights of Way, including those passing through the main site or within its more immediate context to the west and south;
 - Potential localised landscape and green infrastructure benefits, as a result of the extensive new woodland planting and other mixed habitats, new publicly accessible landscape areas in the west of the site, other improved public



- access connections, and through the long-term management of the conserved and new planting and habitats;
- Potential visual effects on visual receptors as a result of the expansion of the rail freight interchange and potential installation of higher rail gantry cranes.

7. Ecology and Biodiversity

Introduction

- 7.1. An assessment of the potential impacts of the development on ecology and biodiversity will be undertaken by FPCR. This will draw on the result of a Preliminary Ecological Assessment (PEA) for the main site and a full suite of protected species surveys.
- 7.2. Further assessments will also be undertaken for land required for highways works, and the EMG1 rail freight expansion land.

Scope and Methodology

- 7.3. The proposed scope of the ecology and biodiversity work is as follows for the application site as a whole:
 - Describe the baseline conditions, the site and its surroundings covering ecological features, designations and quality and review the importance within the existing ecological framework and its sensitivity to change;
 - Assess the ecological character of the site, its surroundings and context in the wider area, predict the ecological effects of the proposed development and assess the significance of these effects;
 - Review all relevant planning policy and guidance on ecology and biodiversity issues:
 - Identify and evaluate the impacts of the development and provide a mitigation strategy including a Biodiversity Net Gain Assessment; and
 - Quantify any residual impacts.
- 7.4. A range of habitat and species surveys have been conducted on the main site in 2022. Some specific surveys will be updated this year on the main site and other targeted surveys completed on the wider highways and EMG1 land. This strategy has been discussed and agreed in principle with NWLDC's ecologist during June 2024.
- 7.5. The following surveys and assessments have been conducted:
 - Desktop data search of statutory and non-statutory designations which may impact the site;
 - Habitats surveys including an extended Phase 1 Habitat Survey and Biodiversity Net Gain Assessment utilising the statutory biodiversity metric calculation tool;



- Protected species surveys including:
 - Badgers;
 - Bats including activity and roosting surveys;
 - Birds including breeding and wintering surveys;
 - Great Crested Newts including the utilisation of Natural England district level licencing;
 - Invertebrates;
 - o Reptiles; and
 - o Riparian mammals including Water Vole and Otters surveys.
- 7.6. If additional data requirements come to light during the above assessment work, additional surveys may be recommended, and any effects assessed.
- 7.7. The chapter will be prepared with reference to the Chartered Institute of Ecology and Environmental Management's (CIEEM) Ecological Impact Assessment Guidelines (CIEEM, 2018). For reasons of clarity and due to the quantity of baseline ecological information collated during the assessment, the detailed methods, results and a full set of associated drawings and figures will be appended to the ES. The chapter will draw upon and summarise these technical appendices.

Baseline conditions

- 7.8. A significant amount of survey work was undertaken on the main site in 2022 and work is currently underway to refresh these surveys. The baseline survey work undertaken to date is summarised in the Summary Note prepared by FPCR in support of representations to the North West Leicestershire Local Plan Preferred Options consultation in March 2024. A copy of the note is enclosed as Appendix 8 to this EIA Scoping Report.
- 7.9. In short, it shows that there are no international or nationally designated sites of nature conservation interest within the search area, that is within 10km and 2km of the main site respectively. There are 23 non-statutory designated sites located within 1km of the main site including an on-site Potential (Historic) LWS, and two candidate LWS adjoining the site boundary.
- 7.10. The main site comprises arable fields, open grassland, ditches, bare ground, areas of scrub and ponds. Hedgerows form an extensive network across the site and link to adjacent further areas of agricultural land surrounding the main site.



- 7.11. Field surveys have highlighted the presence of a typical range of mainly agricultural habitats on the main site. All field compartments are intensively managed and support little of ecological interest. Habitats of local interest include:
 - mature trees, in varying conditions which have potential to support a range of faunal species;
 - species poor hedgerows, which nevertheless comprise a range of native species;
 - wetland features (ponds, ditches and an offsite stream), which although heavily affected by agricultural practices provide habitat diversity and connectivity through the landscape.
- 7.12. Faunal surveys have identified the use of the main site by:
 - badgers;
 - a range of common and widespread bat species typical of the range of habitat present. A single roost has been identified;
 - a range of typical urban edge and farmland bird species that use the site for breeding in small numbers;
 - common toad, common frog, great crested newts and smooth newts are known to use habitats in the vicinity of the site;
 - hedgehog, brown hares, and polecat have been recorded on, or in proximity to the site:
 - no evidence of reptiles, otter or water voles has been identified within the site.
- 7.13. Away from the main site, the application site comprises a range of previously cleared development land and highways infrastructure. The land associated with EMG1 has been subject to earthworks to facilitate that scheme, and as such is generally of limited ecological value. Any areas of green infrastructure affected by this project will be compensated for within the wider landholding associated with EMG2. The highways land included within the scheme is dominated by hard infrastructure and, as such, has negligible ecological value. The verges and associated vegetation are typical of those found across the local highway network, any losses to these through realignment and improvements are likely to be replaced with comparable habitat and the newly created verges. As such, it is unlikely that any additional significant effects will be incurred from the wider site boundary.



Potential impacts

- 7.14. Based on the available baseline information and assessment work undertaken to date, the potential impacts are likely to include:
 - Direct loss of habitats and associated flora and fauna within the DCO boundary limits, interruption of wildlife corridors, decrease in value to wildlife through reduction in species and/or habitats;
 - Indirect effects on retained vegetation within and bordering the site, through increased disturbance and through local changes in soils, drainage and hydrology;
 - Potential effects upon protected species through disturbance;
 - Operational effects such as pollution incidents from chemical spills, pollution of streams and fragile habitats from runoff and incorrect storage of materials;
 - Beneficial effects arising from habitat creation and/or enhancement of landscaping.

Avoidance and mitigation measures

- 7.15. Delivery of the proposals will be undertaken following standard mitigation measures which will be set out in a Framework Construction and Environmental Management Plan (CEMP) which will be submitted with the application. Adherence to the principles established by the CEMP can be secured through the DCO. The CEMP will seek to negate impacts on retained habitats, with additional specific measures employed to avoid harm to protected species which are known to be present on-site or in the vicinity. These could include, but are not limited to:
 - Pollution prevention measures to reduce the risk of accidental pollution, the prevention of siltation of nearby aquatic habitats, potentially affecting water quality, and dust pollution which could affect sensitive flora;
 - Minimise the extent and scale of tree and hedgerow loss where practicable while also ensuring deliverable, operationally efficient development site and associated infrastructure:
 - Protection of retained trees and hedgerows from damage and soil compaction via the maintenance of fenced Root Protection Areas (RPAs) in accordance with BS 5837:2012;
 - Installation of appropriate stand-offs and protection fencing for retained habitats where appropriate;
 - Best practice with regards to vegetation removal for nesting birds, and other species (where necessary), e.g. removal of vegetation outside of the bird nesting season and appropriate licensing from Natural England;



- Avoidance of lighting sensitive habitats during construction and a lighting plan post development.
- 7.16. The development provides opportunities to deliver significant biodiversity benefits, which will be focused in the western section of the main site, and will provide a range of habitats including, scrub, woodland and species rich grassland. These habitats will be of significantly higher value than the arable habitats currently present on the main site.

Anticipated residual impacts

- 7.17. By virtue of the former intensive management of the main site for agriculture, important ecological receptors are limited and the site is largely unremarkable in nature conservation terms.
- 7.18. The main potential residual impacts are likely to be:
 - Short-term adverse impacts on the ecology of the site as a result of the loss
 of species poor hedgerows, which are a habitat of principle importance, the
 loss of field ponds which are a declining habitat in Leicestershire, the loss of
 ditches and the loss of semi-mature trees;
 - Impacts derived from the loss of mature hedgerow trees and associated invertebrate assemblages;
 - Temporary impacts of loss of suitable habitat for GCN;
 - Short-term disturbance of fauna, including badgers, bats, birds and other terrestrial mammals disrupting commuting and foraging habitats, or displacing them from the site in the short-term;
 - Long-term beneficial impacts arising from the provision of new landscaping and habitat creation measures resulting in a minimum of 10% biodiversity net gain (the intention is to deliver as much as possible on-site), including the creation of areas of wetland, grassland, scrub and woodland.

8. Traffic and Transport

Introduction

8.1. This chapter of the ES will be prepared by BWB, supported by iTP on sustainable travel, and will describe the likely significant environmental effects that would be created by the changing transport conditions. It will consider the main modes of travel including the likely development demands on the existing transportation infrastructure for walking, cycling, public transport usage and vehicular traffic.

Scope and Methodology

- 8.2. A full Transport Assessment (TA) will be undertaken in accordance with national guidance and other relevant background documents will be produced to describe access arrangements and demonstrate that the development complies with relevant standards and can be satisfactorily accommodated within the local and strategic highway network.
- 8.3. The TA will also deal with the response of the development proposals to sustainable transport policy. The accessibility of the site by sustainable transport modes, including public transport, cycle and by foot will be analysed. Sustainable transport modes will be identified and quantified. The capacity for increasing non-car borne trips, opportunities for pedestrian access including existing, and potential new, rights of way and opportunities for bus access of the site will be actively considered. A Framework Travel Plan will be prepared and submitted with the DCO application.
- 8.4. The ES will summarise the findings of the TA including the transport baseline position, relevant impacts and mitigation measures and residual impacts and their significance.
- 8.5. The full scope of the TA is being agreed between BWB and a wider Transport Working Group (TWG) which has been set up to consider the transport implications of developments coming forward in the area. The TWG consists of the representatives from the key statutory highway authorities, Leicestershire County Council and National Highways, and the neighbouring authorities including Derbyshire County Council, Nottinghamshire County Council, Leicester City Council, Nottingham City Council and Derby City Council.
- 8.6. BWB has been in detailed discussions with the TWG since April 2022 and will continue to engage to reach agreement with regard to the scope of the transport assessment work and required mitigation measures.
- 8.7. In light of the TA, the ES will assess the impacts recommended by IEMA Guidance for 'Environmental Assessment of Traffic and Movement' in combination with guidance contained within DMRB LA 104 and LA 112. These effects include:



severance, driver delay, non-motorised user delay and amenity, fear and intimidation and road user and pedestrian safety. The development would not give rise to hazardous loads and this has therefore been scoped out of the assessment.

Baseline conditions

Main Site

- 8.8. The main site lies to the south of Ashby Road (A453) with East Midlands Airport beyond. It is located immediately north-west of Junction 23A of the M1 motorway and approximately 3 km south of Junction 24. Access is proposed to be taken from the north off the A453.
- 8.9. The area surrounding the site benefits from an existing network of Public Rights of Way (PRoW) footpaths and bridleways providing connections from Diseworth, Kegworth and Castle Donington, Hemington and Lockington.
- 8.10. Hyam's Lane (PRoW L45) bisects the main site along a north-east to south-west alignment. The route connects to the existing L45 footpath heading north towards EMG1 and Kegworth, and to the south-west the village of Diseworth.
- 8.11. In terms of public transport, there are four existing high frequency bus services which pass the main site; the skylink Express, skylink Nottingham, skylink Derby-Leicester and Airway 9. A fifth bus service, my15, terminates at East Midlands Airport, which is within walking distance of the main site. These services provide bus connectivity between the key settlements of Nottingham, Derby, Ilkeston and Leicester as well as East Midlands Airport, EMG1 and the NET Tram at Clifton Park and Ride. East Midlands Parkway train station is located 5 miles to the north-east with direct trains to Leicester, Loughborough, Derby and Nottingham as well as services outside of the East Midlands to London St Pancras and Sheffield.
- 8.12. A significant amount of strategic modelling has been completed to date. As agreed with the Transport Working Group, the strategic transport impacts of the proposed development have been tested using the East Midlands Freeport Model (EMFM), derived from a cordon of the wider Pan Regional Transport Model (PRTM), managed by AECOM on behalf of Leicestershire County Council.
- 8.13. As set out in the Transport Position Statement submitted with the representation to the North West Leicestershire Local Plan Preferred Options consultation in March 2024 (included as Appendix 9 to this EIA Scoping Report), the modelling work undertaken to date has identified potential for congestion during the peak hours around the strategic roads between M1 Junction 24 and M1 Junction 23A/Finger Farm roundabout.



EMG1 SRFI expansion land

- 8.14. The proposed application site for development consent includes the existing EMG1 rail freight terminal, intermodal facility, adjoining undeveloped land and associated road and utilities infrastructure to the north of East Midlands Airport. The existing facilities are currently access from EMG1 Gyratory on the A453 between M1 Junction 23A and 24.
- 8.15. EMG1 is served by an established network of footway and cycleway links to the surrounding area and villages of Castle Donington and Kegworth. A bus interchange is located at the site entrance and is served by frequent bus services connection EMG1 to Kegworth, Derby, Nottingham, Loughborough, Long Eaton and Leicester.

Potential impacts

- 8.16. Based on the available baseline information and assessment work undertaken to date, the potential impacts are likely to include:
 - Effects of increased traffic due to construction vehicles on the IEMA assessment criteria, including severance, delay, amenity and safety; and
 - Effects of increased, and revised, traffic movements as a result of the proposed development once fully operational on the IEMA assessment criteria, including severance, delay, amenity and safety.

Avoidance and mitigation measures

- 8.17. The construction phase of the proposed development will generate heavy goods vehicle (HGV) movements to and from the site. The most intense construction period in terms of HGV movements will be the earthworks phase. To minimise HGV movements to/from the site, an earthwork strategy will be developed which will seek to achieve a balanced cut and fill thereby resulting in minimal importing and exporting of materials.
- 8.18. In addition, a Construction Environmental Management Plan (CEMP) will be prepared and set out measures to minimise construction traffic impact such as construction traffic routing and hours of operation. A Framework CEMP will be submitted with the DCO application.
- 8.19. Sustainable transport measures will play a key role in minimising traffic generation of the operational development. A Sustainable Transport Strategy and Framework Travel Plan will be submitted with the DCO application. The emerging strategy on sustainable travel is set out in the Sustainable Travel Strategy that was submitted with the representations to the North West Leicestershire Preferred Options consultation and is included as Appendix 10 to this EIA Scoping Report. The strategy follows the success of the existing EMG1 development, which has achieved



a significant modal shift away from private car travel. Key elements of the strategy are:

- Integration of the EMG2 site and its occupiers into the EMG1 Sustainable Transport Working Group;
- Inclusion of a new bus interchange at the entrance to the main site to be served by existing high-frequency bus services;
- An electric shuttle bus connecting the bus interchange with stops along the main estate road to make it quick and easy to reach the employment units;
- Implementation of other Travel Plan measures including an expansion of the existing EMG1 car share platform;
- Improvements to existing pedestrian/cycle routes and provision of safe and convenient pedestrian/cycle routes as part of the development.
- 8.20. BWB has already completed a significant amount of strategic and detailed transport modelling work to understand the impacts of the development on the surrounding highway network. Highway mitigation will be required and potential options for highway improvements to the wider network are being developed which will be subject to modelling and assessment, safety audits and agreement with highways authorities.

Anticipated residual impacts

8.21. The proposed development is expected to result in potential residual impacts on the surrounding local and strategic highway network as a result of development traffic with potential effects on severance, driver delay, pedestrian amenity and delay, fear and intimidation and accidents and safety. The Transport chapter will quantify these and assess their impacts in detail.



9. Air Quality

Introduction

9.1. An assessment will be undertaken by Vanguardia of the likely significant effects on air quality, construction phase dust, and operational phase road traffic emissions on relevant receptors.

Scope and Methodology

- 9.2. The assessment will focus on air pollutants that are likely to arise from the construction and occupation of the proposed development. These pollutants are oxides of nitrogen (NO_x), nitrogen dioxide (NO₂), particulate matter in the 10 μm and 2.5 μm size fractions (PM₁₀ and PM_{2.5}) and dust for human and ecological receptors and nitrogen deposition (N) for ecological receptors.
- 9.3. The assessment will have regard to air quality impacts of nearby uses (including operations at East Midlands Airport, the EMG1 and Junction 23A Donington Services) and suitability of the site for the development proposed in light of these.
- 9.4. The Department for Environment, Food and Rural Affairs (DEFRA) background mapping website will be utilised to provide background, NO_x, NO₂, PM₁₀, and PM_{2.5} concentrations.
- 9.5. To identify any sensitive ecological designated sites, a review of the DEFRA Magic Map website and the UK Air Pollution Information System (APIS) website will be undertaken.
- 9.6. Air quality at specified receptor locations will be predicted using ADMS-Roads (v5.0.1.3) dispersion modelling software.
- 9.7. The assessment will be prepared in accordance with the Institute of Air Quality Management (IAQM) (2024) *Guidance on the assessment of dust from demolition and construction* document and Environmental Protection UK (EPUK) & IAQM (2017) *Land-Use Planning & Development Control: Planning for Air Quality* quidance.
- 9.8. General mitigation measures for managing the effect of traffic generated by the proposed development on local air quality will be outlined in accordance with local and national planning policy and guidance.



Baseline conditions

- 9.9. There are two Air Quality Management Areas (AQMAs) located in different parts of North West Leicestershire District, both declared for exceedances of the NO₂ annual mean objective; High Street/Bondgate in Castle Donington and Copt Oak Road in Copt Oak.
- 9.10. The existing baseline concentrations of nitrogen dioxide (NO₂), Particulate Matter 10 µm and 2.5 µm size fractions (PM₁₀ and PM_{2.5}) in the vicinity of the site have been assessed using the monitoring data in the local authority air quality review assessment reports, and specific site monitoring. The scope for site specific monitoring was agreed by Vanguardia with the Environmental Health Officer at North West Leicestershire District Council (NWLDC) in 2022 and monitoring was subsequently undertaken with additional monitoring currently under way.

Potential Impacts

- 9.11. Based on the available baseline information and assessment work undertaken to date, the potential impacts are likely to include:
 - Potential dust emissions during the construction phase arising from earthworks including ground clearance and excavation, from construction activities such as concrete batching, sandblasting and piling and handling of construction materials and stockpiles, and trackout from construction traffic;
 - Potential change in emissions as a result of the operational phase of the development due to changes in traffic movement;
 - Potential change in emissions as a result of the operation of the improved/expanded rail freight interchange.
- 9.12. As set out at Section 3 and 4, the DCO boundary limits include three distinct elements to the development that may differ in their impacts and may therefore have to be considered separately.

Avoidance and mitigation measures

- 9.13. The main impact during construction will arise from site activities that generate dust which can be controlled by best practice dust management measures, as well as emissions from construction vehicles on the local highway network.
- 9.14. A number of highway improvements will be required to create additional capacity and thereby alleviate congestion and aid a reduction in vehicle emissions. A comprehensive Sustainable Travel Strategy will also be implemented to encourage the use of sustainable modes of transport to travel to the development and minimise private vehicle car trips.



Anticipated residual impacts

- 9.15. The main residual impacts are likely to be:
 - Short-term temporary impacts on air quality from site operations;
 - Long-term increase in vehicles travelling to and from the site resulting in an increase in vehicle emissions.
- 9.16. The Air Quality chapter will quantify these and assess their impacts in detail.

10. Noise and Vibration

Introduction

10.1. This chapter of the ES will be prepared by Vanguardia and will consider the potential noise and vibration impacts associated with both the construction and operation of the proposed development.

Scope and Methodology

- 10.2. The proposed development has the potential to generate noise from the following sources, all of which will be considered as part of the assessment:
 - Construction of buildings and associated infrastructure and landscaping and the alterations to the intermodal rail freight facility at EMG1;
 - Changes in road traffic flows on the road network around the proposed development and junctions affected by the proposed works, associated with both the construction and operational phases;
 - Operational activity taking place both within the main site and due to the
 alterations to the intermodal rail freight facility at EMG1, primarily associated
 with the use of heavy goods vehicles (HGVs) manoeuvring and
 loading/unloading, and the stacking and movement of containers; and
 - Operation of fixed plant associated with the proposed buildings.
- 10.3. The noise assessment will include the following:
 - An assessment of potential noise impacts from construction processes in accordance with the guidance set out within in BS 5228-1:2009+A1:2014 and ISO 9613-2:1996 using industry recognised noise modelling software. Construction noise levels will be predicted for the day, evening and/or nighttime periods as appropriate;
 - An assessment of change in road traffic noise as a result of the construction traffic on the road network around the proposed development following the principles of the methodology described in document LA 111, part of the Design Manual for Roads and Bridges (DMRB);
 - An assessment of changes in road traffic noise as a result of developmentgenerated traffic as well as the junctions affected by the proposed works, using the methodology set out in the Calculation of Road Traffic Noise (CRTN) and undertaken with the noise modelling software IMMI. The assessment will draw upon, as appropriate, the principles of the approach set out in the Design Manual for Roads and Bridges;



- Operational noise generated by the proposed development, primarily as a
 result of heavy goods vehicle movements, loading activities within the main
 site's boundary and relevant activities within the area relating to the
 alterations at the EMG1 intermodal rail freight facility, will be assessed taking
 into account both the existing noise climate at the noise-sensitive receptors
 around the site and the context including the absolute level of sound i.e.
 following the principles of BS 4142:2014+A1:2019;
- Consideration of noise from the operational phase including fixed plant, such as building services plant; and
- Description of any necessary outline mitigation measures to meet national and local policy requirements.
- 10.4. Regarding vibration, it is possible that there may be some associated effects during the construction phase from certain activities, but no significant vibration is anticipated from operation of the proposed development. Therefore, consideration of operational effects is to be scoped out of the assessment.
- 10.5. Of the likely construction activities to be undertaken, only piling and vibratory ground compaction has been identified as having the potential to generate levels of vibration that could adversely affect nearby receptors. Potential levels of vibration will be considered based on the measured data provided in the British Standard BS 5228-2:2009+A1:2014.
- 10.6. To identify the relevant sensitive receptors for the assessment, a review was undertaken of the area surrounding the proposed development. Most of the noise and vibration sources associated with the development are located within the main site or within the area relating to the alterations at the EMG1 intermodal rail freight facility and therefore the relevant receptors are around the site boundary. The nearest existing noise sensitive receptors are a mix of residential dwellings and hotels. The receptors are located on all sides of the proposed development site. Increases in road traffic noise and junctions affected by the proposed works may impact receptors further from the site, along the roads used by the additional vehicles. These receptors will be identified once detailed traffic information becomes available.
- 10.7. Consultation was undertaken with North West Leicestershire District Council's environmental health team regarding the proposed methodology for baseline survey and receptor locations in May 2022 in relation to the main site. A plan showing the agreed locations is attached to the EIA Scoping Report as Appendix 11.



Baseline conditions

- 10.8. To characterise and quantify the existing baseline noise environment in the areas around the main site, noise surveys were undertaken in May 2022 and validation measurements are being undertaken in 2024. If required, further validation monitoring will be undertaken to address additional receptors for the alterations to the intermodal rail freight facility at EMG1 and junctions affects by the proposed works. The approach to the additional monitoring will be discussed and agreed with NWLDC.
- 10.9. The noise surveys undertaken in 2022 identified that the main existing noise sources affecting the site are road traffic noise on the A453, A42 and M1, aircraft activity associated with the operation of East Midlands Airport, and noise from the service station.
- 10.10. As there are no existing sources of vibration in close proximity to the main site, it is not proposed to undertake a baseline vibration survey.
- 10.11. The noise environment at the EMG1 rail freight interchange is characterised by road traffic noise and operational sounds of the rail freight interchange including the loading and unloading of freight from road to rail and associated traffic and train movements.

Potential Impacts

- 10.12. Based on the available baseline information and assessment work undertaken to date, the potential impacts are likely to include:
 - Increase in noise and vibration during construction, particularly during periods of earthworks and construction of site infrastructure;
 - Increase in noise caused by construction traffic travelling to and from the site;
 - Potential change in road traffic noise as a result of increased traffic generated by the operational development using the local and strategic road network;
 - Operational sounds impacting on nearby sensitive receptors. The likely sources of noise are: noise from building services plant (BSP) and HGVs manoeuvring, parking and docking;
 - Changes in operational noise at the rail freight interchange and from freight trains as a result of the increased handling capacity.

Avoidance and mitigation measures

10.13. There are typically three opportunities to reduce noise levels: at source, between the source and the receptor, and/or at the receptor.



- 10.14. With regard to the construction phase of the development, the main means of mitigation will be to reduce noise levels at source, i.e. at the construction site through best practice measures such as:
 - Ensuring the use of quiet working methods, the most suitable plant and reasonable hours of working for noisy operations, where reasonably practicable;
 - Locating noisy plant and equipment as far away from sensitive receptors as reasonably possible and, where practical, carry out loading and unloading in areas away from sensitive receptors;
 - Screening plant to reduce noise which cannot be reduced by increasing the distance between the source and the receiver.
- 10.15. A Framework CEMP will be submitted with the DCO application and measures to control construction noise can be secured through the DCO consent.
- 10.16. In respect of the operational phase of the development, the consideration of noise mitigation has formed an integral element in the development of the Parameters Plan. On the main site, a significant landscaping buffer including bunding is proposed which in addition to ecology and landscape/visual mitigation also performs a noise mitigation purpose. Good acoustic design will be employed when considering the detailed design and layout of facilities on the site to ensure, for example, that service yards are located to face away from noise sensitive receptors wherever possible. Plant noise limits will also be proposed where required.

Anticipated residual impacts

- 10.17. The construction phase of the proposed development has the potential to generate adverse noise and vibration impacts, which would be temporary in nature and would be intermittent depending on the construction activities.
- 10.18. The main residual impacts of the operational phase of the development are likely to be:
 - Potential adverse impact from noise arising from development road traffic and the junctions affected by the proposed highway works; and
 - Operational noise effects on sensitive receptors arising from on-site activities at the main site and relating to alterations to the intermodal rail freight facility at EMG1, although these are not expected to be significant given embedded mitigation and implementation of suitable measures to control noise emissions.
- 10.19. The Noise chapter will quantify these and assess their impacts in detail.



11. Flood Risk and Drainage

Introduction

11.1. The potential impacts of the development in terms of flood risk and drainage will be undertaken by BWB. This will draw on the outcomes of a Flood Risk Assessment (FRA), Sustainable Drainage Statement (SDS), and Ground Conditions Report which will be included as appendices to the ES.

Scope and methodology

- 11.2. In 2022, extensive consultation was undertaken with Leicestershire County Council (LCC) as the Lead Local Flood Authority (LLFA), the Environment Agency (EA) and Severn Trent Water (STW) in order to agree the scope and methodology of assessing flood risk and drainage issue in relation to the main site. The outcomes of these discussions and assessment work to date are set out in a Summary Note on Flood Risk and Drainage submitted with the representations to the North West Leicestershire Local Plan Preferred Options consultation in March 2024. A copy of the summary note is enclosed as Appendix 12 to this EIA Scoping Report.
- 11.3. Based on the previous scoping discussions, it is envisaged that this chapter of the ES will assess the potential direct and indirect effects of the development on flood risk and drainage during the construction and operational phase. This will include consideration of:
 - Flood risk to the surrounding area, including the nearby villages of Diseworth and Long Whatton;
 - Surface water runoff quantity from the main site and alterations to the intermodal rail freight terminal;
 - Surface water runoff quality from the site and alterations to the intermodal rail freight terminal;
 - Change in the quality of runoff to groundwater receptors; and
 - Capacity of the local foul water sewer network for receiving additional flows.
- 11.4. The above matters will be assessed through a FRA, a Drainage Report and a Ground Conditions Report which will provide details on:
 - Flood risk to the main site within the Long Whatton and Diseworth Brook catchment from fluvial, pluvial, and sewer sources using the integrated LLFA hydraulic model;
 - Flood risk to the wider highway works in the River Trent and Lockington Brook catchments using EA hydraulic river models;



- Flood risk to the site from other potential sources including groundwater, canals, reservoirs, and large waterbodies using national datasets prepared by the LLFA and EA alongside site-specific ground investigations;
- Identification of any necessary measures to reduce flood risk to the proposed development, and prevent a detrimental impact on flood risk within the wider area;
- The existing surface water drainage regimes on the site, and the proposed strategy to manage surface water runoff from the completed development in terms of quantity and quality, including the use of Sustainable Drainage Systems (SuDS); and
- The strategy to drain foul water flows from the proposed development.

Baseline conditions

Main Site

- 11.5. The main site is located within Flood Zone 1 according to the EA Flood Map for Planning, which is defined as land at a low probability of flooding from rivers or seas. The Hall Brook flows along a portion of the western boundary before flowing in a south-westerly direction to its confluence with the Diseworth Brook, approximately 500m southwest of the site. A minor watercourse and series of field ditches are present in the south-east corner of the site. These exit the site via a piped outfall (500mm diameter) to a larger pipe system (525mm to a 700mm diameter) which runs alongside the A42 and outfalls to the Diseworth Brook beneath the A42 road bridge.
- 11.6. A public surface water sewer is also present in the east of the main site. This runs in parallel to the piped watercourse between the Donington Park Services and the Diseworth Brook, outfalling just upstream of the A42 culvert. A public foul water rising main is shown to flow along Hyam's Lane in a north-easterly direction.
- 11.7. The main site falls across two topographical catchments roughly separated by Hyam's Lane. The northern catchment falls in a westerly direction and towards the Hall Brook, the southern catchment falls in a south-easterly direction and towards the Diseworth Brook.
- 11.8. The nearby villages of Diseworth and Long Whatton have experienced numerous recent flood events. These events prompted Leicestershire County Council (LCC) to commission the production of the Long Whatton and Diseworth Flood Risk Mitigation and Resilience Study, with an accompanying Integrated Catchment Model.
- 11.9. LCC provided a copy of the hydraulic model to allow assessment of flood risk at the site. The model was updated to include additional site-specific detail from the



- topographical survey of the main site as well as a CCTV survey of the public sewer and piped watercourse in the east of the site.
- 11.10. The hydraulic modelling has shown that the Hall Brook floodplain is contained to its channel next to the site during all modelled events, confirming that the site is at a low fluvial flood risk. Additionally, the local public sewer network and the EMIA drainage is not predicted to affect the site.
- 11.11. The modelling has identified that, in the 1 in 100-year storm event and above, there is the potential for surface water overland flow pathways to form over the site. However, these are generally relatively shallow and are a product of runoff from within the site itself, rather than being driven by runoff from upstream third-party land.

Highways works, and EMG1 SRFI expansion land

- 11.12. The land required for potential alterations to the EMG1 intermodal rail freight terminal and most of the land identified for potential highway improvements also fall within Flood Zone 1.
- 11.13. However, a length of the westbound A50 slip road to the west of the M1 is located within Flood Zone 2, which is associated with the Lockington Brook. This designated does not appear to reflect the elevated nature of the road, which is situated upon an embankment in this location.
- 11.14. Also, a length of the southbound A50 slip road, to the east of the M1, is located within Flood Zone 3 of the River Trent. This designation also does not appear to reflect the elevated nature of the road, which is situated upon an embankment in this location.
- 11.15. Assessments will also be undertaken for these areas as part of the application.

Potential Impacts

- 11.16. Based on the available baseline information and assessment work undertaken to date, the potential impacts are likely to include:
 - Construction activity such as the stripping of topsoil and movement of construction vehicles could lead to additional surface compaction increasing the rate and volume of surface water runoff;
 - Water pollution during the construction period from suspended solids, oils and hydrocarbons, concrete and cement products, metals, sewage and other pollutants and hazardous materials generated during the construction process;



- Potential impact on the existing public sewer network in terms of additional foul flows entering the network;
- Potential for silt-laden surface water run-off from hardstanding areas and oil/chemical contamination to enter surface water drainage systems and ultimately receiving watercourse;
- Potential increased in runoff volumes and rates impacting flood risk to the village of Diseworth and Long Whatton.

Avoidance and mitigation measures

- 11.17. The minor flood risk posed by the shallow surface water runoff on the main site will be addressed through the implementation of a surface water drainage strategy. The drainage strategy will be designed to intercept and store rainwater falling on the development, before discharging it to the local watercourse at the equivalent annual average runoff rate. In a typical rainfall event, this will mimic the existing runoff rate from the site, but in larger storm events this will represent a reduction in runoff, thereby providing a reduction in downstream flood risk. Therefore, there is expected to be no detrimental impacts on flood risk within Diseworth or Long Whatton.
- 11.18. Additionally, the drainage scheme will be designed to direct all surface water from the development (both during construction and operation) to a minor watercourse located in the south-eastern corner of the main site, this means that all surface water runoff from the development will be discharged downstream of the village of Diseworth. This is expected to offer a minor betterment to the existing flood risk within Diseworth.
- 11.19. The drainage scheme will be designed to provide treatment to the surface water runoff from the development, which is currently envisaged to comprise a series of cascading swales and basins along the western and southern boundaries as part of the embedded mitigation. Additional treatment facilities, such as on-plot basins, storm fencing and flocculants, will also be provided.
- 11.20. The wider highway improvement works are expected to largely occur outside or above the design floodplain. However, should a potential loss of floodplain be identified through the design process, then appropriate floodplain compensatory storage will be added to the scheme to ensure that there is no detrimental loss in floodplain.
- 11.21. It is expected that the highways design for the wider highway works will integrate with the existing highways drainage system, but if it is found necessary new drainage infrastructure will be proposed as part of the design process.
- 11.22. Similarly, the proposed expansion of the EMG1 intermodal terminal will also be assessed with regard to additional surface water run-off and appropriate drainage capacity or integration with existing infrastructure will form part of the design.



11.23. A Framework Construction and Environmental Management Plan (CEMP) will be produced and submitted with the DCO application. The document will include a Surface Water Management Plan and set out measures to protect the water environment during construction.

Anticipated residual impacts

- 11.24. Through effective mitigation, including production of a CEMP and good construction processes, the impact on flood risk and drainage during construction will be minimised.
- 11.25. The main residual impacts of the development are likely to be:
 - Short-term impact on the surface water quality and the capacity of the local foul network;
 - Long-term beneficial impact to flood risk to the village of Diseworth arising from the redirection of surface water runoff from the main site.

12. Heritage and Archaeology

Introduction

12.1. An assessment will be undertaken by RPS of the potential significant effects of the proposed development on cultural heritage assets. This will include an assessment of the potential built heritage impacts, and an assessment of previously unrecorded archaeological remains within the application site, drawing upon a desk-based assessment and the result of a detailed programme of archaeological evaluation.

Scope and methodology

- 12.2. A built heritage statement (BHS) will be prepared in accordance with national and local planning policy and the relevant guidance provided by Historic England (most particularly GPA3: The Setting of Heritage Assets 2nd edition, December 2017).
- 12.3. An archaeological desk-based assessment (DBA) will be prepared in accordance with national and local planning policy and the Standard and Guidance prepared by the Chartered Institute for Archaeologists (Standard and Guidance for Historic Environment Desk Based Assessment 2014 updated 2020). The DBA will be supported by a programme of archaeological evaluation, consisting of a geophysical survey and trial trenching.
- 12.4. Based on these reports, which will be appended to the ES, the heritage chapter of the ES will assess the potential significant effects of the proposed development on cultural heritage assets. It will include:
 - A review of national, regional and local archives and sources of information;
 - A site survey and walkover survey;
 - Geophysical survey and trial trenching investigations;
 - The identification of any known heritage assets that may be directly or indirectly affected by the development and an assessment of their significance;
 - An assessment of the potential for other heritage assets to exist; and
 - Recommendations for further post determination evaluation and/or mitigation if appropriate.



Baseline conditions

- 12.5. An initial built heritage and archaeological assessment has been prepared by RPS for the main site. The archaeological assessment was informed by evaluation fieldwork comprising a geophysical survey undertaken in May 2022 followed by an extensive programme of field-walking, geoarchaeological assessment and trial trenching undertaken between September and November 2022. The findings of the initial assessments are summarised in a Heritage Position Statement, which was submitted with the representations to the North West Leicestershire Local Plan Preferred Options consultation in March 2024. A copy of the Heritage Position Statement is appended to this EIA Scoping Report at Appendix 13.
- 12.6. It shows that the main site does not contain any designated heritage assets. In terms of the wider landscape, the Scheduled Monuments of The Moated Site with Fish Ponds and Flood Banks at Long Whatton both lie approximately 1.2km to the southeast of the main site.
- 12.7. The historic core of Diseworth, located circa 100m to the south-west of the main site, is designated as a Conservation Area and includes 22 listed buildings, of which the Church of St. Michael and All Angels is Grade II* Listed, while the remaining designated structures are Grade II Listed. The Grade I Church of St Mary and St Hardulph in Breedon-on-the-Hill, is located 5km to the west of the site.
- 12.8. In terms of other designated heritage assets, there are no World Heritage Sites, Registered Parks and Gardens, Historic Battlefields, or Historic Wreck Sites within a 2km radius of the main site.
- 12.9. The archaeological investigations undertaken to date show that the earliest archaeological features recorded on the main site are pits and ditches of Iron Age or Roman date, with such features principally concentrated in two areas: immediately north of Hyam's Lane in the centre of the site; and in proximity to the south of Hyam's Lane at the western edge of the site. Limited features of a similar date were found in the western part of the main site, while the remaining features encountered across the main site were dated to the Post-Medieval or Modern periods and considered of limited interest. The geoarchaeological assessment did not identify any deposits of significance.
- 12.10. Within the rail freight terminal, previous investigations were undertaken as part of the EMG1 DCO application and, post-consent, all relevant archaeological features of interest have been recorded or preserved in situ. The evidence which underpinned the EMG1 SRFI site, and the works undertaken since, mean there are no heritage constraints or assets within the area now proposed for expansion.



12.11. The baseline conditions for land included for potential improvements to the wider highway network will be assessed as part of the ES, with an expectation that given the nature of most of that land, and its relationship with existing highways infrastructure, there is likely to be little if any archaeology of note. As a result, it is expected this will be a desk-based assessment.

Potential Impacts

- 12.12. Based on the available baseline information and assessment work undertaken to date, the potential impacts are likely to include:
 - During the construction phase, the earthworks and excavations for foundations, landscaping and ancillary works would affect and result in the potential loss of below ground archaeology;
 - Proposed development could result in direct and indirect effects on the setting of heritage assets.

Avoidance and mitigation measures

- 12.13. In respect of archaeology, the initial archaeological assessment has recommended the implementation of a further programme of targeted archaeological investigations on the main site (i.e. in respect of the identified Iron Age and Roman archaeological features). This can be secured through the DCO via conditions.
- 12.14. Impacts of the proposed development on built heritage are to be addressed through embedded mitigation in the form of the proposed landscaping buffer and extensive bunding, and the retention of Hyam's Lane in its existing form.

Anticipated residual impacts

- 12.15. The proposed development will result in the physical loss of buried archaeological remains during the construction phase which would be off set through their preservation by record.
- 12.16. In terms of built heritage, the following main residual impacts are anticipated.
 - Alteration to views of the spire of the Church of St. Michael and all Angels with the introduction of large-scale built form into the Church's wider setting;
 - Proposed development is expected to diminish some of the rural setting of the Church and reduce the ability to appreciate its architectural interest from the application site and from within the wider rural surrounds;
 - The rural approach to the Diseworth Conservation Area will be changed from the north-east and the proposals will also affect views from and to the Conservation Area and in parts of the wider landscape resulting in the alteration of an element of its rural setting.



13. Agriculture and Soils

Introduction

13.1. This chapter of the ES will be prepared by Land Research Associates Ltd (LRA) and will assess the impact of the proposed development on agricultural and soils.

Scope and methodology

- 13.2. The impact on the following environmental considerations will be assessed:
 - Soil resources all natural soils are a finite resource, but their quality as a resource for re-use varies;
 - Agricultural land quality best and most versatile agricultural land is considered to be a finite national resource and is given special consideration in national policy;
 - Agricultural land users the main site is currently in arable use and the impact on the agricultural business operating on the land need to be considered.
- 13.3. The assessment of the agricultural land quality will be based on the impact magnitudes for loss of best and most versatile land set out in the Technical Information Note 049 (TIN049), published by Natural England to provide general guidance, and consultation thresholds.

Baseline conditions

- 13.4. A soil resources and agricultural land quality survey of the main site was undertaken by LRA in December 2022.
- 13.5. This showed that the main site is underlain by a mixture of coarse loams and fine loams over slowly permeable clay, giving land of grade 1, 2, subgrade 3a and subgrade 3b agricultural quality. The land is predominantly limited by wetness/workability constraints.
- 13.6. Neither the EMG1 SRFI expansion land, nor the potential improvements to the wider highway network, will have any additional impact on agricultural land.

Soil resources

13.7. The main site has three main soil types: coarse loams; loamy over slowly permeable soils; and heavy slowly permeable soils. The coarse loamy soils comprise sandy loam topsoil and subsoil that overlie clay at depth and are moderately-freely to imperfectly draining. The loamy and heavy slowly permeable soils overlie reddish dense clay at shallower depth and tend to be less well draining (imperfectly to poorly draining).



Agricultural land quality

13.8. The agricultural quality of the land is a combination of grades 1, 2, subgrade 3a and subgrade 3b. The land is predominantly limited by wetness and workability constraints. The better draining land where coarse loams and fine loams have clay at depth gives 35.2 ha of higher quality agricultural land, best and most versatile land (grade 1-subgrade 3a). The heavy soils directly over slowly permeable clays gives 64.2 ha of poorly draining land of subgrade 3b agricultural quality.

Potential Impacts

- 13.9. Based on the available baseline information and assessment work undertaken to date, the potential impacts are likely to include:
 - Potentially loss or damage of soil resources as a result of topsoil stripping and stockpiling during the construction process;
 - Permanent loss of best and most versatile agricultural land as a result of the proposed development;

Avoidance and mitigation measures

- 13.10. There is no mitigation possible to offset or minimise the loss of agricultural land for built development.
- 13.11. With regard to soil resources, the main mitigation measures will be the implementation of a Soil Management Plan in accordance with the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites.

Anticipated residual impacts

13.12. The development will result in the permanent loss of some best and most versatile agricultural land.



14. Climate Change

Introduction

14.1. The climate change assessment will determine the potential effects of the development on climate change (i.e. through the assessment of greenhouse gas emissions), in addition to identifying any risks climate change may pose on the development.

Scope and methodology

- 14.2. It is acknowledged that the development will give rise to greenhouse gas emissions both during the construction and operation of the development. During the construction phase, greenhouse gas emissions arise from embodied caron in the construction materials used for the development, construction traffic, and the use of energy and fuel during the construction process. Post construction, during the operational phase, greenhouse gas emissions are generated by the operation of the buildings (energy and fuel used) and by development traffic.
- 14.3. Construction phase emissions will be calculated based on published lifecycle assessment data for materials used in the development's design (where available), and estimates of direct emissions from the use of onsite construction plant and construction traffic. Operational phase emissions will be calculated by scaling operational energy consumption and vehicle movements (informed by an Energy Strategy and traffic modelling, respectively) by applicable emissions factors published by the Department for Energy Security and Net Zero, and the Department for Business, Energy and Industrial Strategy.
- 14.4. Alongside the assessment of emissions, a risk assessment of the impact of climatic changes on the proposed development will also be undertaken. This will identify any potentially significant risks and relevant mitigation measures. Further, assessment of in-combination climate impacts will be included within individual chapters where relevant, i.e. where climatic changes could modify the proposed development's other environmental impacts.

Baseline conditions

- 14.5. The main site currently comprises undeveloped arable land with hedgerows and trees dividing the various fields. The current climatic conditions baseline will be established by meteorological records for the area of the development.
- 14.6. The future baseline GHG emissions for existing land-use without the proposed development are expected to remain similar, with a decrease in agriculture-related emissions over time in line with the UK's national climate change policies. The potential future climatic baseline will be considered using the 'UKCP18' projections



published by the Met Office Hadley Centre (MOHC), which encompass the potential climatic outcomes in the UK from a range of potential global emissions and climate change scenarios.

Potential Impacts

- 14.7. Any new development will effectively add to the resource/energy consumption and associated emissions originating from construction activity and operation of the proposed development and associated traffic movements, particularly on the main site as the baseline is currently a greenfield site. Potential impacts are likely to include:
 - Greenhouse gas emissions generated by construction traffic, the use of energy and resources during the construction process and the embodied carbon in the construction materials used for the development;
 - Greenhouse gas emissions from operational energy use and vehicle emissions.

Avoidance and mitigation measures

- 14.8. To address the potential climate change impacts, the proposed development will incorporate the following mitigation measures:
 - Design of buildings that consider energy efficiency, low carbon and renewable energy measures, rooted in the 'net zero carbon' policy agenda;
 - Implementation of Sustainable Travel Strategy to reduce greenhouse gas emissions resulting from development traffic movements;
 - Implementation of a Resource Management Plan to consider the use of recycled materials and lower carbon alternatives.

Anticipated residual impacts

- 14.9. Following the implementation of the above mitigation measures, the following residual impacts are anticipated:
 - Residual greenhouse gas emissions generated by construction traffic, the
 use of energy and resources during the construction process and the
 embodied carbon in the construction materials used for the development.
 - Although not expected to be significant given the avoidance and mitigation measures described above, the operational phase of the development will result in residual greenhouse gas emissions from operational energy use and vehicle emissions.



14.10.	The Climate Change chapter will seek to quantify their impacts where feasible, and assess their impacts commensurate to the 'outline' nature of the proposals.

15. Socio-Economic Effects

Introduction

15.1. This chapter of the ES will be prepared by Savills and will consider the socioeconomic effects of the proposed development.

Scope and methodology

- 15.2. The socio-economic effects of the proposed development will be considered in the context of the Freeport designation, and with reference to construction and operational jobs creation, skills and training, and provision of new floorspace for industrial and logistics businesses.
- 15.3. The assessment will comprise the following components:
 - Review of existing planning policy and other relevant strategies focusing on socio-economic issues;
 - Assessment of baseline socio-economic conditions in the area;
 - Consideration of economic impacts of the proposed development; and
 - Assessment of the potential impacts on the socio-economic characteristics of the area.
- 15.4. The assessment will be informed by a review of information available from the Council website and the evidence base for the Local Plan. It will draw upon information provided by the applicant on the capital costs of the development, job creation and readily available information in relation to the Freeport and its expected benefits.
- 15.5. The assessment will be aligned with relevant local and national guidance, including the Homes & Communities Agency (HCA, now Homes England) Employment Density Guide (2015, 3rd Edition) and the Additionality Guide (2014, 4th Edition). In line with the guidance, the assessment will consider the net additional impact of the proposed development relative to a reference case, the site in its existing use, and will take into account leakage, displacement and multiplier effects.
- 15.6. The assessment will examine the baseline conditions in relation to population data, economic activity, employment rates, skills and occupational level, and earnings.
- 15.7. For the purpose of the assessment, the primary study area is North West Leicestershire (NWL). However, the proposed development is anticipated to result in impacts on socio-economic receptors across a wider geographical area extending beyond NWL. The relevant geographical scope for each socio-economic receptor will therefore be defined with reference to planning policy evidence base and



technical reports prepared as part of the DCO application.

Baseline conditions

- 15.8. Significant new job opportunities have been generated in North West Leicestershire in recent years, a large proportion of which have been at East Midlands Gateway, providing employment for residents of North West Leicestershire and the adjoining districts and cities. The Office for National Statistics (ONS) data from the Annual Population Survey (APS) estimates that as of December 2023, 80.1% of NWL's working age population (16-64 years old) was employed. This is higher than in the East Midlands (75.5%) and Great Britain (75.8%). According to the ONS's 2023 Business Register & Employment Survey (BRES) the 'transportation and storage' sector was the largest employer in the district, providing employment to 17,000 people, or 23.6% of the workforce (compared to 6.4% in the East Midlands and 5.0% in Great Britain).
- 15.9. NWL has experienced a fast growth in population, at a rate of 1.3% per annum on average between 2012 and 2021 (latest year in the time series from the ONS), which is around twice as fast as the averages for the region (0.76%) and Great Britain (0.58%). NWL's population is projected to increase significantly and new employment developments are required to balance job and housing growth.
- 15.10. Raising aspirations, educational attainment and skills are important priorities as North West Leicestershire still has a high proportion of people with few or no qualifications and a large proportion of residents in low skilled occupations, though lower than the regional or national averages.
- 15.11. In March 2022, the Government announced the designation of Freeport status to the areas around, and linked to, East Midlands Airport. East Midlands Freeport is the only inland Freeport in England and will create a globally connected, world-leading advanced manufacturing and logistics hub at the heart of the UK. The spatial extent of the East Midlands Freeport covers three complementary locations, East Midlands Airport and Gateway Industrial Cluster (EMAGIC), Uniper's Ratcliffe-on-Soar site, and the East Midlands Intermodal Park (EMIP). The majority of the site falls within the EMAGIC area as shown on the map included as Appendix 2.
- 15.12. The East Midlands Freeport offers unique opportunities for new high-value, low carbon investment. With Net Zero, skills and innovation at its core, the Freeport is forecast to create thousands of new jobs in the region over the next 30 years and deliver £8.4 billion net additional gross added value to the UK economy.
- 15.13. The project will make a major contribution to delivering the outcomes of the East Midlands Freeport. It will contribute to the objectives of the Midlands Engine and will be a significant component of the Leicestershire International Gateway.



Potential Impacts

- 15.14. Based on the available baseline information and assessment work undertaken to date, the potential impacts are likely to include:
 - Short-term economic benefits arising from the construction of the proposed development including the creation of a significant number of job opportunities directly on site and indirectly in the supply chain through significant investment and wider effects from construction spending;
 - Medium to long-term beneficial impacts on the economy as a result of the substantial number of permanent new jobs generated directly on the site and indirectly in the supply chain, including a wide range of job opportunities requiring both skilled and non-skilled labour;
 - Medium to long-term beneficial impacts on businesses in the industrial and logistics sector looking for floorspace in the area;
 - Short, medium and long-term increase in regional and national economic activity and productivity as a result of the construction and operation of the proposed development;
 - Medium to long-term beneficial impacts in terms of skills and training of the local labour force.

Avoidance and mitigation measures

- 15.15. Where relevant, the socio-economic chapter will provide avoidance and mitigation measures to address any adverse significant effects, or will recommend enhancement actions to maximise benefits.
- 15.16. At this stage, no significant adverse effects on socio-economic receptors are anticipated and no mitigation is therefore proposed.

Anticipated residual impacts

15.17. The residual impacts of the development are unchanged from the potential impacts.



16. Conclusions

- 16.1. This Scoping Report is submitted pursuant to and in satisfaction of the requirements of Regulation 10(1) and (3) of the EIA Regulations. It has described the proposed development site and characteristics of the proposed EMG2 development based on the Applicant's existing knowledge of the site and the environment. It has also been prepared by reference to the earlier EIA Scoping Request to NWLDC and the EIA Scoping Opinion issued in December 2022. It has defined the likely significant effects of the development on the environment, the studies necessary to assess them, and the level of detail required to enable a decision to be made.
- 16.2. The proposed development site within the DCO boundary limits comprises three elements: the main site to the south of East Midlands Airport immediately north-west of Junction 23 of the M1 motorway where a new logistics and manufacturing hub is proposed, land at the existing EMG1 intermodal rail freight terminal which is proposed to be potentially expanded and improved, and land required for potential public footpath and highway improvements.
- 16.3. Having assessed the scope of the EIA, it is considered that the main areas of potential significance requiring full consideration within the ES for this development are as follows:
 - Landscape and visual impacts (including the effects of lighting);
 - Ecology and biodiversity;
 - Traffic and transportation;
 - Air quality;
 - Noise and vibration;
 - Flood risk and drainage;
 - · Heritage;
 - Agriculture and soils;
 - · Climate change; and
 - Socio-economic impacts.
- 16.4. There are a number of further areas which are of relevance but are not proposed to be assessed in detail as part of the ES and are suggested as matters that can be 'scoped out' for the reasons given in this report. This applies to the following matters:
 - Population and human health impacts (outside of those already covered);
 - Ground conditions/contamination;
 - Minerals safeguarding;



- · Aerodrome safeguarding;
- · Material assets; and
- · Vulnerability to major accidents or disasters.
- 16.5. The Secretary of State is respectfully invited to provide their opinion pursuant to Regulation 10(6) of the EIA Regulations as to the scope and level of detail to be included within the ES and whether they consider there are any other aspects that need to be covered. In particular, confirmation of the inter-projects to be included in the cumulative impact assessment is also requested as per Section 5 of this report, paragraphs 5.22-5.24 inclusive.

SEGRO

East Midlands Gateway Phase 2, Land South of East Midlands Airport, Derby

EIA Scoping Report - Appendices

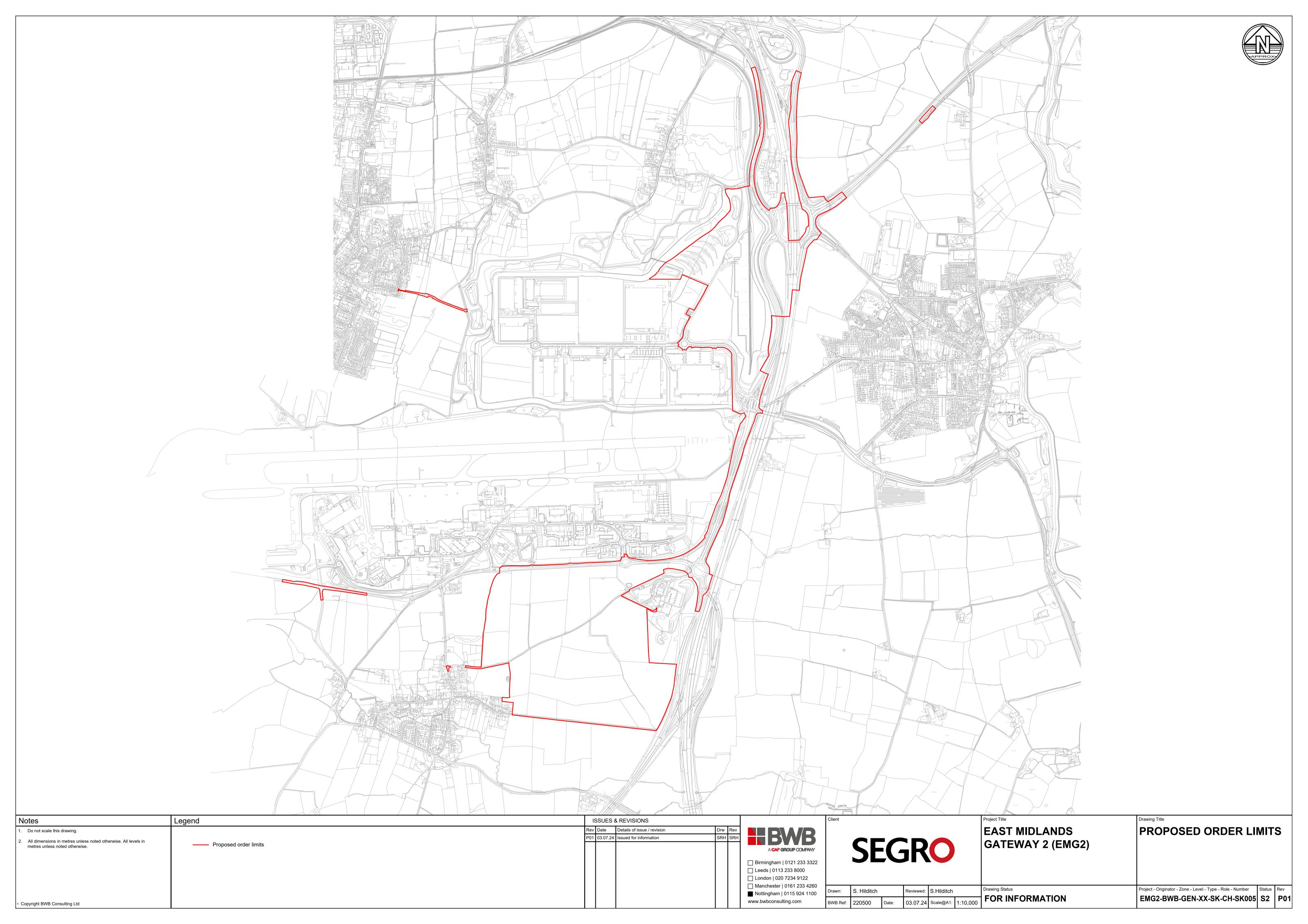
August 2024



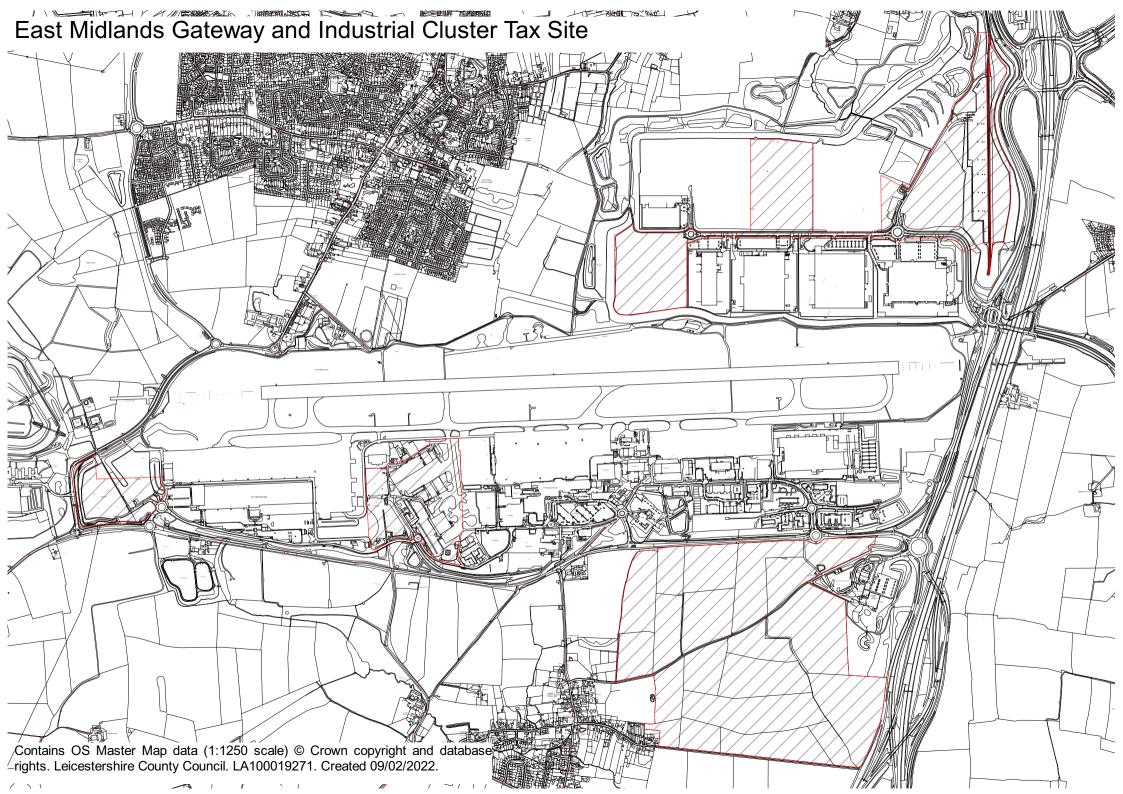
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Appendix 1 – Site Location Plan



Appendix 2 – Freeport 'EMAGIC' Sites Plan



Appendix 3 – NWLDC Scoping Opinion



Planning and infrastructure

Planning and development

Reference number: AM/12/22/EIA/0938

Date: 2nd December 2022

Sent by email only to:

Delta Planning

Cornwall Buildings 45 Newhall Street Birmingham B3 3QR

Dear ,

REFERENCE 22/00938/EAS

TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2017.

SCOPING OPINION IN RESPECT OF THE DEVELOPMENT OF A LOGISTICS/INDUSTRIAL PARK (USE CLASS B2 AND B8) WITH ANCILLARY OFFICES AND ASSOCIATED PARKING, HIGHWAY INFRASTRUCTURE AND LANDSCAPING AT EAST MIDLANDS GATEWAY PHASE 2 (EMG2), LAND SOUTH OF EAST MIDLANDS AIRPORT, DISEWORTH.

I refer to your Scoping Opinion request dated 31st May 2022 (ref: SEG2) regarding the above site. I apologise for the significant delay in this response.

This Scoping Opinion has taken into consideration the consultee responses received which are available to view on the District Council's website here, but will also be directed to you separately. Should I subsequently receive any further comments from consultees, I shall endeavour to forward you copies, with specific reference to:

- Any issues which may alter this Scoping Opinion; and
- Issues which must be addressed in any background documents / technical reports etc. informing the content of the Environmental Statement itself.

Environmental Statement Scope

Overall Scope of Environmental Statement

This Authority considers that the Environmental Statement accompanying any such application should include those matters and methodology as set out in the Scoping Opinion Request report accompanying your submission (and as amended below).

Detailed Matters to be Addressed within Specific Environmental Statement Chapters

In terms of specific matters raised in respect of the intended scope of the Environmental Statement (and including those set out in individual consultee responses to the scoping request), this Authority considers as follows:

- The Landscape and Visual Impact chapter of the Environmental Statement (and / or the background reports informing that chapter, as appropriate) should have regard to the locations identified in the photos provided by the North West Leicestershire District Council's Conservation Officer which were directed to you via email on the 25th November 2022.
- The Ecology and Biodiversity chapter of the Environmental Statement (and / or the background reports informing that chapter, as appropriate) should have regard to those matters raised in the responses of Natural England (of the 16th June 2022) and the Leicestershire County Council Ecologist (of the 17th June 2022).
- The Traffic and Transportation chapter of the Environmental Statement (and / or the background reports informing that chapter, as appropriate) should include consideration of the site's suitability for accessibility by non-road means (and including by rail), as well as having regard to those matters raised in the response of Leicestershire County Council in its capacity as Local Highway Authority (of the 28th July 2022) and East Midlands Airport Safeguarding (of the 28th June 2022).
- The Air Quality chapter of the Environmental Statement (and / or the background reports informing the chapter, as appropriate) should also include consideration of the suitability of the site for the development proposed, having regard to air quality impacts of nearby uses (including operations at East Midlands Airport, the East Midlands Gateway and Junction 23a Services).
- The Flood Risk and Drainage chapter of the Environmental Statement (and / or the background reports informing that chapter, as appropriate) should have regard to those matters raised in the response of the Leicestershire County Council in its capacity as the Lead Local Flood Authority (of the 22nd June 2022). Regard should also be given to the impacts on water resources (i.e. the quality of surface water runoff from the site and potential for pollution incidents).
- The Heritage chapter of the Environmental Statement (and / or the background reports informing that chapter, as appropriate) should have regard to those matters raised in the responses of the North West Leicestershire District Council Conservation Officer (of the 17th June 2022), the Leicestershire County Council Archaeologist (dated 28th June 2022) and Historic England (of the 29th June 2022).

In terms of the Noise and Vibration chapter of the Environmental Statement (and / or the background reports informing that chapter, as appropriate) the North West Leicestershire District Council Environmental Protection Team have confirmed that the contents of the Scoping Opinion Request report, including the information at appendix 3 (Noise Monitoring and Key Noise Sensitive Receptor Locations Plans), is acceptable.

Cumulative Impacts and Alternatives

The contents of section 5 (Consideration of Cumulative Impacts and Alternatives) of the submitted Scoping Opinion Request report are noted, in this respect it is outlined that the cumulative impacts of the development with the East Midlands Gateway and the Freeport designation within East Midlands Airport will be considered but the Freeport designations at Uniper's Ratcliffe on Soar site and the East Midlands Intermodal Park will not be considered given the distances involved.

Whilst, to some extent, the separation would likely not lead to cumulative impacts in respect of certain chapters of the Environmental Statement, it is certainly the case that there would be interactions in relation to the Traffic and Transportation chapter of the Environmental Statement (as is identified in the consultation response from Leicestershire County Council in its capacity as the Local Highways Authority). Consequently it is considered that the cumulative impacts with the Freeport designations at Uniper's Ratcliffe on Soar site and the East Midlands Intermodal Park should be considered.

The committed developments at Land at Sawley Crossroads (District Council references 15/00015/FULM and 17/00366/VCIM), Site of Former Sawley Crossroads Service Station (District Council reference: 18/01115/FUL), Land at East Midlands Point (Junction 23A) (District Council reference 18/02227/FULM) and Land North and South of Park Lane, Castle Donington (District

Council references 09/01226/OUTM and 16/00465/VCUM) should also be considered in respect of the cumulative impacts.

The point in paragraph 5.7 that alternative sites will be considered, based on sub-regional employment land studies, is noted.

Other (Non-EIA) Matters to be Addressed

Insofar as matters falling outside of the scope of the Environmental Statement are concerned (i.e. matters to be addressed by way of separate technical reports submitted in support of the planning application), the Local Planning Authority would comment as follows:

- Assessments should be provided in respect of those matters raised in the response of East Midlands Airport Safeguarding (of the 28th June 2022), which are not directly attributable to the Environmental Statement (i.e. a Bird Hazard Management Plan).
- An assessment should be provided in respect of the quality of the agricultural land within the site. If such a report demonstrates the significant loss of 'Best and Most Versatile' agricultural land, i.e. more than 20 hectares, than I would be of the opinion that the impact to 'Land Use and Soils' should be scoped into the Environmental Statement.
- An assessment should be provided in respect of the impact on any mineral resource beneath or adjacent to the site as is outlined in the response from Leicestershire County Council in its capacity as Mineral and Waste Planning Authority (of the 28th June 2022).

Your attention is also drawn to other comments made by consultees and third parties, in particular, those provided by South Derbyshire District Council (of the 27th June 2022), WINGS Community Group (of the 28th June 2022), Michael Goy (of the 6th July 2022), Rushcliffe Borough Council (of the 14th July 2022), Long Whatton and Diseworth Parish Council (of the 8th July 2022), Castle Donington Parish Council (of the 1st July 2022) and Kegworth Parish Council (of the 5th July 2022).

If you have any questions or queries about this letter, please contact number or by e-mailing on	on telephone
Yours sincerely	

Head of Planning and Infrastructure

AM2021

Appendix 4 – Draft Illustrative Masterplan





Dimensions are in millimeters, unless stated otherwise.
Scaling of this drawing is not recommended.
It is the recipients responsibility to print this document to the correct scale.
All relevant drawings and specifications should be read in conjunction with this drawing.

Application Boundary

Strategic Landscape Proposals

Existing Vegetation Retained

Existing Tree Retained

Existing Telecoms Mast

Existing Public Right of Way / Footpath

Proposed footpath

Indicative Gradient

Indicative localing land/landscaping Indicative location of proposed SUD's within open

Existing Pond

Proposed Bus stop

Cycle Hire virtual Docking Station

Existing Foul water easement [5m easement either

Existing Overhead HV cables [3m easement either

Schedule of Accome	odation		Plot Areas		
Unit 1 Total	800,000 ft ²	74,323 m²	39.41 ac	15.95 ha	
Unit 2 Total	265,000 ft ²	24,619 m²	11.86 ac	4.80 ha	
Unit 3 Total	460,000 ft ²	42,735 m²	25.74 ac	10.42 ha	
Unit 4a Total	240,000 ft ²	22,297 m²	10.85 ac	4.39 ha	
Unit 4b Total	145,000 ft ²	13,471 m²	7.85 ac	3.18 ha	
Unit 5a Total	350,000 ft ²	32,516 m²	16.00 ac	6.48 ha	
Unit 5b Total	230,000 ft ²	21,368 m²	11.75 ac	4.75 ha	
Unit 6a Total	240,000 ft ²	22,297 m²	12.71 ac	5.15 ha	
Unit 6b Total	100,000 ft ²	9,290 m²	5.12 ac	2.07 ha	
Unit 7 Total	30,000 ft ²	2,787 m²	1.98 ac	0.80 ha	
Grand Total	2,860,000 ft ²	265,703 m ²	143.28 ac	57.98 ha	
Pumping & Sub Station	ТВС	ТВС	0.61 ac	0.25 ha	



East Midlands Gateway,

Phase 2 Illustrative Masterplan





o. +44 (0)1636 653027 f. +44 (0)1636 653010

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Drawing Status: 09/01/2024 1:2500 A1



Ground Investigation Report Summary

East Midlands Gateway Phase 2, Land South of East Midlands Airport, Derby

July 2024











CONTROL SHEET

CLIENT: SEGRO PLC

PROJECT TITLE: East Midlands Gateway Phase 2, Land South of East

Midlands Airport, Derby

REPORT TITLE: Ground Investigation Report Summary

PROJECT REFERENCE: 148749

DOCUMENT NUMBER: R8.1

STATUS: Draft

nedule	ISSUE	ISSUE 1 Name			Signature		Date		
oval Scl	Prepared by Ch			Christo Dunston		Signature held on file		17/07/24	
Issue & Approval Schedule	Checked by								
Issu	Approve	d by							
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EXECUTIVE SUMMARY Introduction Fairhurst have been commissioned by SEGRO PLC (the Client) to provide a Ground Investigation Report (GIR) associated with the proposed development at East Midlands Gateway Phase 2, Land South of East Midlands Airport, Derby. The report has been prepared in support of a hybrid planning application seeking (1) full planning permission for the principal site infrastructure works (including site remodelling and earthworks, new vehicular access and associated highways improvement works, principal internal highway and drainage infrastructure, and structural landscaping) and (2) outline planning permission for distribution and industrial uses (Use classes B8/B2) including associated offices together with plot and related new vehicular access, parking and service yards, drainage and landscaping. The report was prepared in support of the forthcoming planning application and also aims to provide **Scope & Objectives** geotechnical assessment and recommendations with respect to earthworks, foundations, external hard cover and floor slab proposals. The specific objectives include: Carry out and report on an intrusive ground investigation designed to determine the characteristic ground conditions and hydrogeology underlying the site and to identify any potentially significant environmental or geotechnical development constraints; Review and assess the chemical and geotechnical test results to inform and update the conceptual site model; Make recommendations for further actions, if applicable, relating to any remaining pollutant linkages identified by the ground investigation; and Make recommendations relating to any geotechnical constraints to development identified by the ground investigation. The scope of the 2023 intrusive investigation comprised: Buried utility services search to clear proposed exploratory hole locations of buried utilities and establish the location (x, y, z) of each location; 27 No. cable percussive boreholes with rotary core follow on to depths of between 20.00m and 31.00m bgl. CP drilling was carried out until competent bedrock was encountered. In-situ testing and undisturbed and disturbed sampling for laboratory analysis was also specified; 28 No. cable percussive boreholes to establish the depth to rockhead was carried out, taken to depths of between 4.50m bgl and 17.00m bgl. In-situ testing and undisturbed/disturbed sampling for laboratory analysis also specified; 38 No. machine excavated trial pits were completed (37 No. proposed, 1 No. additional to investigate extent of contaminated Made Ground), with hand shear vane testing and collection of samples for laboratory analysis; 8 No. soakaway infiltration tests in selected trial pits in accordance with BRE Digest 365, three repeat fillings of the pits were not undertaken due to slow infiltration rates; 2 No. variable head permeability tests carried out in BH11 and CP06 in accordance with BS EN ISO 22282-1:2012 and -2:2012; Installation of 25 No. groundwater and ground gas monitoring wells within selected borehole locations, 2 of which were dual installations. Following the monitoring period, all the installations were decommissioned aside from those at BH09, BH12, BH18, BH24, CP01 and CP27, this was to minimise disruption to the land owners; 3 No. further return visits to site to undertake groundwater and ground gas monitoring; 3 No. surface water sampling sets (downstream, midstream and upstream) from waterbodies situated in the south-eastern area of the site, along the western and south-eastern site boundaries and from a pond in the north-east of the site; Geotechnical laboratory testing of selected soil and groundwater samples (using UKAS accredited laboratory) allowing for targeted geotechnical testing based on the proposed

Chemical laboratory testing of selected soil sample, groundwater and surface water (using a UKAS and MCERTS accredited laboratory) allowing for testing of a suite of contaminants

development plans;

based on historical land use;



Ground & Groundwater Conditions

The intrusive ground investigation encountered the following ground conditions:

Topsoil was encountered from surface to a maximum depth of between 0.10m and 0.85m bgl (91.0m AOD and 58.8m AOD) where it was found to generally comprise firm to very stiff brown/reddish brown clay with silt, sand and gravel;

Made Ground was encountered in isolated instances at a number of locations across the site, namely BH04, BH12, BH25, CP27, TP08, TP25, and TP37 where it extended to maximum depths of between 0.20m and 3.00m bgl (86.0m AOD and 53.0m AOD). The material was generally found to be cohesive dominant;

The Oadby Member was encountered below the Topsoil/Made Ground in 21 of the 93 exploratory and was found to extend to depths of between 1.70m and 16.40m bgl (85.8m AOD and 63.9m AOD). The soils are generally described as stiff to very stiff greyish brown / dark grey clay with subordinate silt, sand and gravel;

Glaciofluvial deposits was encountered below the Topsoil/Made Ground/Oadby Member where more extensive deposits were found in the central regions of the site. It was found to extend to maximum depths of between 0.40m and 17.30m bgl (89.7m AOD and 53.4m AOD). The deposits consisted variable interbedded cohesive and granular soils with limited lateral continuity of strata observed between exploratory positions;

The Gunthorpe Member (subset of the Mercia Mudstone Group) was found across the entirety of the site and comprised predominantly mudstone interbedded with siltstone and sandstones. These deposits were found beneath the superficial soils where present, and from surface elsewhere, with a weathered profile invariably encountered at shallower depths. The weathered soils comprised predominantly stiff to very stiff reddish brown clays with silt, sand and gravel where the gravel fraction consisted of mudstone and siltstone lithorelicts. Pockets / lenses of grey silty sand / sandy silt and black staining on fracture surfaces were locally observed. Laminae of extremely weak mudstone and fine grained sandstone were recorded, generally increasing in frequency with depth suggesting a decrease in weathering grade;

The bedrock was encountered below this weathered material where present, and below the Topsoil / Made Ground / superficial soils elsewhere; its upper surface varies between 1.40m and 18.50m bgl (86.8m AOD and 54.9m AOD) and extended the remaining extent of depths investigated where encountered. It comprised extremely weak to medium strong reddish brown;

The Diseworth Sandstone, a subset of the Gunthorpe Member was also encountered where it was described as very weak to medium strong greenish grey fine to medium grained sandstone. The deposit was not found to be continuous between exploratory locations and appears as discrete sandstone strata interbedded with mudstone and siltstone;

Groundwater strikes were observed during drilling at a range of depths within the Glaciofluvial and Gunthorpe Member (including weathered) Deposits. The strikes ranged from 2.80m to 26.50m bgl and from +49.60m AOD to +81.80m AOD; and,

Monitoring suggests that a groundwater body is present between depths of 1.25m and 15.32m bgl (84.9m AOD and 52.7m AOD) within the Glaciofluvial, Weathered Gunthorpe Member and Gunthorpe Member.

Geotechnical Assessment

The following geotechnical considerations/recommendations have been identified:

- Utility searches and/or surveys are recommended prior to further design development to confirm the absence of services and verify the locations of any utilities that are identified on sita:
- It is recommended that foundations are inspected by a suitably qualified Geotechnical Engineer in order to confirm the absence of Made Ground or soft/loose soils within foundation excavations where foundations will require local deepening if encountered. Provision should be made for removal of the soils when encountered within the footprint of proposed structures. Excavations will need to be backfilled and re-compacted / compacted with material suitable for use as general fill;
- Battering/shoring of excavations is recommended where collapsible, granular deposits are encountered. Battering of excavations to a suitable angle is recommended where excavations encounter cohesive strata;
- Given shallow groundwater has been identified across the site, there is potential for groundwater induced instability and flooding of excavations. Following comparison of the groundwater elevation data with the current cut and fill plan, shallow groundwater (< c.4.00m below formation level) is expected in the following areas:



- Western half of zone 1
- Northeast corner of zone 2
- Northern half of zone 3
- Northeast corner and eastern edge of zone 8
- Eastern area of zone 9

Therefore, provision of suitable shoring and appropriate dewatering measure are recommended;

- All foundations and associated structures in contact with the underlying superficial soils and
 weathered bedrock should be designed to DS-2 AC-2. It may be possible to reduce this
 classification where buried structures are in contact with the solid bedrock however this will
 require careful consideration given the varied ground conditions and cut/fill configurations;
- For the cohesive soils, prescriptive bearing capacities of c. 150kPa can be assumed where
 a minimum undrained shear strength of 75kPa is achieved. Where granular soils are
 encountered at foundation depth, a prescriptive bearing capacity of c. 150kPa can be
 assumed:
- The competent Gunthorpe Member is likely to exhibit bearing capabilities in excess of 200kPa based on a minimum Unconfined Compressive Strength of 0.20MPa. However, the bearing capabilities of this stratum will need careful consideration given the variable weathering grade observed across the site. Where the bedrock is highly to moderately weathered (Grade Iva to Grade III) the bearing capacity is likely to be in the region of 150kPa;
- Heavy plant and expensive breaking and ripping techniques may be required where excavations are within the competent bedrock. The possibility of cuttings encountering bedrock is subject to finalisation of the Cut and Fill Plan;
- Design of foundations within areas of fill will be dictated by the depth and type of engineering
 fill utilised. Where fill is shallow and bedrock is present near surface, foundations should be
 extended through the fill into the competent natural strata. Where deeper fill is present or
 superficial soils are present at shallow depth, foundations will need to be formed in
 accordance with the standards or engineering fill placed or suitably designed based on the
 geotechnical criteria of the superficial material;
- Initial settlement analysis suggests careful consideration is needed when assessing the
 potential for settlement across the site and the use of in-situ compaction on fill formation
 layers by use of rollers is likely required prior to the placement of fill to decrease the potential
 for settlement:
- Collapsible deposits and strata susceptible to settlement have been identified on site
 therefore, the risk of failure of any proposed embankments as a result of the formation soils
 below will need to be carefully considered;
- It is recommended that staged construction is undertaken and basal and interim granular
 layers are installed and linked to the wider drainage network to avoid build-up of pore-water
 pressure where embankments are formed from fine grained material. Drainage will also need
 to be carefully considered to cope with surface water and avoid softening of the slope faces
 and foundation soils, in particular at the toe of slopes;
- Options for increasing the angle of embankment slopes thus reducing the footprint and volume of embankments may be explored; these may include reinforced embankments (geogrids) or soil stabilisation (lime and cement) or even retaining walls if required;
- Clean, natural soils are present within areas of cut and these materials should be suitable for re-use provided they are carefully selected and managed in accordance with a suitable earthworks specification.
- Given the similarity in appearance of the cohesive superficial soils, it is likely these materials will become mixed during the earthworks. For this reason, supplementary testing will be required to reassess the material properties in terms of its earthworks suitability;
- As elevated sulphates have been identified within the on-site soils, careful consideration should be given to the design specification of earthworks in relation to sulphate induced heave where lime stabilisation is used. Specialist advice should be sought to assess the suitability of utilising lime stabilisation as a moisture content control;
- Initial pile capacity calculations have been undertaken to advise on construction of the lorry bridge over Hyam's Lane where it has been identified that piles will need to extend to a depth



of c.18.00m to socket into the competent Gunthorpe Member ensuring sufficient bearing capacity is achieved;

CBR testing on prepared sub-formation should be undertaken to confirm adequate road
construction details. Yard spaces may be surfaced in concrete slabs and therefore
appropriate compaction to Series 600 of the specification for Highway works and a site
specific Earthworks Specification will be required.

Geo-Environmental Assessment

No exceedances of the site specific assessment criteria or commercial end us generic assessment criteria have been identified with respect to human health, and therefore the risk to site end users is considered low. Risks to controlled waters were also assessed as low.

Based on the assessments presented in Section 7.0 of this report the conceptual site model was updated. The assessment confirms that the majority of source-pathway-receptor linkages are low or very low risk and require no further assessment or mitigation with limited exceptions. It is recommended that the following is implemented for the development of the site:

- Suitable drinking water supply pipes are to be installed. A WIR assessment may be required
 along the proposed drinking water pipe route to demonstrate material suitability. Alternatively
 the use of barrier pipe would negate the need for further testing. In both events, the local
 water company should be contacted to agree the chosen pipe material suitability.
- In the event that unexpected contamination is encountered at the site, works in the area are
 to stop and the Local Authority and the appointed geo-environmental consultant should be
 contacted. The contamination should be sampled, tested and risk assessed and if required a
 remediation strategy should be agreed and implemented.
- Based on the ground gas risk assessment, the site is classed as a Characteristic Situation CS1 (very low risk) site and no mitigation are required.
- Risks to controlled waters were assessed as low and no further works are required.
- Despite the low risk of encountering asbestos as part of the construction works, the Principal Contractor should develop appropriate RAMS to address the potential to encounter Asbestos during the construction works.
- Shallow groundwater is likely to be encountered during excavation / construction works.
 Suitable allowance should be made for the disposal of groundwater and surface water.
- Should offsite disposal of material be required, specific waste classification testing should be
 undertaken prior to disposal and liaison with the receiving facility should be sought. Given the
 site's agricultural history, there is low potential to encounter grossly contaminated soils or
 groundwater not encountered during the investigation.
- An Earthworks Specification should be prepared to specify the geotechnical requirements for material re-use on site.
- Prior to undertaking any cut and fill operations, consideration will have to be given to materials
 management onsite upon development; particularly for earthworks, in the form of a CL:AIRE
 DoWCoP Materials Management Plan (MMP) or Environmental Permit. Further testing under
 a site-specific earthworks specification is recommended to determine the suitability of sitewon material for re-use. Further costs are likely to be incurred as a result of importation of
 material or offsite waste disposals, should they be deemed necessary.

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Minerals Safeguarding Assessment

East Midlands Gateway Phase 2, Land south of East Midlands Airport, Derby

July 2024











CONTROL SHEET

CLIENT: SEGRO PLC

PROJECT TITLE: East Midlands Gateway Phase 2, Land South of East Midlands Airport

REPORT TITLE: Minerals Safeguarding Assessment

PROJECT REFERENCE: 148749

DOCUMENT NUMBER: R5

	Issue 1 Name			Signature		Date		
Issue	Prepared	by	Cl	nelsea Hug	a Huggins Signed copy		y held on file	05/06/2023
Original Issue	Checked by			Alex O'Connor		Signed copy held on file		05/06/2023
	Approved	Approved by Christo Dunston Signed		Signed cop	y held on file	03/07/2024		
	Issue	D	ate	Status	De	escription	Sigr	nature
							Prepared By	
	2						Checked	
ord							Approved	
Rec							Prepared By	
Update Record	3						Checked	
Upc							Approved	
							Prepared By	
	4						Checked	
							Approved	

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EXECUTIVE SUMMARY

Site Details & Proposed Development	The site is located immediately south of East Midlands Airport and to the east of the village of Diseworth, centred on National Grid Reference 445940, 324550, within Leicestershire County Council. The site covers an area of c. 100 ha and is broadly rectangular in shape and can be accessed by vehicles and pedestrians from several access points.
	The site is currently occupied, comprising arable land with no structures aside from the overhead power lines in the west of the site and a telephone mast in the northeast. The land is divided into 20 individual fields with hedgerows marking their boundaries. The topography is undulating and generally falls towards the south, with an overall fall of c. 35 m from the northern to southern boundary.
	The development proposed includes construction of a number of warehouse, ancillary offices, associated services, access roads, parking and landscaping.
Objectives	The purpose of this report is to determine the possible presence of economic minerals and to prevent the sterilisation of minerals which may be needed within the plan period and beyond. This report therefore aims to undertake a desk based review of available information pertaining to the geological setting of the site.
	The assessment has been carried out in accordance with the Leicestershire Minerals and Waste Local Plan by which consideration must be given to the extraction of any identified mineral resources prior to any permanent redevelopment.
	The assessment of the potential for mineral extraction beneath the site, in accordance with the Leicestershire Minerals and Waste Local Plan identifies the following potential resources are present on site:
Conclusions	Brick Clay (Mercia Mudstone)
3011010010113	Sand and Gravel (Glaciofluvial Deposits)
	Sand and Gravel (Diseworth Sandstone)
	It is concluded that extraction of these resources is not economically viable on the site, the reasons for which are set out within the report.



CONTENTS

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FIGURES

FIGURE 1 - SITE LOCATION PLAN

APPENDICES

APPENDIX A - LOCATION PLAN AND PROPOSED DEVELOPMENT DRAWING

APPENDIX B - MINERAL SAFEGUARDING PLAN OVERLAY

APPENDIX C - BGS BOREHOLE RECORD AND HISTORICAL BOREHOLE LOGS

APPENDIX D - STRUCTURAL SOILS BOREHOLE RECORDS



1.0 INTRODUCTION

Fairhurst have been appointed by SEGRO PLC (the 'client') to undertake a Mineral Safeguarding Assessment to support the DCO submission for the proposed development on a plot of land to the north east of Diseworth, Derby, approximate post code DE74 2TN, National Grid Reference 445940, 324550 (the 'site').

The development proposed includes construction of a number of warehouse, ancillary offices, associated services, access roads, parking and landscaping. The proposed development plan and site boundary is provided in Appendix A.

The site requires assessment in accordance with Minerals Safeguarding Areas (MSA) – Leicestershire County Council adopted the Leicestershire Minerals and Waste Local Plan (LMWLP) dated September 2019, by which consideration must be given to the extraction of any identified mineral resources prior to any permanent redevelopment, with a view of avoiding sterilisation of potential mineral assets.

The purpose of this report is to determine the possible presence of economic minerals and to prevent the sterilisation of minerals which may be needed within the plan period (2031) and beyond. This report therefore aims to undertake a desk-based review of available information pertaining to the geological setting of the site and should be read in conjunction with the associated reports:

- Geo-Environmental Preliminary Risk Assessment (148749/R6, July 2024).
- Geotechnical Investigation Report (148749/R7, July 2024).



2.0 SITE INFORMATION

2.1 Site Location and Description

The site is located south of East Midlands Airport, to the north east of the village of Diseworth and to the north-west of Junction 23a of the M1 motorway. The site has an area of approximately 100ha and currently comprises undeveloped (except overhead power lines to the west and telephone mast to the north-east) arable land with hedgerows and trees dividing the various fields. A public byway, known as Hyam's Lane, dissects the site from south-west to north-east.

The site is bounded to the north by Ashby Road (A453) with East Midlands Airport beyond. Donington Park Services, including a petrol station, is located immediately adjacent to the north-east. To the east lies an undeveloped parcel of land, the A42 and the M1. To the south the site is bounded by Long Holden public byway with fields situated beyond and to the south-west is the village of Diseworth, situated from adjacent.

The topography is undulating and generally falls towards the south, with an overall fall of c. 40 m from the northern to southern boundary. The highest point is at c. 92.6m AOD in the north-east corner of the site whilst the lowest is at c. 52.2m AOD located in the south-east corner.

The surrounding area is predominantly characterised by agricultural land with the exception of a commercial / light industrial park, East Midlands Airport, Donington Park Services and residential properties with gardens and commercial businesses within Diseworth.

2.2 Site History

A detailed review of the site history and immediate site surrounds has been undertaken within the Fairhurst Geo-Environmental and Geotechnical Preliminary Risk Assessment (148749/R5, May 2023). In summary, the review of historical mapping from Envirocheck confirmed the site to comprise predominantly agricultural fields to the earliest map available dated 1883. Numerous ponds have been identified, and a pump was introduced in 1921 in the north-east of the site. By 1975 all ponds were assumed to be infilled. No significant changes were noted herein.

The local area around the site appears to comprise agricultural land with ponds from the earliest available historical map dated 1883, with additional ponds in 1955 and an airfield in the north which later became known as East Midlands Airport. In 1966, the M1 motorway was constructed. Between 1972 and 1984, numerous ponds were assumed to be infilled, with tanks being noted 260m north-west of the site. Limited commercial buildings and a hotel was noted 100m north of the site with a junction linking the M1 to the A453 with further commercial buildings were constructed in 2000 along with Donington Park Service Station which is shown to comprise some earthworks as part of the development.



3.0 SOURCES OF INFORMATION

An intrusive ground investigation was undertaken by Structural Soils Ltd. between 5th September and 6th October 2022. A Factual Report has been produced and for the purpose of this report the exploratory hole logs and relevant laboratory test results have been included within Appendix D.

The following sources of information were reviewed as part of this Minerals Safeguarding Assessment and should be considered in conjunction with this report:

- British Geological Survey (BGS) online viewers (geology and hydrogeology) http://www.bgs.ac.uk/data/maps/; accessed on the 26th May 2024.
- British Geological Survey (BGS), Geology of Britain (1:50,000 Sheet No. 141, Loughborough, Solid and Drift (dated 2001). - www.bgs.ac.uk, accessed on the 26th May 2024.
- British Geological Survey (BGS) Leicestershire and Rutland Mineral Resource Information in Support of National, Regional and Local Planning (2002).
- British Geological Survey (BGS) Leicestershire and Rutland Mineral Resource Map, 1:100,000 (dated 2002).
- Fairhurst Geo-Environmental and Geotechnical Preliminary Risk Assessment (148749/R6, July 2024).
- Fairhurst Ground Investigation Report (148749/R7, July 2024).
- Structural Soils Ground Investigation Logs contained within Appendix D.
- Leicestershire Minerals and Waste Local Plan (LMWLP) adoption 2019 until 2031.



4.0 MINERALS SAFEGUARDING

4.1 Leicestershire Minerals and Waste Local Plan

As part of the Council's 'emerging plan' to create a new Local Plan for minerals and waste planning policy, the Leicestershire Minerals and Waste Local Plan (LMWLP) will provide the planning framework for Minerals and Waste development and set out the long-term vision through the plan period to 2031. This Minerals Safeguarding Assessment has been undertaken based on guidance contained within the proposed LMWLP.

It is understood that one of the main reserves in Leicestershire are construction aggregates, namely sand and gravel. Leicestershire has been a significant producer of aggregates, and the LMWLP aims to deliver 19.04 million tonnes of construction aggregates from primary sources to meet the identified needs of Leicestershire over the plan period. A set of 4 Minerals Objectives have been outlined in the LMWLP to ensure that the key delivery outcomes are achieved. The objectives pertinent to this Minerals Safeguarding Assessment are presented below:

• M1 – Supply of Sand and Gravel Aggregate

The County Council will ensure a steady and adequate supply of sand and gravel for aggregate purposes by:

- i) making provision over the plan period (2015 to 2031) for the extraction of some 19 million tonnes of sand and gravel
- ii) maintaining a landbank of at least 7 years based on the past 10 years average sales
- iii) giving priority to proposal for extraction to be worked as extensions to existing site operations
- M2 Supply of Sand and Gravel Aggregate from Existing Sites

The County Council will make provision over the plan period (2015 to 2031) for the supply of sand and gravel for aggregate purposes from the following locations:

- i) the extraction of remaining permitted reserves at the following existing sites: Brooksby, Cadeby, Husbands Bosworth, Lockington and Shawell
- ii) the following extensions to existing sites as shown on the Policies Map Insects:
 - Brooksby Spinney Farm and south of existing plant site
 - > Cadeby west of plant site; north of Brascote Lane; east of Newbold Road
 - Husbands Bosworth Butt Lane northern extension
 - Shawell western extension adjacent to Lutterworth Road; land south of Gibbet Lane to the west of the plant site; land to the south west of Cotesbach village; and eastern extension adjacent to Lutterworth Road north of Shawell village.
- M3 Sand and Gravel Extraction (Unallocated Areas):

In unallocated areas, planning permission to extract sand and gravel for aggregate construction purposes provided that it is an extension to a permitted sand and gravel site or is needed to meet an identified shortfall in the landbank; a new quarry to replace an existing site nearing exhaustion; or would offer significant benefits than allocated sites.

M5 - Brickclay

The County Council will ensure a steady and adequate supply of brick clay by:



- allowing extensions to existing sites where they are required to maintain a landbank of at least 25 years of permitted reserves to support the level of investment required to maintain and improve existing brick-making plan and equipment
- ii) giving priority to proposals for extraction site where it can be demonstrated that production cannot be maintained from existing sites and appropriate extensions to existing site.
- M11 Sand and gravel used for aggregate construction purposes within Minerals Safeguarding Areas in accordance with the Mineral and Waste Safeguarding documents, are to be protected from permanent sterilisation by other development.

The LMWLP also identifies a number of Allocated Sites to meet the need for primary aggregates. The subject site does not fall within the area of these Allocated Sites.

4.2 Geological Setting

The published British Geological Survey (BGS) 1:15,000 Sheet No. 141, Loughborough, Solid and Drift (dated 2001) and nearby BGS borehole records indicate that the geological setting of the site is as summarised below. An extract of the 1:15,000 geological map is provided in Appendix C.

The BGS maps indicate the site to be underlain by three superficial deposits; Head Deposit, Oadby Member and Glaciofluvial deposits. The Head Deposit is shown to surround the river in the north-west corner of the site and is described by BGS as clay, silt, sand and gravel although it is expected to be cohesive dominant given the cohesive nature of the surrounding soils. The Oadby Member is mapped as a long thin outcrop across the central area of the site as well as the north-east corner. The soils are described by BGS as Diamicton Till consisting of brown to grey clay with subordinate silt, sand and gravel where the gravel consists of chalk and flint and localised lenses of sand and gravel. The Glaciofluvial deposits are mapped across the majority of the northern half of the site. They are described by BGS as predominantly brown to red-brown sand and gravel with localised lenses of silt, clay or organic material.

The site is predominantly underlain by the Gunthorpe Member, comprising mudstone with subordinate dolomitic siltstone and fine-grained sandstones. It is considered that the upper zone of the Gunthorpe Member will be encountered as a weathered material consisting of clay with mudstone lithorelicts. The Diseworth Sandstone, a subgroup of the Gunthorpe Member, is shown to outcrop in the western, central and eastern areas of the site and is expected to be encountered at depth elsewhere. Based on the BGS map, the strata demonstrates a dip of 0.5 to the south.

Due to the absence of historical development on site, significant Made Ground deposits are not anticipated across the majority of the site. However, as identified in the walkover section, 2 No. infilled clay pits are situated on the northern boundary which were reportedly infilled with clay and brick rubble c.10 years prior to the Fairhurst visit.

A ground investigation was undertaken on site by Structural Soils in September 2022 under the instruction of Fairhurst to inform a Ground Investigation Report submitted in support of a pre-planning application. The intrusive works comprised 38 No. machine dug trial pits (TP01 to TP37, and TP39) to a maximum depth of 4.00 m bgl, 7 No. soakaway tests within the trial pits, 27 no. cable percussive boreholes with rotary follow-on (BH01 to BH27) to a maximum depth of 31.00 m bgl; 38 no. cable percussive boreholes (CP01 to CP28) to a maximum depth 17.21 m bgl; along with geotechnical and geo-environmental laboratory testing. The exploratory hole location plan and logs from this ground investigation are presented in Appendix D.

A summary of the ground conditions is included in Table 4-1 below.



Table 4-1: Ground Conditions Summary

Lithology	Location	Base of Lithology (m bgl)	Base of Lithology (m AOD)
Topsoil	All exploratory hole locations (aside from where Made Ground is encountered)	0.10 - 0.85	91.0 - 58.5
Made Ground	(BH04, BH12, BH25, CP27, TP08, TP25, and TP37)	0.20 – 3.00	86.0 – 53.0
Oadby Member	21 No. positions, most extensively found E-W through the centre of the site (cross section line B-B)	1.70 – 16.40	85.8 – 64.0
Glaciofluvial	61 No. Positions, most extensively found E-W through the centre of the site (cross section line B-B)	0.40 – 17.30	89.7 – 53.4
Weathered Gunthorpe Member	73 No. positions, less extensively present where significant superficials soils are found	1.40 – 18.50	88.2 – 51.0
Gunthorpe Member	33 No. positions	> 33.35	< 28.0

Please refer to the Fairhurst Ground Investigation Report (148749/R7) for full details of the ground conditions encountered.

4.3 Glaciofluvial Deposits

Glaciofluvial Deposits are a source of sand and gravel for extraction and have been identified on site during the ground investigation. The Leicestershire Minerals and Waste Local Plan states such deposits "are worked in Leicestershire, but they are exploited modestly due to the proximity of more readily worked river deposits" suggesting although the deposits are worked it is unlikely they are practically or economically viable to extract.

The Glaciofluvial Deposits encountered on site were found to comprise predominantly cohesive material interbedded with granular deposits meaning the take-home yield from these deposits would be very low with increased processing and sorting costs incurred.

Particle Size Distribution testing undertaken as part of the Fairhurst Ground Investigation indicates silt contents are 15-68% and clay contents are 5-21% for the granular Glaciofluvial strata suggesting the fines content of these deposits would be too high for economical extraction.

4.4 Brick Clay

The Leicestershire Minerals and Waste Local Plan (LMWLP) identifies the Mercia Mudstone as the principal brickclay resource in Leicestershire. The Gunthorpe Member, a subgroup of the Mercia Mudstone, is shown to underlay the entire site on the Mineral Plan Overlay included in Appendix B and, as shown in Table 4-1, was proven during the intrusive ground investigation. However, extraction of the deposit is not considered practical or economically viable given the following:

- the exploratory hole logs indicate horizons of siltstone and sandstone are interbedded within the mudstone meaning costly material processing and sorting would be required post excavation
- the economic and environmental cost of importing suitable fill material following extraction of the resource would make extraction unviable



 the site is not within close proximity of an existing brickworks therefore is not prioritised for extraction

Therefore, the Mercia Mudstone present on site is not seen as a viable resource suitable for extraction.

4.5 Diseworth Sandstone

The "Boundary of area assessed for sand and gravel at the indicated resource level" is indicated on site and is interpreted to represent outcrops of the Diseworth Sandstone based on comparison with the BGS 1:50,000 scale maps. Although these deposits are indicated to outcrop on site

In accordance with the LMWLP, proposals to extract reserves should be given priority to existing site operations. Current sites of extraction include Brooksby, Cadeby, Husbands Bosworth, Lockington and Shadwell. Since the subject site is not within these areas it is unlikely that the subject site will be considered appropriate or sustainable for extraction in accordance with the requirements of the LMWLP.

The ground investigation report found the Diseworth Sandstone is not extensive across the site with variable thicknesses found within the rotary borehole logs (0.15m to 2.15m). The results also suggest limited lateral continuity across the site where the sandstone strata are often interbedded with the mudstone/siltstone strata. As such, it is not considered practical or economically viable to extract the Diseworth Sandstone as a construction aggregate.

4.6 Groundwater

Shallow groundwater was identified on site during the ground investigation and it was concluded a groundwater body is present between depths of 1.25m and 15.32m bgl within the Glaciofluvial, Weathered Gunthorpe Member and Gunthorpe Member. This hinders resource extraction at this site as groundwater pumping would be required and there is increased risk of excavation instability.

5.0 CONCLUSION

Fairhurst have been appointed by SEGRO (the 'Client') to undertake a Mineral Safeguard Assessment to support a planning application for the proposed development.

Glaciofluvial Deposits composed of granular material (sand and gravel) have been identified on site and, although these soils are sporadically worked in the region, it is not considered the deposits on site will be economically viable to extract. This is due to the relatively unsorted nature of the deposits and their limited extent across the site.

The Gunthorpe Member, the principal bedrock across the site, is identified as a potential resource of brickclay. This report has deemed it unsuitable for extraction given the site's location as it is not close to existing clay pits, there would be an unacceptable environmental cost of importing replacement fill material and the deposit is interbedded with siltstone and sandstone increasing the material processing costs.

It is evident that the Diseworth Sandstone is not extensive across the site with variable thicknesses and limited lateral continuity of the sandstone which is interbedded with mudstone and siltstone strata. As such, it is not considered practical or economically viable to extract the Diseworth Sandstone as a construction aggregate.

Appendices available upon request

Appendix 7 – LVA Preliminary Report



SEGRO

East Midlands Gateway 2 - Land South of East Midlands Airport

LANDSCAPE AND VISUAL APPRAISAL

March 2024



FPCR Environment and Design Ltd

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APPENDICES

Appendix A: Landscape and Visual Appraisal – Methodology and Assessment Criteria



1.0 INTRODUCTION

- 1.1 This Landscape and Visual Appraisal (LVA) has been carried out for the site and potential future development by FPCR Environment and Design Ltd (FPCR). The study describes and evaluates the landscape and visual amenity of the site and its surroundings. It reviews the existing baseline conditions and published landscape character and sensitivity assessments and other relevant landscape studies; considers the potential of the site to accommodate future development; considers the likely nature of landscape and visual change and effects arising from proposed development; and outlines landscape design and mitigation measures that should be considered as part of a future development strategy for the site.
- 1.2 The primary objective of the study is to consider the potential implications and landscape and visual effects that could arise from future employment based development on the site and to advise on design and mitigation proposals to minimise these effects where applicable and maximise other landscape and green infrastructure opportunities.
- 1.3 The site lies within the East Midlands Freeport EMAGIC site, as designated by the Government in March 2021. The main site extends to approximately 105Ha of land to the south of East Midlands Airport and to the east of Diseworth. The site has been identified as a 'Potential Location for Strategic Distribution' by North West Leicestershire District Council (NWLDC) in their draft Local Plan. The Site is identified as 'EMP90 (part)'.
- 1.4 This LVA has been prepared in response to the North West Leicestershire's Regulation 18 Draft Local Plan and other relevant studies and as part of an evaluation of the potential for the site to successfully accommodate future employment development, in landscape and visual terms.
- 1.5 FPCR are a multi-disciplinary environmental and design consultancy with over 60 years' experience of architecture, landscape, ecology, urban design, masterplanning, arboriculture and environmental impact assessment. The practice is a member of the Landscape Institute and Institute of Environmental Management and Assessment and are frequently called upon to provide expert evidence on landscape and visual issues at Public and Local Plan Inquiries.

The Site and Context

- 1.6 The site comprises a series of arable fields situated immediately to the south of the A453; west of the M1 motorway and A42 road corridors and south west of Junction 23a of the motorway and motorway service area. The settlement of Diseworth lies to the south west of the site. A public byway, known as Hyam's Lane, dissects the site from south west to north east. The southern extent of the site is defined by Long Holden (an access track) and the western extent by a small watercourse and field boundaries. The wider site, which includes land proposed for highway and servicing works, extends to approximately 118ha in total.
- 1.7 To the north of the site and the A453 lies East Midlands Airport (EMA); with Pegasus Business Park, a hotel and other buildings and uses associated with the airport. The A453 stretches along the northern edge of the site and provides a link from Junction 23a and 24 of the M1 motorway in a westerly direction towards Melbourne and other smaller settlements. Donington Park Motor Racing Circuit lies more to the west of the site and EMA. Immediately to the north of EMA is East Midlands Gateway (EMG), a strategic rail freight and logistics development, with the settlements of Castle Donington and Kegworth also located close to the north and east of the airport.



- 1.8 South of the site and west beyond Diseworth lies further rolling farmland, including some scattered farming and residential properties and a number of minor roads. Diseworth Brook a small watercourse lies to the south of the site and generally falls from west to east. This passes beneath the A42 and M1 motorway and then along the northern side of the settlement of Long Whatton.
- 1.9 Diseworth to the south west of the site occupies a relatively low lying position and includes a Conservation Area and a series of Listed Buildings, including St Michael and All Angels Church, towards the centre of the village.
- 1.10 Figures 1 and 2 detail the site location and its context.

The Proposed Development

- 1.11 The proposed development considered and appraised by this study comprises employment development (B2 and B8 uses) and ancillary offices, in conjunction with associated highways and other infrastructure proposals and landscape and green infrastructure measures.
- 1.12 Whilst at this stage the appraisal does not assess a fixed or final development proposal or set of development parameters, it does provide a site specific analysis of the likely implication and effects of future employment development on the site, based upon the emerging design and development proposals detailed in the accompanying Vision document.

Limitations

1.13 At this stage, the appraisal work, with supporting photographs has been undertaken to provide a preliminary assessment of the likely landscape and visual issues, changes and effects of future employment based development within the site. Further detailed landscape and visual assessment work will subsequently be necessary to fully ascertain the detailed landscape and visual effects based upon confirmed development parameters and proposals.



2.0 METHODOLOGY

Overview

- 2.1 The purpose of this report is to explore landscape and visual matters in relation to the site and its potential to accommodate future employment based development. It considers the potential of the site and its landscape context to assimilate future change in the form of new employment based development. The level of any impacts and effects on landscape character and visual amenity have not been determined in detail at this stage, although the likely nature of potential change and effects are considered.
- 2.2 The report provides a preliminary landscape and visual appraisal. It includes consideration of those landscape design and mitigation measures that should help guide future development on the site and that will help to minimise potential resulting likely landscape and visual effects.
- 2.3 This study alongside other environmental, planning and technical work should guide the ongoing and future masterplanning and design work. Any subsequent application for development would include further detailed analysis, within a Landscape & Visual Impact Assessment (LVIA), as part of an Environmental Statement (ES). A LVIA would provide judgements on the magnitude of change and the level of effects on landscape and visual receptors resulting from confirmed development parameters and proposals.
- 2.4 In this instance, the subsequent LVIA will be included as part of an ES for future development on the site. A Scoping Opinion has been sought and received for this ES (Reference 22/00938/EAS) and this has also been drawn on by this LVA study, in respect of landscape and visual matters.

Methodology

- 2.5 This LVA has been prepared drawing upon the guidance contained within the *Guidelines for Landscape and Visual Impact Assessment* GLVIA3 (2013). It provides an understanding of the landscape that would potentially be affected, in terms of constituent elements, character, condition and value. For the visual baseline this includes an understanding of the area in which people experience views of the site, and the nature of these views.
- 2.6 The standard methodology employed for Landscape and Visual Impacts Assessments (LVIAs) and Appraisals (LVAs) by FPCR is included at Appendix A for reference. This is as also set out within the ES Scoping Report for the proposed development submitted to NWLDC in 2023.

Landscape

- 2.7 The baseline landscape is described by reference to existing landscape character assessments and by a description of the site and its context through the initial field work analysis.
- 2.8 The characteristics of the existing landscape resource is considered in respect of the susceptibility of the landscape resource to accommodate change arising from development. The value of the landscape is also considered.
- 2.9 A range of landscape effects can arise through development. These can include:
 - Change or loss of elements, features, aesthetic or perceptual aspects that contribute to the character and distinctiveness of the landscape;
 - Addition of new elements that influence character and distinctiveness of the landscape; and



· Combined effects of these changes.

Visual

- 2.10 A series of preliminary viewpoints and associated photographs are included. These provide representative views towards the site for visual receptors. The views typically illustrate what can be seen from a variety of distances and from different receptors.
- 2.11 The visual receptors most susceptible to change are likely to include:
 - · Residents at home;
 - People engaged in outdoor recreation, including use of public rights of way, whose attention or interest is likely to be focused on the landscape or particular views;
 - Visitors to heritage assets or other attractions, where views of surroundings are an important contributor to the experience; and
 - Communities where views contribute to the landscape setting enjoyed by residents in the area.
- 2.12 Travellers on road, rail or other transport routes tend to fall into an intermediate or lower category of moderate or low susceptibility to change.
- 2.13 Visual receptors likely to be less sensitive to change include:
 - People engaged in outdoor sport or recreation which does not involve or depend upon appreciation of views of the landscape; and
 - People at their place of work whose attention may be focused on their work or activity, not on their surroundings.



3.0 PLANNING CONTEXT

3.1 The following considers the relevant planning and legislative framework in the context of landscape and visual issues. Not all policies are referred to or listed in full but those of most relevance to the site and nature of the proposed development are included.

National Planning Policy Framework (NPPF)

3.2 The NPPF sets out the Government's commitment to delivering sustainable development. Throughout the document the aspirations are generally positive. A holistic approach is encouraged, balancing benefits with impacts across all aspects of the development process.

12. Achieving well-designed places

- 3.3 Paragraph 135 advises that proposed developments should function well and add to the overall quality of the area; be visually attractive as a result of good architecture, layout and appropriate and effective landscaping; be sympathetic to local character and history including the surrounding built environment and landscape setting; and create places that are welcoming, safe, inclusive and accessible.
- 3.4 Paragraph 136 notes that trees make an important contribution to the character and quality of urban environments and can also help mitigate and adapt to climate change.

15. Conserving and enhancing the natural environment

3.5 Paragraph 180 states;

'Planning policies and decisions should contribute to and enhance the natural and local environment by:

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;.....'
- 3.6 The site and its context lie within an undesignated landscape with no statutory or protected status for reasons of landscape character or value. It is also not identified as being of any particular landscape quality or interest within the development plan.
- 3.7 The site is not and does not form part of a 'valued landscape' as referenced at paragraph 180a. The landscape value of the site and its immediate context has been appraised, as detailed later in this study, by reference to a range of factors that can help in the identification of valued landscapes, as detailed in the Landscape Institute Technical Guidance Note (TGN) 02-21 "Assessing landscape value outside national designations".
- 3.8 The appraisal of the Landscape Value of the site and its immediate context concludes that it is of Medium Value (See 'Landscape Value' sub heading in Section 4).



- 3.9 The intrinsic character and beauty of the countryside should be recognised as part of devising a suitable 'landscape led' development solution for the site and is likely to include the dedication of a substantial proportion of the site for combined Green Infrastructure (GI), planting and other landscape and habitat proposals, coupled with appropriately defined extents and parameters for the built development. These should be determined as responses to the characteristics and features of the Site and its immediate context.
- 3.10 The emerging development proposals and parameters have been suitably informed by the landscape and visual appraisal work undertaken to date.

Local Planning Context

Draft North West Leicestershire Local Plan 2020 – 2040: Proposed Policies for Consultation (Jan 2024)

- 3.11 The Plan Objectives are set out at paragraph 4.4. These include; achieving high quality development which responds positively to local character and which creates safe places to live, work and travel; and conserving and enhancing the district's natural environment, including its landscape character.
- 3.12 Policy Ec3 (New Employment Allocations (Strategic Policy)) sets out the proposed employment allocations for the District in the accompanying *'Proposed Housing and Employment Allocations'* consultation document as per below.

Draft North West Leicestershire Local Plan 2020 – 2040: Proposed Housing and Employment Allocations for Consultation (January 2024)

- 3.13 Section 6 of this consultation document details the identified 'Potential Locations for Strategic Distribution'. This references the Leicester and Leicestershire Strategic Growth Plan that identified EMA and its immediate area as a 'major employment opportunity' and this area forms part of the 'Leicestershire International Gateway' area. It also references the designated East Midlands Freeport which includes circa 100ha of land to the south of East Midlands Airport.
- 3.14 The document identifies two 'Potential Locations for Strategic Distribution' including the site which is the subject of this LVA. The site was identified after the Council's detailed site specific landscape sensitivity assessment work (considered in the following Section 4). The site is identified as 'EMP90 (part)' for 81ha (including 'areas shown for landscaping').
- 3.15 In relation to the *EMP90 (part)* site, the consultation document states (on page 81):

"Potential Locations for Strategic Distribution: Land south of East Midlands Airport (EMP90(part))

- (1) Land south of A453 and east of Diseworth is identified as having potential for strategic distribution.
- (2) Allocation of the site in the Regulation 19 Plan will only be supported where there is a demonstrable need for further strategic distribution in North West Leicestershire.
- (3) If the site is allocated, matters which will need to be addressed include:
 -(d) The provision of an appropriate landscaping scheme which includes both extensive boundary treatment and also internal planting, so as to minimise the impact of development on the wider landscape and the setting of Diseworth....



-(h) A satisfactory design and layout which takes account of site's sensitive location, both in landscape terms and its adjacency to Diseworth Conservation Area.
- (4) Proposed development will need to satisfy all other relevant policy requirements in the draft Local Plan."

Landscape Designations and Studies

- 3.16 No national or local landscape designations have been identified within or in close proximity to the site
- 3.17 The site is not identified in the adopted or draft Local Plan as a 'valued landscape' in the terms of NPPF para 180 a. and there is no specific landscape related policy or designation covering the site or its immediate context.
- 3.18 Other Environmental Designations, including heritage based areas and features within the site or its context are shown on Figure 4.



4.0 LANDSCAPE CHARACTER AND SENSITIVITY

4.1 The following is drawn from the hierarchy of published landscape character and sensitivity studies of most relevance to the landscape of the site and its context. It covers relevant published studies from a national scale down to a site specific level.

National Character Areas

- 4.2 National Character Area (NCA) profiles have prepared by Natural England for the 159 NCA's defined across England. These NCA profiles include a description of the natural and cultural features that shape the landscape, how the landscape has changed over time, the current key drivers for ongoing change, and a broad analysis of each area's characteristics. This scale of assessment provides a contextual understanding of substantial landscapes areas.
- 4.3 At this very broad landscape scale, the Site lies within the northern part of Natural England's National Character Area 'Melbourne Parklands' (NCA 70). The 'Melbourne Parklands' comprises land above the Trent valley and extends from Burton upon Trent in the west to Shepshed in the east. It includes the landscapes around Burton (its eastern part), Repton, Melbourne, Castle Donington and Kegworth.
- 4.4 The Key Characteristics of the '*Melbourne Parklands*' as defined in the NCA profile include the following references:
 - "An undulating landform of Sherwood Sandstone in the west of the NCA, with Carboniferous limestones forming a broken ridge of hills in the east and extending south-eastwards;
 - Large landscaped parks with grand country houses and mixed woodlands, and remnant orchards associated with market gardening.
 - New woodland planting associated with The National Forest;
 - Small, clustered red-brick villages retain a rural character, but those close to the River Trent valley, including Melbourne, Repton and Castle Donington, are larger.
 - East Midlands Airport, with its important passenger and freight terminal, is located in the east of the NCA and serviced by the A42 and M1"
- 4.5 This national scale assessment provides a very broad contextual understanding of the site and its surroundings.

Regional - East Midlands Regional Landscape Character Assessment (2010)

- 4.6 The East Midlands Regional Landscape Character Assessment (EMRLCA) identifies 31 regional Landscape Character Types (LCT).
- 4.7 Within this assessment study, the site within the 'Wooded Village Farmlands' landscape type. The landscape character of the Wooded Village Farmlands is described as;
 - "....The Wooded Village Farmlands Landscape Character Type is characterised by productive and well wooded rolling farmlands and valleys.... Only limited remnants of semi natural vegetation remain in the agricultural landscape. However, broadleaved woodlands, copses and occasional meadows and unimproved grasslands in parkland are important, as are areas of connective habitats such as species rich grasslands, hedgerows and river corridors.".
- 4.8 The Cultural Influences section of the EMRLCA advises:



"As with other rural landscapes in the region, major infrastructure such as the M1 has also had an effect on local landscape character."

4.9 Under the heading *Infrastructure* the study also advises;

"Localised road improvements are evident in the road network, especially near larger settlements and around the East Midlands Airport, where existing routes are being straightened and widened to accommodate increased levels of traffic. This has an urbanising effect and brings a degree of standardisation to the countryside."

4.10 As with the national scale landscape study, the EMRLCA provides a very broad and contextual understanding of the Site and its surroundings.

County - Landscape Sensitivity and Green Infrastructure Study for Leicester & Leicestershire (LUC, 2017)

4.11 This strategic study seeks to examine the sensitivity of the landscape, exploring the extent to which different areas can accommodate development without impacting on their key landscape qualities, and how any impacts can be mitigated whilst delivering Green Infrastructure (GI) enhancement opportunities. It appraises both the wider landscape character areas (LCAs) across Leicestershire (in Section 6 of the study) and a number of more targeted and detailed 'Strategic Opportunity Assessment Zones' (SOAZ`s) (in section 5 of the study).

Langley Lowlands LCA

4.12 The site lies within the 'Langley Lowlands' LCA. This broad LCA stretches between Shepshed and Ashby to the south and Castle Donington and Kegworth to the north. Its landscape character is described as:

"Gently rolling landform incised by small streams flowing towards the Trent and Soar valleys. Varied field pattern, with a contrast of large post-war arable fields and smaller piecemeal enclosure associated with villages. Well treed with ancient woodlands and frequent hedgerow trees. A number of historic parkland estates occur throughout the landscape. Settlement comprises small nucleated villages and the edges of larger settlements at Castle Donington and Shepshed. Quarries at Breedon Hill and Breedon Cloud and major transport infrastructure have an influence on the landscape, particularly East Midlands Airport and the M1/A42." (page 125).

4.13 Under the 'Description by evaluation criteria', the study includes the following references for the 'Langley Lowlands' LCA;

<u>Physical character (including topography and scale):</u> Rolling landform dissected by minor watercourses draining northwards towards the Trent or eastwards to the Soar....and pockets of smaller scale piecemeal enclosure which tend to be located close to villages.

<u>Natural character</u>: The farmed landscape is mixture of arable and pasture cultivation, with pastures mostly associated with smaller fields closer to settlements.....The landscape has a strong wooded character and forms part of the National Forest.

<u>Historic landscape character</u>: A number of the villages are designated as Conservation Areas, with many Listed Buildings. Historic churches are usually a focal point within these villages.

<u>Form, density and setting of existing development</u>: Settlements within the landscape primarily consist of small, characterful villages (including some Conservation Areas) and farms.....Much of



the existing development is concreted in the north and east of the area. In the west, settlement is very sparse and mostly consists of occasional farmsteads.

<u>Views and visual character including skylines</u>: The rocky outcrop of Carboniferous Limestone at Breedon Hill is widely visible; with the Grade I listed Church of St Mary and St Hardulph forming a focal point. Trees on ridges and higher ground create wooded skylines, while some areas are visually enclosed by the woodland.....

<u>Perceptual and experiential qualities</u>: Although this landscape retains many rural qualities, there are land uses which can detract from this, including active quarries at Breedon Hill and Breedon Cloud, a motor racing circuit, East Midlands Airport and the A42/M42 roads. The area around the airport has a very open, exposed character in comparison with the rest of the landscape. There is strong juxtaposition between the industrial areas/transport infrastructure and the many historic parkland influences on the landscape...."

- 4.14 Under the landscape sensitivity judgement, the study states that this LCA is considered to have overall 'moderate high' sensitivity to commercial development. It is relevant to note however, that this is a judgement applied to the LCA as a whole, unlike the more focussed and specific assessment undertaken in the same study for 'large scale industrial development (warehousing)' in the area focussed on the site, namely the 'Northern Gateway (No. 2)' SOAZ. This is considered in the following sub-section under the 'Northern Gateway (No. 2)' SOAZ heading and this more relevant and focussed assessment concluded 'moderate sensitivity' to new large scale industrial development (warehousing).
- 4.15 Key landscape sensitivities for the *Langley Lowlands* LCA are identified and include;
 - Small streams and brooks which cross the landscape, creating localised areas of steep landform.
 - Well-wooded character....
 - Sparse settlement pattern with scattered farms and small nucleated villages, including a number designated as Conservation Areas.
 - Long views across adjacent landscapes from higher ground.
- 4.16 Landscape and Green Infrastructure guidance and opportunities for the *Langley Lowlands* LCA are also stated within the study. These include the following;
 - Avoid siting development on areas of steep landform or where it will be widely prominent within
 the landscape. Utilise the undulating topography and existing woodland and mature hedgerows
 to effectively screen development.
 - Protect the character, setting and integrity of the landscape's ornamental parkland, including Staunton Harold Hall and Whatton House (Grade II* and Grade II Registered Park and Garden) and non-registered estates including Donington Park and Langley Priory....
 - Respect the pattern and vernacular of existing development and the setting of the numerous Conservation Areas within the landscape.
 - Retain distinctive small-scale historic field patterns where they remain on the edge of settlements.



Northern Gateway (No. 2) 'Strategic Opportunity Assessment Zone' (SOAZ)

4.17 Within this 2017 landscape sensitivity study, the site and its immediate context lie within one of a number of 'Strategic Opportunity Assessment Zones' (SOAZ`s), namely; 'Northern Gateway (No. 2)'. For this SOAZ and under the sub-heading 'Description of Evaluation Criteria', the study includes the following references to the SOAZ No.2 Northern Gateway;

"Physical character (including topography and scale): The landform within the SOAZ is gently undulating, with steeper areas where it is dissected by small streams. The field pattern comprises small-medium scale enclosures, which tend to be more intricate on the edges of settlements....

<u>Historic Landscape Character</u>: The non-registered estate parkland associated with the Grade II* listed Langley Priory is distinctive within the farmed landscape and creates a sense of time depth with gateposts and walls surrounding the estate.....Historic churches form the focal point of villages in the SOAZ with the Church of St John the Baptist in Belton and Church of St Michael in Diseworth, both of which are Grade II* Listed Buildings.

<u>Form, density and setting of existing development</u>: The small villages of Diseworth and Belton are located within the SOAZ. The rural setting of the villages is important to their identity. Diseworth is located in a dip of the landscape with the edges softened by woodland.

<u>Views and visual character including skylines</u>: Views are variable depending on woodland and topography. Blocks of woodland and hedgerow/in-field trees create frequent wooded skylines, with trees also providing some visual enclosure....Church spires in Belton and Diseworth are prominent within the undulating, farmed landscape. Views to East Midlands Airport (located to the north of the SOAZ) are limited by topography and woodland; only the air traffic control tower and radio masts are visible. Ratcliffe-on-Soar power station cooling towers are visible to the north....

<u>Perceptual and experiential qualities:</u> The landscape is mostly undeveloped and rural, with high levels of tranquillity, although there are influences from major transport corridors including the M1, A42 and A453 and noise from East Midlands Airport." (pages 51- 59).

- 4.18 A sensitivity rating is stated for each of the evaluation criteria. For all of the criteria, the rating for this SOAZ is *Medium*, with the exception of *'Form, density and setting of existing development'*, where the rating is stated as *Medium High*.
- 4.19 The study further advises for SOAZ No.2 Northern Gateway (page 53);

"The north-eastern part of the SOAZ, east of Diseworth, has also been assessed for large-scale industrial development (warehousing). This part of the landscape has been assessed as **moderate** sensitivity overall for this development type due to close proximity of major transport infrastructure including the M1 and East Midlands Airport, gently undulating landform and tree cover which would enable large warehousing to be effectively hidden within the landscape, providing the guidelines below are followed. However, the close proximity of the Conservation Area at Diseworth, pockets of deciduous woodland and undeveloped character are features of the landscape which would be sensitive to development of this sort."

- 4.20 This landscape study has specifically assessed the site area for 'large scale industrial development (warehousing)' and determined that it has 'moderate' sensitivity overall to this type of development..

 The accompanying guidelines for new development within the SOAZ states;
 - "Avoid locations on steep slopes and areas which are visually prominent.



- Retain the remnant small-scale field patterns within the landscape, particularly those associated with settlements.
- Protect the setting of valued heritage features, including archaeological remains and Conservation Areas with many Listed Buildings.
- Respect the form and vernacular of existing settlement within the landscape.
- Retain valued natural features within the landscape, including hedgerows, trees, woodland and streams.
- Protect the distinctive estate landscape associated with Langley Priory and the sense of time depth.
- Remain in keeping with the settlement form and vernacular of the existing development.
- Plan for its successful integration through sensitive design and siting, including use of sensitive materials and landscape mitigation to enhance sense of place. Include planting to screen large scale buildings and roads to reduce noise and visual impact.
- Retain the sense of separation and setting the landscape provides to existing settlements."

Summary

- 4.21 The Langley Lowlands LCA covers a broad landscape tract and it is evident from this study that this landscape varies quite considerably across the LCA, with parts containing and being influenced by large scale activities, transport corridors, developments and associated infrastructure and other parts containing and being influenced by historic parkland estates and more tranquil and rural features and areas. The study recognises this juxtaposition of uses and influences. The site lies within a part of the LCA that is more influenced and more closely related to some of the larger scale and more urbanising and active uses and features.
- 4.22 Further, in respect of the site and its immediate context, the consideration of SOAZ No. 2 'Northern Gateway' offers a relatively more detailed and relevant assessment of this landscape, including with reference to new 'large scale industrial development (warehousing)'. It concludes that this landscape is of 'moderate sensitivity' to this type of development.

District - North West Leicestershire Landscape Sensitivity Studies

North West Leicestershire Landscape Sensitivity Study (July 2019)

- 4.23 This study was prepared to inform the Local Plan Review and to provide a basis for decision making in the determination of planning applications. The study covers landscape and visual sensitivity.
- 4.24 The study appraises a series of 'Sensitivity Parcels' associated with the towns, services centres and villages across the District. The majority of the Site lies beyond the two sensitivity parcels appraised at Diseworth. However, a small part of the south western extent of the Site does lie within parcel 13DIS-A (referred to as 'Parcel A' in the Diseworth part of the study). The assessment of this parcel includes the following references;

"Parcel A is located to the north and east of Diseworth. There are variations in scale and level of enclosure but topography is relatively consistent and there is a relatively strong rural character in this parcel. The settlement edge breaks down into intimate scale fields and rural properties which integrate with a landscape of pastoral agriculture. The parcel has a number of the key



characteristics of NCA 70, Melbourne Parklands, including gently rolling lowland, low and well-trimmed hedges, a nucleated village, and the presence of East Midlands Airport less than 1km from the north edge of Diseworth."

4.25 The overall landscape sensitivity of Parcel A is described as;

"This is a rural landscape comprising pastoral fields of varied scale, with a more distinctive landscape close to the edge of Diseworth. The overall landscape sensitivity is considered to be medium to change arising from new housing development and medium-high to change arising from new employment development."

4.26 The overall visual sensitivity of Parcel A is described as;

"There are some scenic rural views, and long distance views within the eastern portion of the parcel. The parcel forms the setting for the Diseworth Conservation Area and the level of recreational access within the parcel is considered to be moderate. This means that overall visual sensitivity is considered to be medium-low to change arising from new housing development and medium to change arising from new employment development."

4.27 It should be noted that Parcel A is focussed on the landscape surrounding much of Diseworth, with the exception of the landscape to the south of the settlement. Only the south west corner of the site extends into this parcel and the majority of the site lies beyond the area assessed, to the north east of Parcel A. The subsequent NWLDC landscape sensitivity study in August 2021 (see below) appraises the landscape of the site and is more relevant to consider.

North West Leicestershire Further Landscape Sensitivity Study (August 2021)

- 4.28 Further to the 2019 Landscape Sensitivity Study, this study appraised nine parcels of land based upon sites received by NWLDC as part of their 'Call for Sites'. The nine parcels appraised included the site, the subject of this LVA. This parcel is referred to in the study as 'Parcel 13DIS-C'.
- 4.29 The assessment of *Parcel 13DIS-C* includes the following references;

"Landscape Appraisal

Location and Character

There are variations in topography but consistency in scale and land cover, with an overall rural character, which is influenced by East Midlands Airport and road infrastructure. Large arable fields form much of the parcel, which separates the East Midlands Airport, development at Donington Park Services, the M1/A42 junction and Diseworth. The parcel has a few of the key characteristics of NCA 70 Melbourne Parklands including an undulating landform, soils suitable for agriculture, and low well maintained hedges.

Landscape Value

This is a landscape of stronger character in association with the edge of Diseworth and along Long Holden. Character weakens to the north near East Midlands Airport and to the east near Donington Park Services and the M1/ A42 junction. The quality and condition of the large scale arable farmland is consistent across the parcel. Robust field boundary hedgerows provide the more valuable landscape element of the parcel and along with scattered boundary trees provide some connectivity. There are no landscape, ecological or heritage designation within the parcel. The



farmland provides part of the setting of Diseworth conservation area and its listed buildings, which lies to the south west of the parcel.....

Landscape Susceptibility

This is a landscape of consistent scale, with large to medium sized fields bounded by hedgerows. Landform falls from north east to south west and is more distinctive in the southern part of the parcel as it falls more steeply towards Diseworth Brook. There is a stronger sense of place close to the settlement edge of Diseworth and along the PRoW on Hyam's Lane and Long Holden. The sense of place, together with tranquillity, reduces in proximity to Donington Park Services and the M1/A42 junction. The field pattern and hedgerows define the structure of the landscape which is of a rural character relatively typical of this study. The edges of Diseworth which have a direct relationship to the parcel are relatively well integrated with large private gardens and allotment space, otherwise the parcel is separated from Diseworth by smaller scale fields. Any change as a result of development which encroaches on the landscape setting of the Diseworth conservation area would be noticeable."

4.30 The overall landscape sensitivity of *Parcel 13DIS-C* is described as;

"This is a rural landscape with a relationship to the edge of Diseworth and a number of PRoW across the parcel. It serves an important function in separating the development and infrastructure to the north and east from the village of Diseworth. However, sensitivity is reduced by the landscape having relatively few natural features and the presence of both Donington Park Services and the M1/A42 road junction.

Overall landscape sensitivity is considered to be medium to change arising from new employment development."

4.31 Under the sub heading, Visual Appraisal, the assessment of *Parcel 13DIS-C* includes the following references;

"Visual Value

There are some scenic long distance views south from the parcel and to the church spire of Diseworth from Hyam's Lane. There is no evidence that views are valued more than at a local level.

Visual Susceptibility

The elevated topography affords long distance views south, and as such is intervisible with the wider landscape. Views north are contained by woodland belts around East Midlands Airport. Views north east to Donington Park Services and the M1/A42 junction are filtered and screened by vegetation within the services site and a vegetation buffer to the motorway. From the west end of Hyam's Lane and Long Holden there are foreground views to the residential properties along the edge of Diseworth and views to the church spire within Diseworth conservation area. Visual detractors include the tall control building at East Midlands Airport, and the M1/A42. Buildings at Donington Park Services are relatively well screened by surrounding vegetation. Higher susceptibility receptors include the community at the edge of Diseworth, and recreational users on PRoWs. Lower susceptibility receptors travelling on the A42 and M1 have brief and filtered views to the parcel."

4.32 The overall visual sensitivity of *Parcel 13DIS-C* is described as;



"There are some scenic long distance views to the south of the parcel and beyond. However, views to the north and east are relatively contained and include detractors including the large airport control building. The level of access within the parcel is considered to be relatively high due to the network of PRoWs.

Overall visual sensitivity is considered to be medium to change arising from new employment development."

4.33 This study also includes a plan (on page 58) showing suggested 'Guidance and Mitigation Considerations' for development on Parcel 13DIS-C. This includes the identification of areas of relative higher landscape and visual sensitivity; buffer planting areas; PROW connections; and views to be considered. These areas and considerations have been appraised in devising the emerging development proposals, detailed within the accompanying submitted Vision Document.

Published Landscape Character Assessment and Sensitivity Studies – Summary

- 4.34 There are a series of relevant published landscape studies that vary from the very broad to more localised and site specific scales. At a more localised scale they describe a rolling landscape with a mix of rural and urbanising influences, with farmland and scattered woodlands They also highlight the relationship of the site to Diseworth as an important consideration in appraising and devising future employment proposals on the site.
- 4.35 The County and District wide studies have appraised the landscape of the site and its localised context and conclude that it is a landscape of medium or moderate sensitivity to new employment development, indicating that it can potentially accommodate this type of development with suitable landscape and visual mitigation and attention to the design and layout proposals.

Landscape Baseline

4.36 The following provides a review and appraisal of the landscape baseline for the site and its context.

Topography

4.37 The following should be read in conjunction with Figure 5.

Context - Landform

- 4.38 The topography of the site's context is quite varied yet not dramatic. The broad River Trent valley lies to the north of EMA and the River Soar valley lies beyond the M1 corridor to the east. Land to the west and south is generally more undulating with a series of smaller valleys and ridges. EMA stretches across the higher ground to the north of the site. This lies at around 90 95m Above Ordnance Datum (AOD).
- 4.39 In the broader context of the site to the west and south west, the land rolls and rises to around 125m AOD at Breedon Hill and 120m AOD at Barrow Hill, south east of Worthington.
- 4.40 Diseworth lies at around 55 65m AOD, with Diseworth Brook falling to just below 50m AOD to the south of the site. Donington Park Services lie at around 85 90m AOD on the north east corner of the site. Castle Donington and Kegworth both lie on the slopes of the Trent and Soar valleys at generally between 30 80m AOD, with aspects to the north and north east, away from the site.



Site - Landform

- 4.41 The site lies on the northern slopes of the Diseworth Brook and a valley that generally falls towards the east into the larger Soar valley. It has a general southerly aspect, with the land generally falling from north to south, and with a slight south westerly fall in the western part of the site. The land typically falls from just over 90m AOD in the north east part of the site, closest to the Donington Park Services to around 55m AOD in the south east of the site.
- 4.42 Hyam's Lane (PROW) follows a gentle falling area of relatively higher land that extends towards Diseworth from the north east corner of the site. This creates some variation to the south facing slopes, with a minor subsidiary valley/ dip in the landform in the south eastern part of the site.
- 4.43 In the west and closest to Diseworth the site falls to around 65 70m AOD. The north west corner of the site lies at around 75m AOD, with a small watercourse/ ditch and minor valley landform falling south at this point from the A453 towards Diseworth.

Site and Immediate Context – Landscape Character and Features

- 4.44 The site predominantly comprises a number of medium sized arable fields occupying sloping land that generally falls towards the south from its northern boundary alongside the A453. The site is strongly defined and bound by the A453 to the north and the M1/ A42 road corridors and services to the east. A track (Long Holden) defines the boundary to the south and a series of field boundaries to the west. The general aspect of the site is towards the south and south west, reflecting the underlying landform.
- 4.45 Hyam's Lane (a PROW) stretches though the site from the relatively higher ground in the north east to Diseworth on the western side of the site. This PROW and track is bound by hedgerows to both sides, with relatively broad grassed verge in places. The track also provides access to many of the adjoining fields within the site. The fields are generally bound by mixed native hedgerows, containing a relatively limited number of existing hedgerow trees. A small copse of trees, including a small pond exists in the north east portion of the site, alongside the boundary with Donington Park Services. Further mature tees and wooded areas surround these Services, immediately beyond the site boundary and an area of mixed scrubby habitat (and wildlife area) lies beyond the site boundary immediately to the south of the services. The site is relatively contained in the wider landscape, particularly to the north.
- 4.46 The immediate context of the site beyond its boundary also includes the edge of Diseworth to the south west, and further farmland fields to the south and west. The lower lying land beyond the southern site boundary also includes Diseworth Brook, which is lined by mature trees and planting. The Green (minor road) lies immediately to the south of this watercourse and connects Diseworth with Long Whatton, to the east of the A42 and M1 road corridors. Grimes Gate (minor road) links Diseworth to the A453 and lies to the west of the Site. The main vehicular entrance to EMA lies close to the north west corner of the site on the A453.
- 4.47 Existing mature tree planting on the northern side of the A453 limits views towards existing development and EMA from the site, although views are possible towards the control tower and some other buildings and structures, principally from the northern part of the site. Traffic and infrastructure (signs/ gantries) on the M1 and A42 are also visible in places, although existing trees and the relative position of the motorway in cutting as it passes the services do restrict some of these views. Traffic on the A42 is more open and visible for a stretch of this road as it passes the south east side of the site.



- 4.48 In addition to Hyam's Lane, public access is also possible along Long Holden immediately south of the site, although this route stops at the boundary with the A42 to the east. A PROW (footpath) (the Cross Britain Way) stretches across the lower lying fields to the south of the site from the edge of Diseworth to the road bridge crossing on the A42, on the Green. This route continues to the east of the A42/ M1 and to the south west of Diseworth. Other short stretches of PROW (footpaths) lie to the west of the site, with access to/ from Diseworth.
- 4.49 The general landscape character of the site and its immediate context is shaped by the rolling and sloping farmland with hedged fields and varying influences from Diseworth and the larger scale urbanising uses and features in close proximity to the site to the north and east.

Landscape Value

- 4.50 In terms of "landscape value" it is appropriate to examine the role of the site and its immediate context in terms of the range of factors, as set out in the Landscape Institute Technical Guidance Note (TGN) 02/21 'Assessing landscape value outside national designations'. This considers the landscape in terms of a range of factors as set out below. As a starting point, landscape designations have been considered. The following is a preliminary appraisal and will be reviewed further following more detailed analysis and heritage and ecological appraisal work.
- 4.51 <u>Landscape Designations</u>: The site and its wider landscape context is not subject to any national, local or other landscape designations.
- 4.52 <u>Natural Heritage</u>: The site does not include and designated ecological / wildlife sites and it is currently predominantly under arable use. The habitats of relatively greater local value comprise the mature hedgerows and hedgerow trees, small copse and pond (in the north east) and the wet ditch/ stream on the western boundary of the site. A 'wildlife site' lies beyond the site to the east and to the south of the Donington Park Services.
- 4.53 <u>Cultural Heritage</u>: The cultural heritage assessment identifies a number of heritage assets surrounding the site, including the Diseworth Conservation Area and a number of Listed Buildings and features within the settlement. These have been taken into account in appraising Landscape Value.
- 4.54 <u>Landscape Condition:</u> Generally, the landscape is in good or reasonable condition, and the majority of the hedgerows are continuous and appear to be under active management. The basic field pattern also appears to be largely intact yet there are some active and detracting influences from the nearby existing larger scale transport infrastructure and major developments. The arboricultural assessment (undertaken in May 2022), classifies the majority of the trees and hedgerows within the site itself and in arboricultural terms as Category C (Low Quality).
- 4.55 <u>Associations:</u> There are no known associations (eg with notable people or historical events or folklore or associations with arts/science/ technical achievements) that contribute to the perception of the landscape of the site and its immediate context.
- 4.56 <u>Distinctiveness:</u> The landscape includes no particularly distinctive or rare landscape features or characteristics and it does not form part of a rare landscape type or character area. It does contain sloping and rolling farmland and mixed hedgerows, which are characteristic of the broader landscape yet these are not unusual or considered to be particularly fine examples or distinct across the wider character area. The smaller scale pasture fields on the immediate edge of Diseworth, though outside the site are of relatively more value in these terms.



- 4.57 Recreational Value: Hyam's Lane (PROW) stretches across the site and other stretches of PROW (footpaths) existing around the edge of Diseworth to the west and south of the site. There are no formal recreational uses or open access land within the site and public access is focussed along Hyam's Lane, linking the A453/ Donington Park Services with the north east edge of Diseworth.
- 4.58 <u>Perceptual (Scenic):</u> The scenic value of the landscape is variable, as the landscape context of the site encompasses a mix of uses and influences. The major road corridors (M1/A42), including the A453 to the north influence this landscape to differing degrees as does EMA and the existing employment development to the north of the A453. The nature of the underlying landform and the presence of surrounding mature trees and planting do limit the influence of these active and large scale urbanising features in places yet they are still apparent across this landscape.
- 4.59 At this localised scale and in these terms, the most positive features and characteristics comprise the smaller scale paddocks and pasture fields to the immediate edge of Diseworth (beyond the site boundary) and the mature hedgerows and hedgerow trees within and surrounding the site.
- 4.60 <u>Perceptual (Wildness and tranquillity)</u>: The site and its immediate context do not possess any particular or notable perceptual qualities. It is perceived as an agricultural landscape, locally influenced by nearby major infrastructure yet with some relatively more contained pasture fields to the immediate edge of Diseworth. It is not however a tranquil or 'wild' landscape.
- 4.61 <u>Functional aspects:</u> The Site and its immediate context provides no particular functional role in landscape terms. It is not a landscape that has any physical or functional links with an adjacent or nearby designated landscape and neither is it important to the appreciation of a designated landscape. It also does not form an important part of a broader/ strategic Green Infrastructure network and is not identified within any of the published landscape studies as forming part of a landscape that contributes to the healthy functioning of a broader landscape.
- 4.62 In conclusion and having appraised the above factors it is judged that the site and its immediate context is of Medium Landscape Value.
- 4.63 Whilst this is not an assessment of the sensitivity of the landscape to new employment development, the Medium Landscape Value assessment generally aligns with the Medium or Moderate Landscape Sensitivity judgements of the County and District wide Landscape Studies. It is also assessed that this landscape is not a 'valued landscape' in the terms of NPPF, paragraph 180a.



5.0 VISUAL BASELINE

- 5.1 A visual appraisal has been undertaken for the site. This has explored the nature of the existing visual amenity of the area and has sought to establish the approximate visibility of the site and potential future development from surrounding locations and receptors.
- 5.2 Consideration of the availability of views towards the site and any future development for visual receptors has been undertaken in parallel with the baseline landscape study. This has determined those visual receptors within the landscape that are likely to have views of the site and any future development, considering factors such as landform, and existing vegetation and buildings, which determine the extent of actual visibility across the landscape. A series of photo viewpoints have been selected which support this analysis.
- 5.3 Photographs have been taken to illustrate a view from a specific vantage point, or to demonstrate a representative view for those receptors that are moving through the landscape, e.g. rights of way users. The photographs may demonstrate varying degrees of visibility and include both short and long range views. The photographs were taken between July 2022 and March 2023 and seasonal differences have been taken into account when considering visual matters and potential change and effects upon visual receptors.

Photo Viewpoints

5.4 Consideration of the potential likely visual implications, changes and effects of future development upon surrounding receptors is detailed in the subsequent section. Figures 6 and 7 detail the location of the Photo Viewpoints and Figure 8 illustrates the Photo Viewpoints.

Summary of Visual Baseline

- 5.5 The baseline visual analysis provides a number of reasoned conclusions in relation to the Site and potential future development, as summarised below;
 - Visually, the site is generally well enclosed to the north, north west and north east. It is also
 relatively well contained with limited visibility to the east and south east. This is largely as a
 result of the surrounding topography and presence of nearby mature woodland, trees and
 planting.
 - The site is relatively more visible to the south and south west, though in these directions the
 visibility of the site is still limited and interrupted more widely by the rolling landform and
 presence of woodlands and trees.
 - Due to the nature of the landform, the relatively low lying and the enclosed position of Diseworth,
 views towards the site from the village are variable. Existing views towards the site from the
 village are predominantly limited to those properties and positions in the north east of the
 settlement, with views from other properties and locations within the settlement more limited
 and restricted.
 - Views towards the site from other settlements is also generally limited. No views are possible
 from the larger settlements of Castle Donington and Kegworth to the north and north east; or
 more distantly from Melbourne to the west. Very limited views may be possible from the north
 west edge of Long Whatton, situated beyond the motorway to the east, although from this
 direction views are substantially screened by intervening trees and planting largely alongside
 and close to the major road corridors.



- The site is visible from a relatively limited number of other more scattered properties and farms generally across the wider landscape to the west and south of the site.
- The site is visible from a number of PROW, including those passing through the site or within
 its more immediate context to the west and south. These include from Hyam's Lane within the
 site and from Long Holden and the Cross Britain Way to the south. It is also visible from some
 more distant stretches of PROW, also predominantly to the west and south.
- The site is visible from the M1 motorway (principally north bound users) and for a limited stretch of the A42, where it passes close to the south east part of the site. Views from the A453, along the northern site boundary are restricted to some degree by the existing roadside hedgerow and the sloping nature of the landform (generally sloping away from the northern boundary). There are also some views towards the site from stretches of the minor roads/ lanes into and out of Diseworth.
- Distant views towards the site are possible from limited elevated positions and receptors in the wider landscape to the south.
- Overall existing visibility of the site is generally concentrated to the south, south west and west, with visibility from the north, north west and north east notably more restricted.



6.0 LANDSCAPE AND VISUAL APPRAISAL

As detailed in the Introduction to this study, the primary purpose of this LVA is to consider and appraise the suitability and potential for the site to accommodate future employment development; and the likely landscape and visual change and effects that might arise from a development of this nature. It also seeks to determine and outline the design and mitigation measures that should be considered to enable any potentially adverse landscape and visual effects arising from future development to be reduced and minimised as far as practicable.

Landscape Appraisal

- 6.2 The site occupies a landscape that is relatively simple in landscape terms and is dominated by sloping and rolling arable farmland. Its immediate context is more varied and includes a variety of both rural and urban uses, features and influences.
- 6.3 The site and its context is not recognised by any national, local or other local landscape designations. Published landscape character and landscape sensitivity studies covering the site and its context have been prepared at national, regional, county and district wide scales. Within the most recent of these published landscape studies (at both County and District wide scales), consideration has also been given to the potential for future employment development to be accommodated on the site.
- 6.4 Both of the County and District landscape studies assessed the landscape to be of medium or moderate landscape sensitivity to new employment development, indicating that new employment could potentially be accommodated on the site and within this local landscape, subject to suitable landscape and visual mitigation and the layout and detail of the proposals.
- The immediate context of the site comprises a mix of uses, characteristics and features, including both rural and urban and smaller and larger scale features and influences. East Midlands Airport (EMA) (and associated employment and business uses) lies immediately to the north beyond the A453, with the East Midlands Gateway (EMG) development beyond this to the north. Beyond Diseworth to the south and west lies predominantly farmland with scattered properties. Diseworth Brook flows through Diseworth and follows the lower lying land to the south of the site.
- 6.6 The Landscape Value of the site and its immediate context has been assessed in line with recognised guidelines (LI TGN 02-21:' Assessing landscape value outside national designations') to be Medium.
- 6.7 In terms of the landscape susceptibility of the site and its immediate context to future employment development, this has also been considered. In these terms, the landscape features most susceptible to this type of change will be the arable farmland and the hedgerows and the limited trees within the site. The loss of the farmland and the majority of the existing hedgerows is however likely given the nature of the site and the proposed development.
- As recognised in the 2021 NWLDC Landscape Sensitivity, the presence of the nearby major road corridors and development to the north does reduce the susceptibility of this landscape to accommodate future development of this nature. However, it will remain important to assimilate the future employment development into the landscape as effectively as possible, maximising opportunities for new landscape areas and robust mitigation measures.



- 6.9 The relationship of a future development proposal to Diseworth will require careful attention in landscape terms. The settlement occupies a relatively low lying position to the south west of the site and its immediate setting and surrounds includes small pasture fields and paddocks. The creation of a robust landscape framework (or 'buffer') to the perimeter of the future development area, where it lies closest to the village will be important. The nature and character of this landscape perimeter area and its associated benefits in visual mitigation and wider ecological, heritage and environmental terms should be founded on a careful evaluation of all of these respective matters.
- 6.10 As recognised in the published landscape studies, the site is capable of successfully accommodating new employment based development, as part of a comprehensive design solution, also embracing conserved, enhanced and new landscape features, areas and mitigation measures. Particular attention will be required to mitigate and address the relationship of the new development scheme to Diseworth to the south west of the site.

Illustrative Masterplan and Development Parameters

- 6.11 Baseline and landscape and visual appraisal work has been progressed over the past two years. This has considered the potential of the site to accommodate future employment development and has been drawn upon in devising the emerging development parameters and proposals for the scheme, as detailed in the accompanying Vision document. The emerging scheme proposals have been prepared in response to a suite of technical and environmental studies and work undertaken to date, including landscape and visual.
- 6.12 In landscape and visual terms, the following design principles or features have been incorporated as part of the proposed development:
 - Establish an extensive and robust landscape framework to the proposed development; including a broad landscape area and 'buffer' to Diseworth. This should comprise a cohesive arrangement of strategic landscape and habitat areas and corridors, within which the future buildings and infrastructure would be sited. This will form the landscape and green infrastructure setting to the proposed built development;
 - Include earthworks and mounding proposals that contribute positively towards a robust landscape and mitigation strategy. This is likely to include earthworks and mounding proposals within the southern and western parts of the site to support the mitigation of potential landscape and visual effects upon Diseworth. Allied to the earthworks and mounding proposals will be the inclusion of extensive new woodland, trees and other habitat proposals;
 - The extensive planting and habitat proposals will draw upon relevant guidelines and strategies
 and will comprise substantially native and suitable locally occurring species. The new planting
 and habitats will be devised to maximise landscape, visual amenity and biodiversity benefits
 and to contribute more broadly to the local landscape;
 - Conserve existing hedgerows and trees largely to the perimeter of the site and reinforce this
 existing planting through new native planting and habitats and long term management;
 - Retain Hyam's Lane through the scheme as a key public access route and PROW. This should
 also include the substantial conservation of the existing hedgerows and trees along this route
 and reinforcement with other new native planting and habitats along this corridor;
 - Include new public access and associated amenity and informal recreational areas within the 'outer' landscape areas close to Diseworth in the west and south west of the site. Include other



- new publicly accessible routes, within and around the site to improve connectivity and offer more walking and/ or cycling routes;
- Establish a high quality landscape treatment to the main vehicular entrances and routes through the site and to the building frontages and surrounds;
- Maximise biodiversity opportunities and wildlife corridors and connections; including attention to the sustainable drainage proposals to deliver landscape and wildlife benefits; and
- Commit to and deliver a long term landscape and biodiversity management plan.
- 6.13 Good landscape design and green infrastructure practices will be adopted as part of the proposed development and the landscape and green infrastructure areas will extend to a sizeable proportion of the overall site area, with the broadest and largest landscape areas situated closest to Diseworth, in the south and west of the site.

Visual Appraisal

- 6.14 The potential visual implications and effects of proposed development on the site have been appraised.
- 6.15 Views towards the proposed development are likely to be possible from receptors both within the immediate and wider context of the site. This will include views from some properties and locations within Diseworth to the south west of the site and from other receptors primarily to the south and west of the site. This will include principally views from properties and from stretches of PROW and roads, at various distances, including from some limited distant elevated positions to the south. Other close views will also be possible from the A453 along the northern boundary of the site and from Hyam's Lane within the site.

Settlement and Properties

- 6.16 The clearest views towards the proposed development from Diseworth will be from positions and properties on its north eastern edge. For these properties and receptors with existing views towards the site and the north east, the proposed development will be visible beyond the existing immediately surrounding fields and paddocks. The design of the outer mounding and associated landscape and planting proposals in the southern and western parts of the site will be important in addressing and mitigating the potential visual effects of the development from these Diseworth receptors.
- 6.17 From many other properties, streets and locations within Diseworth, there are limited opportunities for views towards or in the general direction of the site and the north east and thus the potential visual effects of the proposed development will be reduced. It is likely that there will be some initial notable visual change and effects arising from the proposed development for those properties and receptors with the clearest views on the north eastern edge of the settlement. However, the outer mounding and broad landscape areas and woodland planting will increasingly and over time filter and screen views towards the proposed development. It is also likely that the outer mitigation mounding will substantially screen the activity (roads; parking areas; service yards etc) associated with the proposed development, from the outset of the completed scheme.
- 6.18 The only potential opportunities for views towards the proposed development from Long Whatton will be limited to a small number of properties and/ or positions on the north western edge of the



settlement. From here, the higher parts the proposed buildings in the east of the site are likely to be visible beyond the intervening fields and the mature trees and planting lining the M1 and A42 road corridors. There will be no views towards the proposed development from the majority of properties within this village due to the relative position and linear nature of the settlement, extending to the east.

- 6.19 No potential views towards the proposed development are likely from the relatively larger settlement areas of Kegworth and Castle Donington to the north east and north west of the site respectively. Glimpsed views may be possible from the highest southern extent of Kegworth yet in this instance any views will be limited and seen in the context of other existing development at EMA and EMG.
- 6.20 There will be views towards the proposed development generally from the edges of some settlement areas and generally scattered properties to the south and south west of the site. These will generally be relatively distant, with the proposed development seen as part of varied views from elevated positions. It will include views from scattered farming and individual properties to the south of the site, including Wood Nook Farm and a small number of properties on Smithy Lane and Dry Pot lane to the south west of Long Whatton.
- 6.21 Views towards the proposed development from properties at Breedon on the Hill, Tonge and Isley Walton some distance to the west of the site are unlikely due to the nature of the intervening landform which includes higher ground to the west of Diseworth and south of Isley Walton.
- 6.22 More distant views towards the proposed development will be likely from other scattered farming and other properties to the west and south west of the site. Views towards the proposed development may also be potentially possible from some distant elevated properties and positions on the edges of Shepshed and Belton to the south. Any likely available views from this direction and distance (over 3 4km+) would be restricted, with the proposed development potentially seen as part of broader and varied views, that are likely include other existing buildings and development at EMA and EMG.

Public Rights of Way and other pedestrian/ cycle routes

- 6.23 The proposed development will be clearly and closely visible from Hyam's Lane, which stretches through the development area. Inevitably, the proposed development will result in some notable visual change and effects for users of this track. The route will however be maintained along its current alignment through the site, with the existing hedgerows and trees bordering the route also substantially conserved. New native planting alongside the conserved planting will also be undertaken and the route will thus be maintained through the development within a landscape corridor.
- 6.24 Longer ranging views south from the route will still be possible between and beyond the proposed buildings and the closer views approaching the edge of Diseworth will also still be possible for those users moving towards the settlement edge.
- 6.25 From south of the site, views towards the proposed development will be possible for users of Long Holden and the Cross Britain Way. Within these views the proposed development will be seen on the rising land to the north. Landscape mitigation proposals in the form of native woodland and other planting along the southern site perimeter will assist in filtering and screening views towards the lower parts of the development, although from the closest and clearest views from these routes



and upon completion the proposed development will represent a notable change to the views northwards.

- 6.26 There will be other views towards the proposed development from stretches of PROW situated to the south and west of Diseworth. For users of these generally more elevated stretches of PROW, the proposed development will be visible on the rising valley slopes to the north of Diseworth Brook. It will generally be seen beyond and/ or to the side of Diseworth, with the settlement area occupying a position on the lower lying valley slopes. Elements of EMA and the Ratcliffe on Soar Power Station are also visible in these existing longer and wider ranging views.
- 6.27 Landscape mitigation measures, including mounding and woodland planting in the south and west of the site will assist in filtering and screening views towards the lower parts of the proposed development for these PROW users. Subsequent attention to the design and colour treatment of the proposed buildings will also be important in addressing the views towards the proposed development from these positions and receptors.
- 6.28 From other PROWs to the west and south of Diseworth, the nature of the rolling landform will screen and limit views towards the proposed development. Potential views from these PROW are thus variable, largely reflecting the relative elevation and the intervening landform and woodland areas.
- 6.29 Views towards the proposed development from PROW to the north and west are generally limited by the nature of the landform in these directions. Where any limited views towards the proposed development are possible from elevated positions, views are likely to be restricted to the highest parts of the proposed buildings with these also seen in the context of other existing developments at EMA and/ or EMG. Views towards the proposed development from The Airport Trail (a loop around EMA) will be limited.
- 6.30 Distant and generally elevated views towards the proposed development will also be possible from some PROW in the wider landscape to the south and west, including from stretches of PROW on the highest ground at Breedon on the Hill and from other elevated positions to the west and south west of Shepshed. Where visible from these distant positions the proposed development is likely to be seen alongside or in the context of other existing developments at EMA, EMG, Castle Donington and Ratcliffe on Soar Power Station.

Roads

- 6.31 The proposed development will be visible from the M1 motorway (principally north bound users) and for a limited stretch of the A42, where it passes close to the south east part of the site. In these views the proposed development will be seen on the sloping ground that falls southwards from the A453 and elevated plateau. The proposed buildings in the east of the site will be those most apparent for these road users.
- 6.32 Views towards the proposed development will also be possible from the A453 alongside the northern boundary of the site. These will comprise close roadside views towards the proposed development on the northern part of the site. Existing views for these road users include existing buildings and development at EMA and the associated Pegasus Business Park. Conserved and new planting proposals along the northern perimeter of the site should establish a suitable landscape setting to these immediate road user views. More limited views from the A453 for east bound users will also be possible from the west of the site.



- 6.33 Varying views towards the proposed development will also be possible from stretches of the roads to the south and west of the site, leading in and out of Diseworth. These include, Grimes Gate, to the west of the site; The Green, to the south; and relatively short stretches of the roads leading out to the west of Diseworth. Limited views towards the highest parts of the proposed development are also likely to be possible from a short stretch of the road (West End) at the western end of Long Whatton and potentially from a limited stretch of Kegworth Lane, leading to the north of Long Whatton.
- 6.34 There will be other views towards the proposed development from generally distant, elevated and limited stretches of roads to the south, west and east of the site.. From most of these elevated stretches of roads, where any views are possible, the proposed development is likely to be seen as part of a more expansive and varied view, including other existing nearby developments at EMA and EMG.

Other Potential Receptors

- 6.35 Views towards the proposed development from EMA and Pegasus Business Park immediately to the north of the site will be limited, largely as a result of the nature of the landform and the presence of mature tree planting on the northern side of the A453. Some limited views towards the higher parts of the proposed development on the northern part of the site are however likely.
- 6.36 Potential views towards the proposed development from Langley Priory (approximately 2km to the south west of the site) are effectively screened by intervening higher ground situated relatively close to the north east of the property. Views from Whatton House (approximately 2.5km to the east of the site) are also screened by the nature of the intervening landform and presence of existing mature woodland, immediately to the west of the House. This property also occupies a position with an outlook generally to the east across the Soar Valley and away from the direction of the site.
- 6.37 Any available views towards the proposed development for users of Donington Services MSA will be limited by the mature woodland and trees immediately surrounding the northern, western and south western edges of the facility. Some glimpsed and restricted views are likely from within the service area yet these are likely to be limited to the winter months, with the proposed development heavily filtered by the immediately surrounding mature woodland and trees.

Visual Appraisal - Summary

- Overall, it is anticipated that the proposed development on the site will result in some notable visual change for receptors within and close to the site, including for residents on the north eastern edge of Diseworth and for users of Hyam's Lane and stretches of the PROW close to the south of the site (Long Holden and the Cross Britain Way). The nature of this visual change is likely to vary and from the edge of Diseworth the visible elements of the proposed development will principally comprise the perimeter mitigation mounding and the woodland and other landscape and habitat proposals. Views towards the proposed built development will also be possible from Diseworth yet these views are likely to be confined to the higher parts of the proposed buildings, with the lower active surrounds (car parks, service yards and roads etc) to the buildings screened from view by the intervening mitigation mounding and landscape proposals.
- 6.39 As part of the proposed development, Hyam's Lane will remain along its existing alignment through the site within a landscape corridor of conserved and proposed hedgerows, trees and woodland



planting. Inevitably, the proposed development will result in some notable visual changes for users of this route between Diseworth and Donington Park Services. However, these changes will be mitigated in part by the conserved and new planting and landscape proposals. The approaching views for users towards Diseworth will also be maintained by the proposals and the inclusion of the broad landscape areas in the south west of the site.

- 6.40 From the PROWs close to the south of the site, the proposed development will be seen on the slopes rising up towards EMA and the A453 to the north. Within these views, it will be the proposed buildings on the southern edge of the site that will be most readily visible. Mitigation woodland and other planting along the southern perimeter of the site will however provide some visual filtering and screening of the proposed development over time. The design and elevational treatments of the proposed buildings, including the appropriate selection and use of colours will be important considerations in addressing these and other views, particularly from the south and west.
- There will be other views towards the proposed development generally from receptors (properties, PROW and roads) across the landscape, principally to the south and west of the site. These will include from other settlement areas, scattered farming and other properties and from stretches of PROW, the M1 and the A42 roads and other roads and lanes. Most of the more distant visual receptors are relatively elevated and the existing views towards the site are generally varied and expansive, with existing development at EMA and EMG also visible in these views.
- The emerging development parameters and proposals for the scheme, as detailed in the accompanying Vision Document, have been informed by the visual appraisal work to date. This has included consideration of the extent and nature of the perimeter mounding and landscape mitigation areas. Further ongoing consideration and attention to these areas and to the proposed plot extents, levels and building heights will continue to be appraised to address and mitigate the potential visual change and effects of the proposed development. The proposals as detailed in the Vision Document encompass robust landscape mitigation measures and areas to address the potential visual effects arising from the proposed development.

EMP90 (part): Landscaping - Review of NWLDC proposal

- As part of this LVA, a review of the area shown for 'Landscaping' in the Regulation 18 Draft Local Plan has been undertaken. The extent of the proposed 'Landscaping' is detailed on the plan at page 81 of the NWLDC Draft Local Plan 'Proposed Housing and Employment Allocations for Consultation' in respect of site EMP90.
- 6.44 The proposed landscaping is set to the perimeter of the development area, with an increased proportion of landscaping to the western and southern sides of the development area. Fields within the red line boundary are not shown as comprising any development or landscaping in the western part of the site as depicted on page 81.
- It is acknowledged that robust landscape areas and corridors should extend around the perimeter and outer parts of the site, and that these are potentially of most importance in the south and west, in relation to the settlement edge of Diseworth and landscape areas to the south and west. However, it is considered that the strategic landscape areas should encompass the fields identified within the western part of the site. This would have the effect of broadening the landscape 'buffer' and mitigation proposals to the edge of Diseworth and extending the built development area a little further to the west. This would be as shown on the plans within the accompanying 'Vision'



Document' and the Proposed Landscaping Mitigation Plan appended to the Representations Statement.

- 6.46 The broad landscape areas shown on the plans within the Vision Document and the Proposed Landscaping Mitigation Plan would include extensive mitigation mounding, woodland planting and other open space and habitat proposals. It would also include the conservation of existing hedgerows within this western part of the site. Overall, this broader landscape area in the west and south west would deliver an equivalent or potentially greater level of landscape and visual 'mitigation' (or 'buffering') to that indicated by the plan on Page 81 of the NWLDC 'Proposed Housing and Employment Allocations for Consultation'.
- 6.47 Whilst the plans within the Vision Document indicate built development extending relatively further to the west within the site, this is not considered likely to give rise to any marked increase or change to the likely landscape and visual effects arising from comparable employment development on site.
- 6.48 The proposed approach to the landscape proposals on site will also include a landscape corridor focussed along Hyam's Lane stretching through the site.
- 6.49 Overall, in landscape and visual terms, it is considered that the built development area shown on the NWLDC (page 81) plan could be extended further to the west than shown on the plan, providing also that the outer landscape proposals similarly extended further to the west and were increased in area and width. The plans within the Vision Document incorporate a robust and suitable landscape mitigation strategy and design approach, reflecting the principles set out within Policy EMP90 (part) policy.



7.0 SUMMARY AND CONCLUSIONS

- 7.1 The site predominantly comprises a number of medium sized arable fields occupying sloping land that generally falls towards the south from its northern boundary alongside the A453. The site is strongly defined and bound by the A453 to the north and the M1/ A42 road corridors and motorway services to the east. A track (Long Holden) defines the boundary to the south and a series of field boundaries and a small watercourse bound the site to the west. The general aspect of the site is towards the south and south west, reflecting the underlying landform. The settlement of Diseworth occupies a low lying position close to the south west of the site. Hyam's Lane (a byway/ PROW) stretches through the site from the relatively higher ground and motorway services in the north east to the edge of Diseworth to the south west.
- 7.2 The immediate context of the site comprises a mix of uses, characteristics and features, including both rural and urban, and smaller and larger scale features and influences. East Midlands Airport (EMA) (and associated employment and business uses) lies immediately to the north of the site beyond the A453, with the East Midlands Gateway (EMG) development beyond this to the north. Beyond Diseworth to the south and west lies predominantly farmland with scattered properties. Diseworth Brook flows through Diseworth and follows the lower lying land to the south west and south of the site.
- 7.3 The site and its immediate context does not lie within a designated landscape or a landscape recognised to be of any identified value or quality. In terms of relevant published landscape character assessments and studies, these typically characterise the wider landscape context of the site as gently rolling with a mix of large scale developments, transport and other urbanising activities, and more rural uses and features, including parkland areas.
- 7.4 The suite of published landscape studies include both county and district level landscape sensitivity assessments that have appraised the site and its context in relation to new employment development. The Landscape Sensitivity and Green Infrastructure Study for Leicester & Leicestershire (2017) appraised the site as part of the 'Northern Gateway' (No. 2) 'Strategic Opportunity Assessment Zone' (SOAZ). It also specifically considered the land to the east of Diseworth for new large scale industrial development (warehousing). In this regard the study states;
 - "The north-eastern part of the SOAZ, east of Diseworth, has also been assessed for large-scale industrial development (warehousing). This part of the landscape has been assessed as moderate sensitivity overall for this development type...."
- 7.5 At a district level, two relatively recent landscape sensitivity assessment studies have been undertaken by NWLDC. The July 2019 landscape sensitivity study appraised the local landscape surrounding the edge of Diseworth. 'Parcel A' of this assessment study included only the south westerly extent of the site. The majority of the site was excluded from this assessment as it was situated beyond the assessed parcel to the north east.
- 7.6 A subsequent site specific 'Further Landscape Sensitivity Study' was undertaken by NWLDC in August 2021. This study assessed the site (Ref: 'Parcel 13DIS-C') and concluded the overall landscape sensitivity and visual sensitivity of Parcel 13DIS-C to change arising from new employment development to be 'medium'.
- 7.7 The County and District landscape studies have thus appraised the landscape of the site and its localised context and conclude that it is a landscape of medium or moderate sensitivity to new



employment development, indicating that it is capable of accommodating this type of development, subject to suitable landscape and visual mitigation and to the layout and detail of the proposals.

- As part of this LVA, an appraisal of the Landscape Value of the site and its immediate context has been undertaken in accordance with relevant guidance and this indicates that it is a landscape of Medium Landscape Value. Whilst this is not an assessment of the sensitivity of the landscape to new employment development, this Landscape Value assessment generally aligns with the Medium or Moderate Landscape Sensitivity judgements of the County and District wide Landscape Studies. It is also assessed that this landscape is not a 'valued landscape' in the terms of NPPF, paragraph 180a.
- 7.9 This LVA has appraised the potential for the site to assimilate new employment development as part of a comprehensive and well-designed scheme, reflecting that detailed in the accompanying Vision Document. This has included input to and consideration of the emerging Masterplan and Development Parameter proposals. It envisages an appropriate development solution would include a framework of landscape and green infrastructure corridors and areas to establish a robust landscape setting to the new built development. As part of this, it is anticipated that a broad outer perimeter landscape would be established, particularly in the west and south west of the site. This would include mitigation mounding and extensive woodland and tree planting to provide effective landscape and visual mitigation to Diseworth.
- 7.10 Based upon this approach and with further careful attention to landscape and visual matters as the development proposals are further refined, it has been assessed that the site is capable of accommodating future employment development, as detailed in the accompanying Vision Document. In landscape and visual terms, there will inevitably be some notable adverse effects that will arise as a result of the proposed development, yet these will be predominantly localised and are capable of being suitably mitigated as part of the overall proposed development.
- 7.11 The proposals should also encompass some localised landscape and green infrastructure benefits, as a result of the extensive new woodland planting and other mixed habitats; the new publicly accessible landscape areas in the west of the site; other improved public access connections; and through the long term management of all the conserved and new planting and habitats.
- 7.12 In overall landscape and visual terms, the site can successfully accommodate future employment development as part of a comprehensive solution, incorporating an extensive and robust landscape framework with mitigation mounding and with careful attention to the design of the future buildings and associated infrastructure.



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KEY



Site Boundary

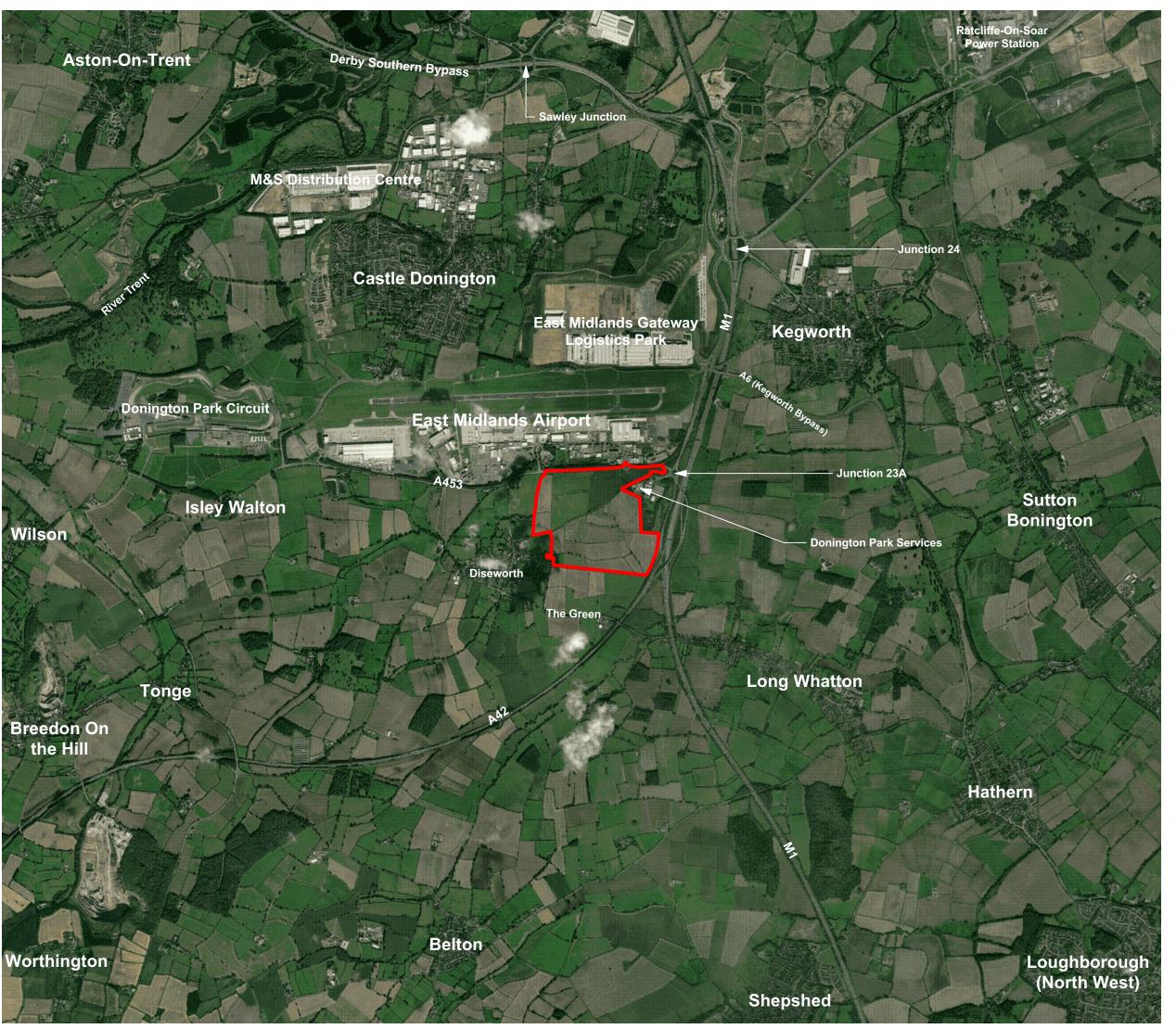


SEGRO

East Midlands Gateway 2

drawing title
AERIAL PHOTOGRAPH

drn chk date created SJL TRJ 11 March 2024



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KEY



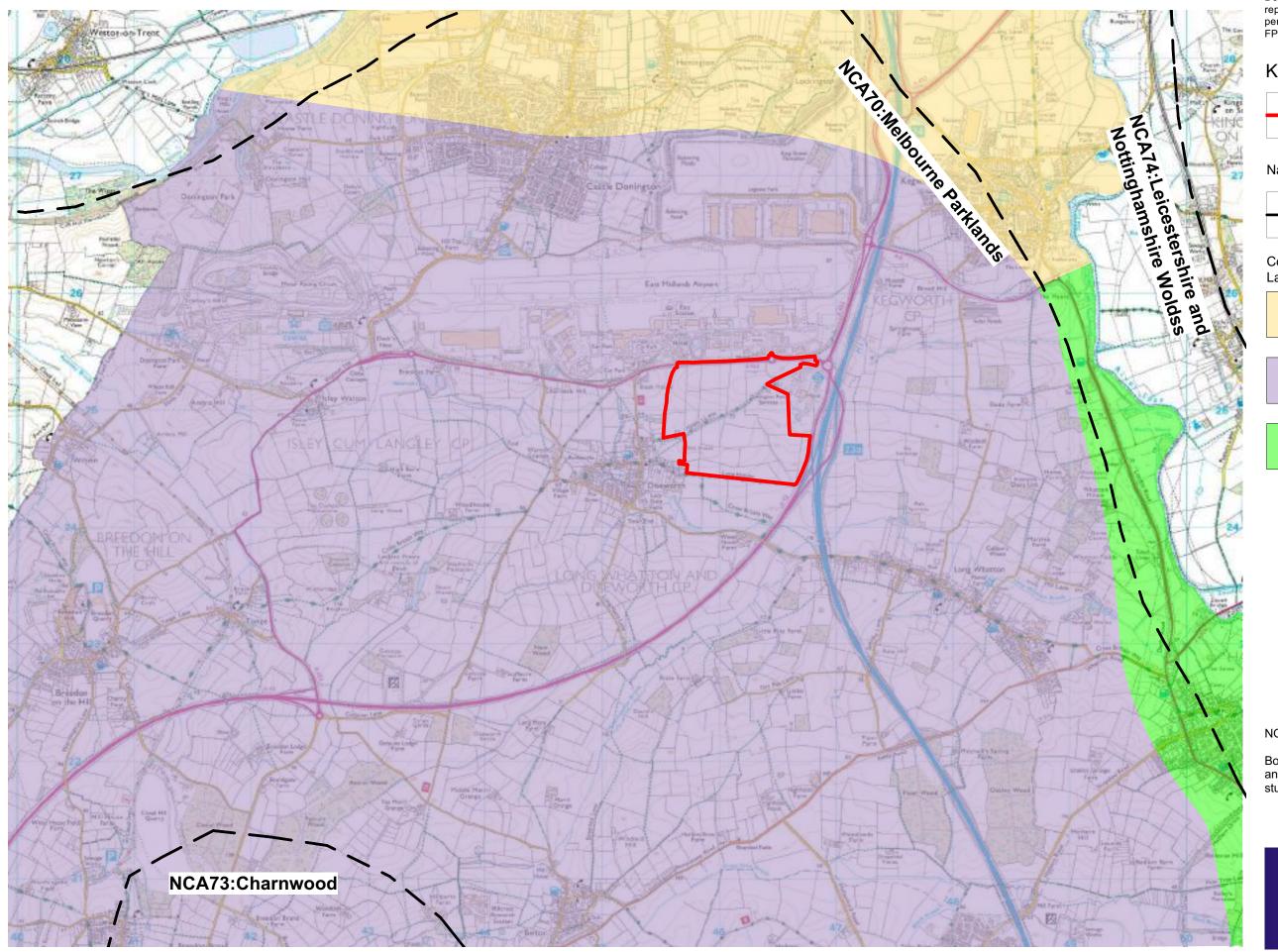
Site Boundary



SEGRO

East Midlands Gateway 2

drawing title
AERIAL PHOTOGRAPH (WIDER CONTEXT) chk date created TRJ 11 March 2024



500

1000

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2000 m

NOTES

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KEY



Site Boundary

National Character Areas (NCA)



NCA Boundary (Approximate)

County (Leicestershire) Landscape Character Areas (LCA)



Trent Valley



Langley Lowlands



Soar Valley

NOTE:

Boundary lines to Character Areas are approximate and based upon the maps within the published studies.



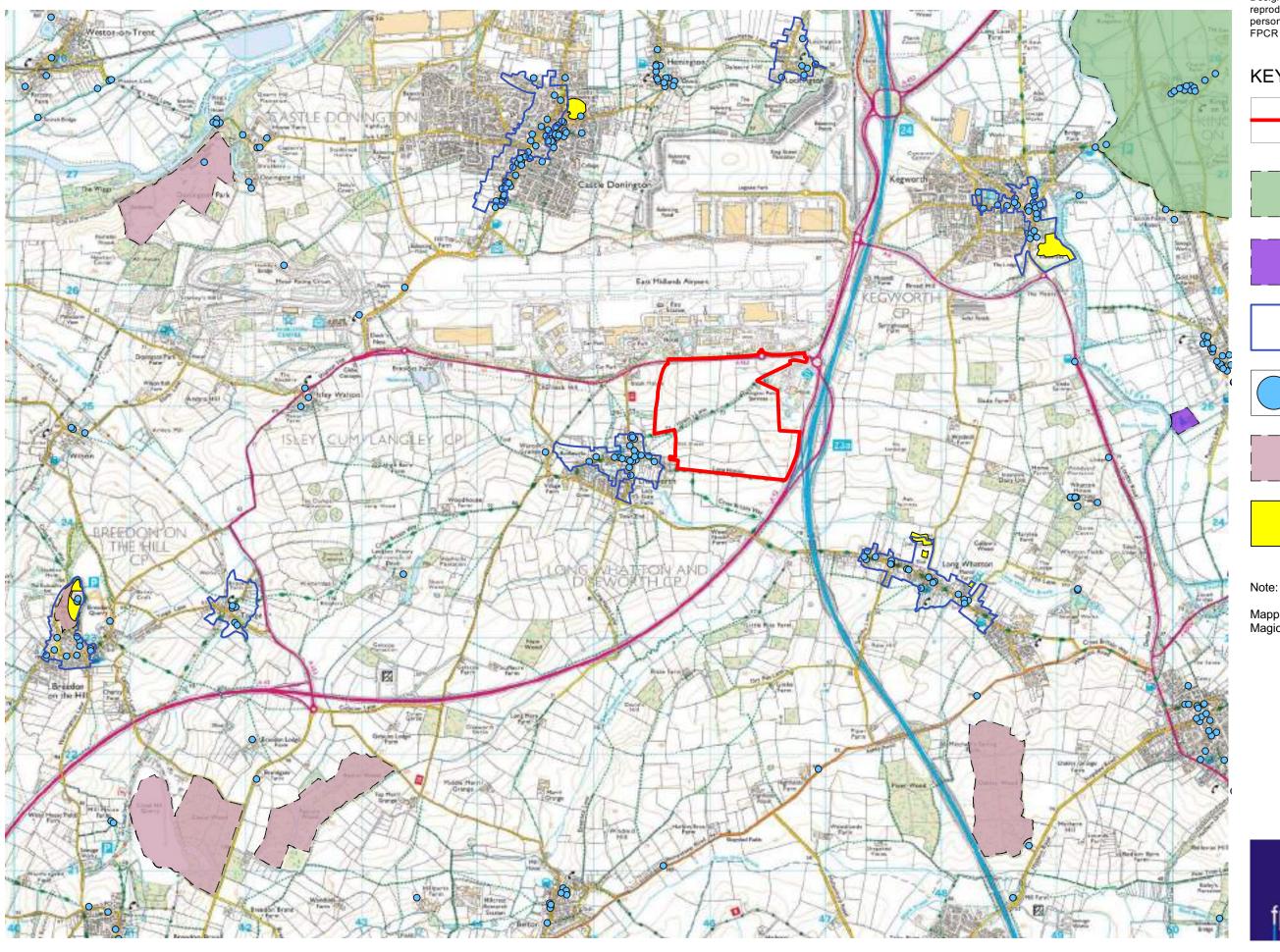
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East Midlands Gateway 2

drawing title
LANDSCAPE CHARACTER
(NATIONAL & COUNTY)



scale drn See Scale Bar SJL



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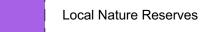
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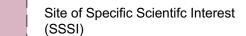














Scheduled Monuments

Mapping of designations & features taken from Magic Map Applications, government website.



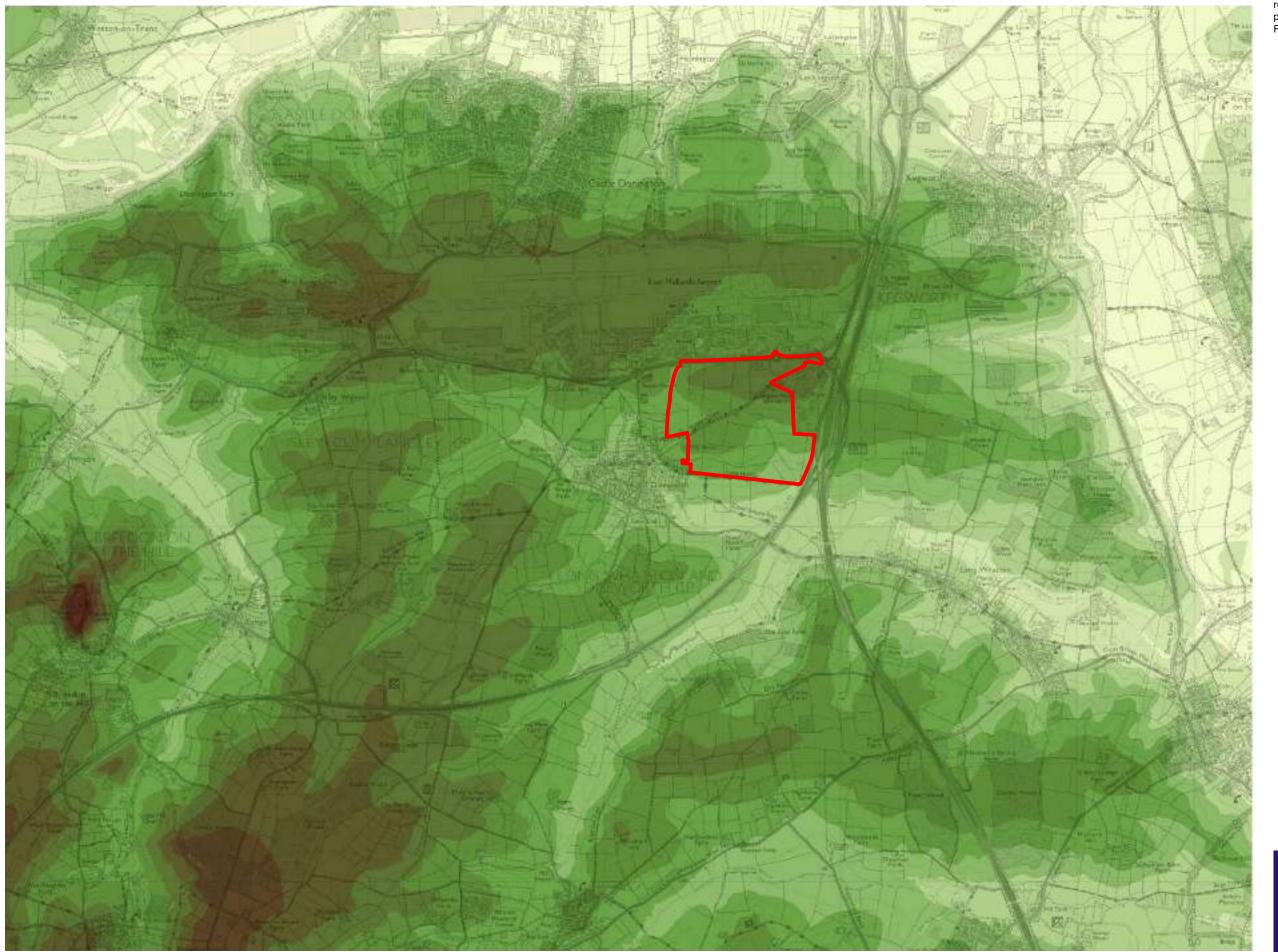
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East Midlands Gateway 2

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Topographical Key (0-120m AOD)

<= 35m

35 - 45m

45 - 55m

55 - 65m

65 - 75m

75 - 85m

85 - 95m

95 - 105m

105 - 115m

> 115m



SEGRO project

East Midlands Gateway 2

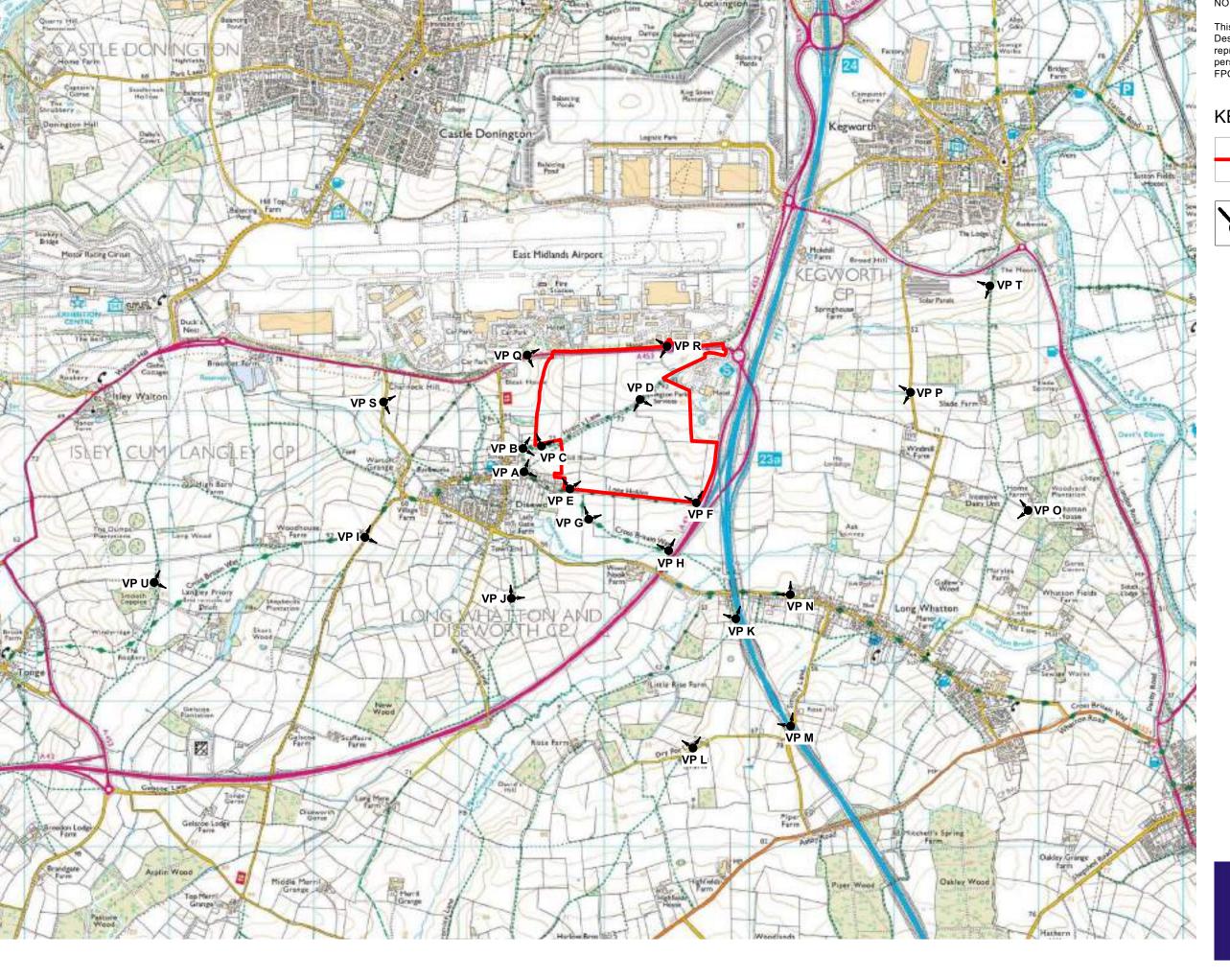
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Figure 5

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Site Boundary



Photo Viewpoint Locations and Reference



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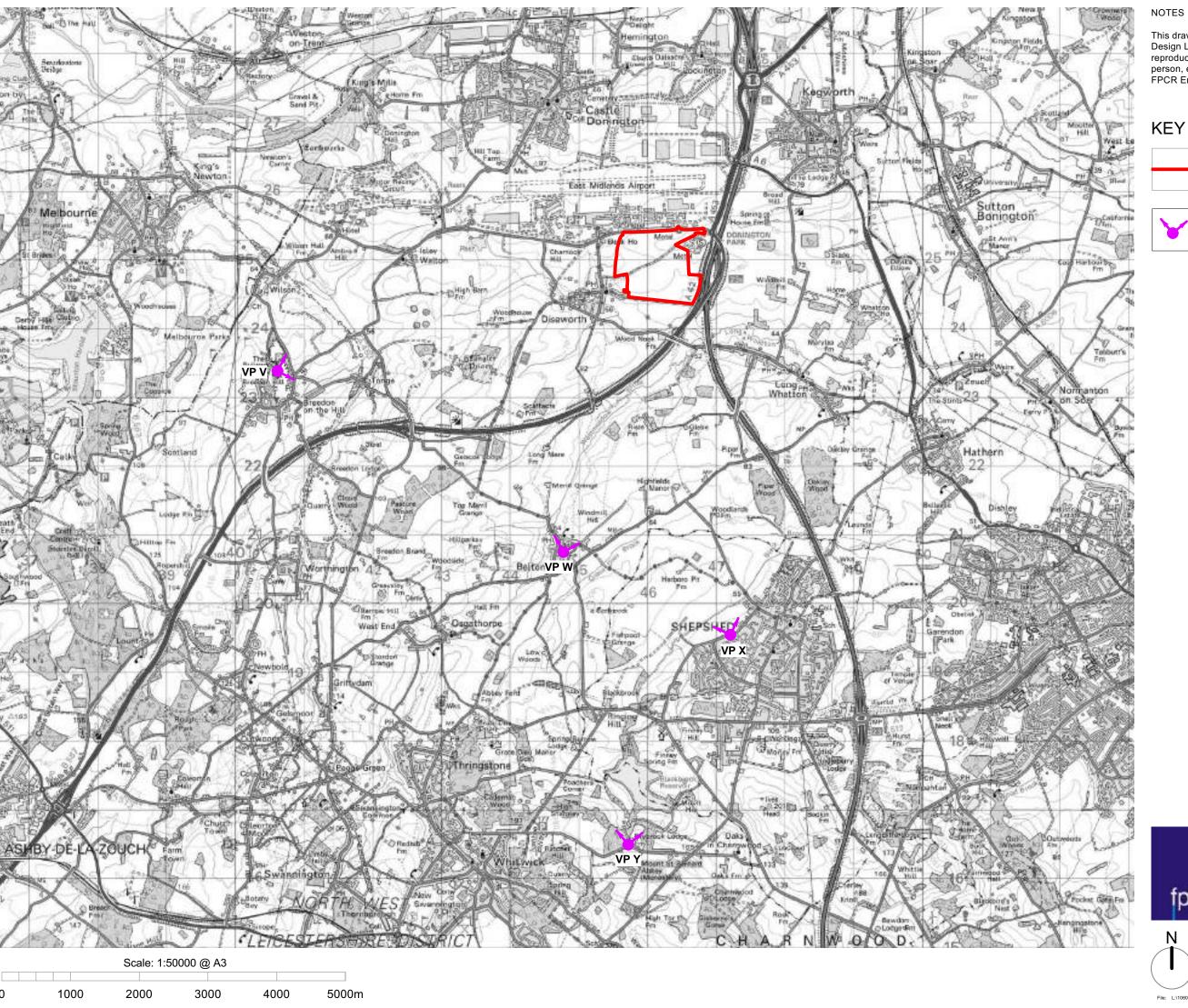
drawing title PHOTO VIEWPOINTS



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Figure 6

Scale: 1:25000 @ A3 500 1000 1500 2000 2500m



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Site Boundary



Photo Viewpoint Locations and reference

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drawing title PHOTO VIEWPOINTS (WIDER CONTEXT) scale drn chk date created 1:50000 @ A3 SJL TRJ 11 March 2024



Photo Viewpoint A

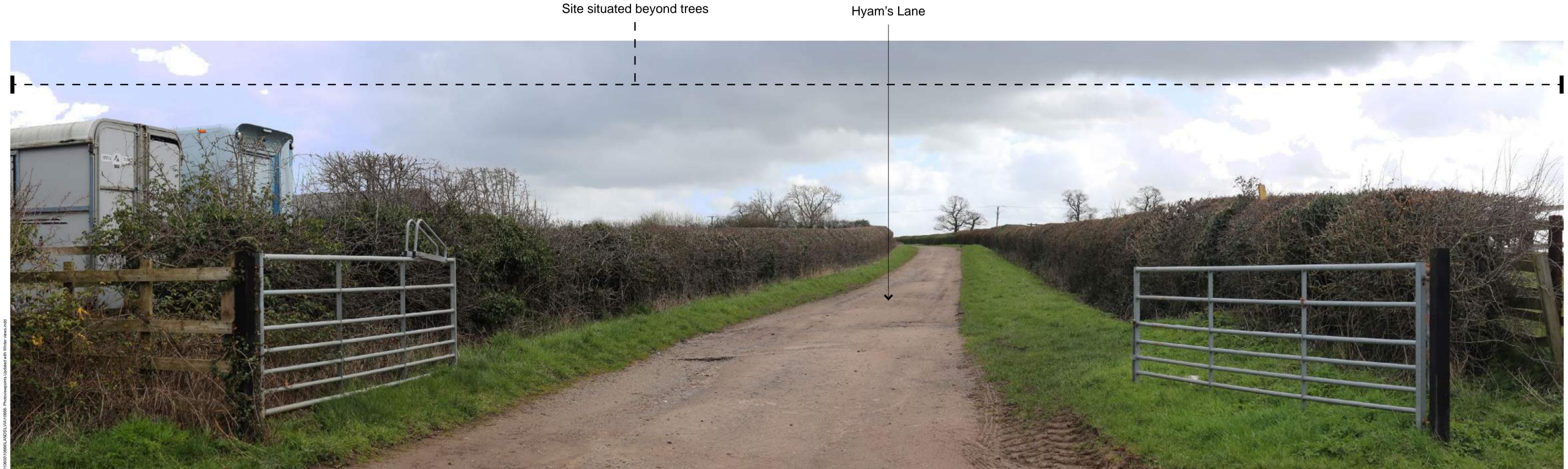


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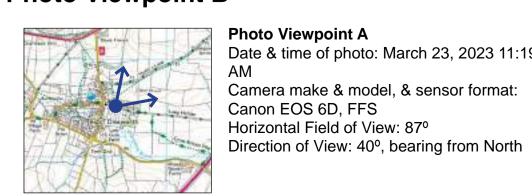


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Date & time of photo: March 23, 2023 11:19 Camera make & model, & sensor format: Canon EOS 6D, FFS Horizontal Field of View: 87°

Photo Viewpoint B

Date & time of photo: March 23, 2023 11:14

Camera make & model, & sensor format: Canon EOS 6D, FFS Horizontal Field of View: 87° Direction of View: 85°, bearing from North Printing note: To give the correct viewing distance the sheet should be printed at a scale of 1:1 on A1. To be viewed at comfortable arms length.

Visualisation Type: Type 1 Projection: Cylindrical Enlargement factor: 100%

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SEGRO

East Midlands Gateway 2

PHOTO VIEWPOINTS A & B SJL/TRJ 11 March 2024



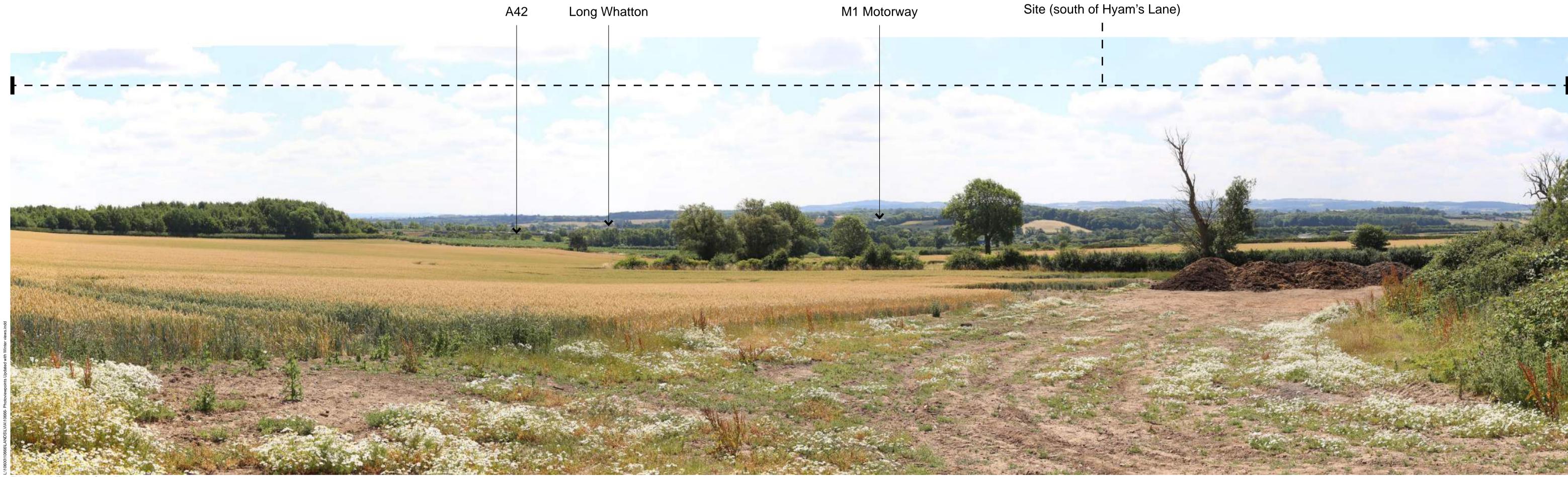


Photo Viewpoint D



Photo Viewpoint C
Date & time of photo: July 8, 2022,11:03 AM
Camera make & model, & sensor format:
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Horizontal Field of View: 87°
Direction of View: 12°, bearing from North



Photo Viewpoint D
Date & time of photo: July 8, 2022,10:54 AM
Camera make & model, & sensor format:
Canon EOS 6D, FFS
Horizontal Field of View: 87°
Direction of View: 160°, bearing from North

Printing note: To give the correct viewing distance the sheet should be printed at a scale of 1:1 on A1. To be viewed at comfortable arms length.

Visualisation Type: Type 1 Projection: Cylindrical Enlargement factor: 100%

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PHOTO VIEWPOINTS C & D SJL / TRJ 11 March 2024



Photo Viewpoint E

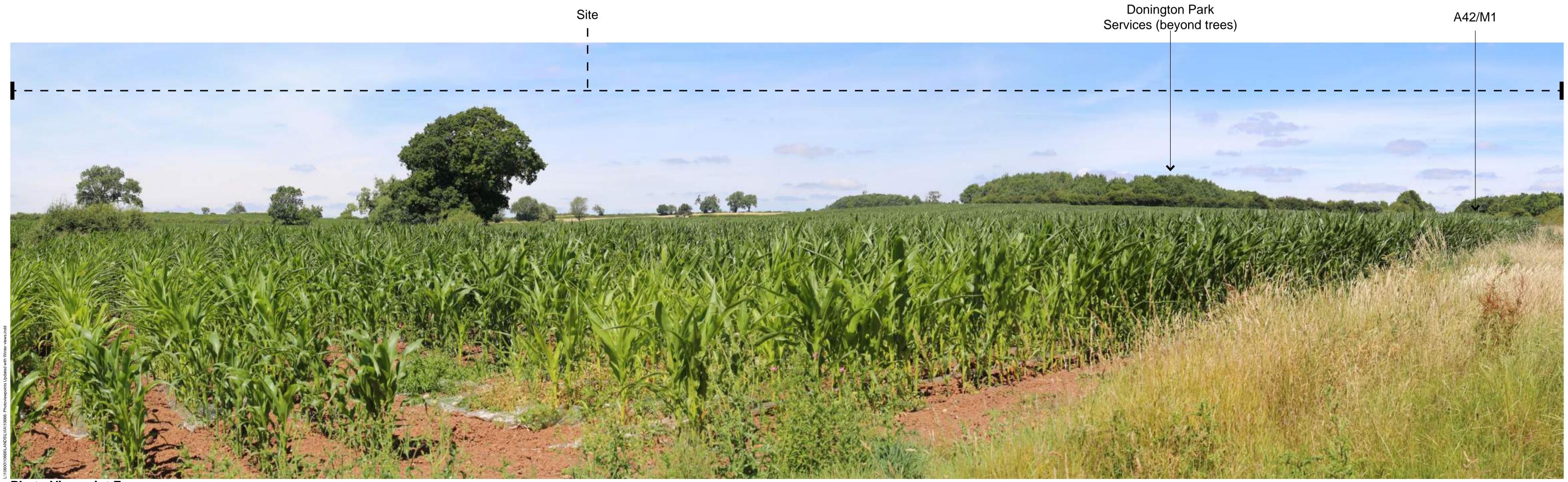


Photo Viewpoint F



Photo Viewpoint E

Date & time of photo: July 8, 2022,11:57 AM

Camera make & model, & sensor format:

Canon EOS 6D, FFS

Horizontal Field of View: 87°

Direction of View: 345°, bearing from North



Photo Viewpoint F

Date & time of photo: July 8, 2022,12:05 PM

Camera make & model, & sensor format:

Canon EOS 6D, FFS Horizontal Field of View: 87° Direction of View: 340°, bearing from North

Printing note: To give the correct viewing distance the sheet should be printed at a scale of 1:1 on A1. To be viewed at comfortable arms length.

Visualisation Type: Type 1 Projection: Cylindrical Enlargement factor: 100%

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East Midlands Gateway 2

PHOTO VIEWPOINTS E & F SJL / TRJ 11 March 2024

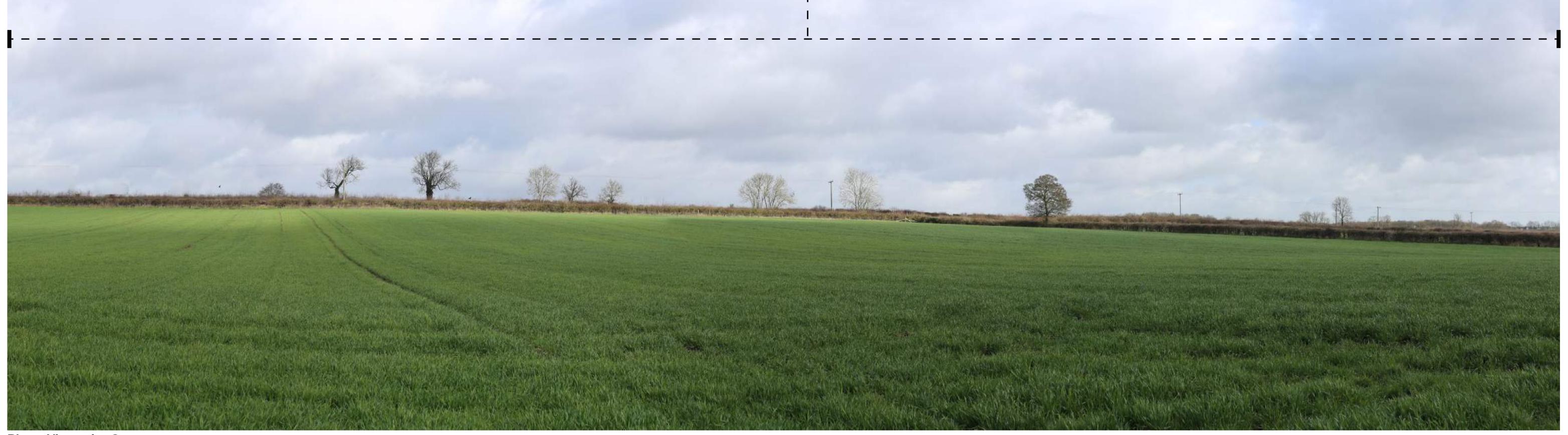


Photo Viewpoint G

Site (beyond hedgerows & Long Holden)

Donington Park Services (beyond trees)



Photo Viewpoint H



Photo Viewpoint G
Date & time of photo: March 23, 2023 10:12

Camera make & model, & sensor format: Canon EOS 6D, FFS Horizontal Field of View: 87°
Direction of View: 20°, bearing from North



Photo Viewpoint H

Date & time of photo: March 23, 2023 10:12

Camera make & model, & sensor format: Canon EOS 6D, FFS Horizontal Field of View: 87° Direction of View: 340°, bearing from North Printing note: To give the correct viewing distance the sheet should be printed at a scale of 1:1 on A1. To be viewed at comfortable arms length.

Visualisation Type: Type 1 Projection: Cylindrical Enlargement factor: 100% This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without written consent of FPCR Environment and Design Ltd. Ordnance Survey material - Crown Copyright. All rights reserved. Licence Number: 100019980 (Centremapslive. com)



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PHOTO VIEWPOINTS G & H SJL/TRJ 11 March 2024

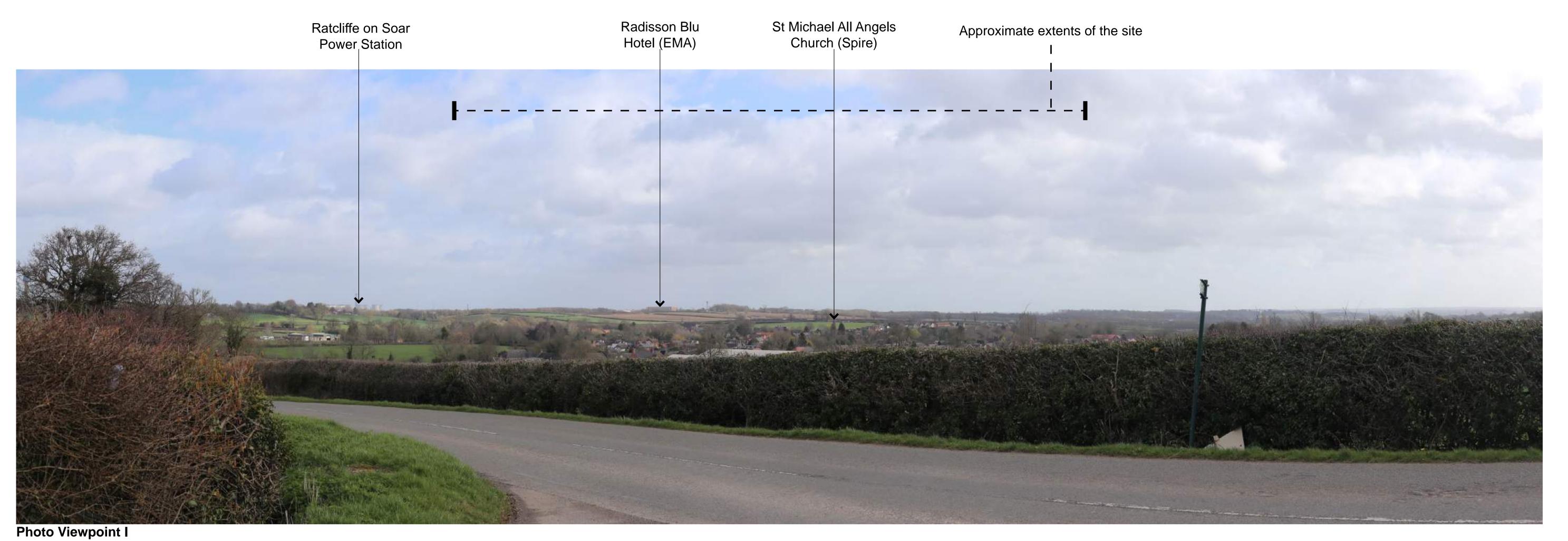




Photo Viewpoint J

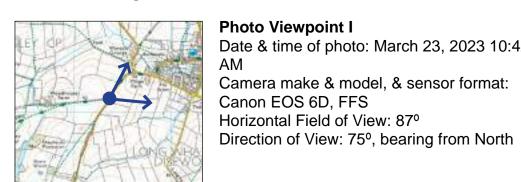


Photo Viewpoint I Date & time of photo: March 23, 2023 10:42 Camera make & model, & sensor format: Canon EOS 6D, FFS Horizontal Field of View: 87°



Photo Viewpoint J Date & time of photo: March 23, 2023 10:12

Camera make & model, & sensor format: Canon EOS 6D, FFS Horizontal Field of View: 87° Direction of View: 10°, bearing from North Printing note: To give the correct viewing distance the sheet should be printed at a scale of 1:1 on A1. To be viewed at comfortable arms length.

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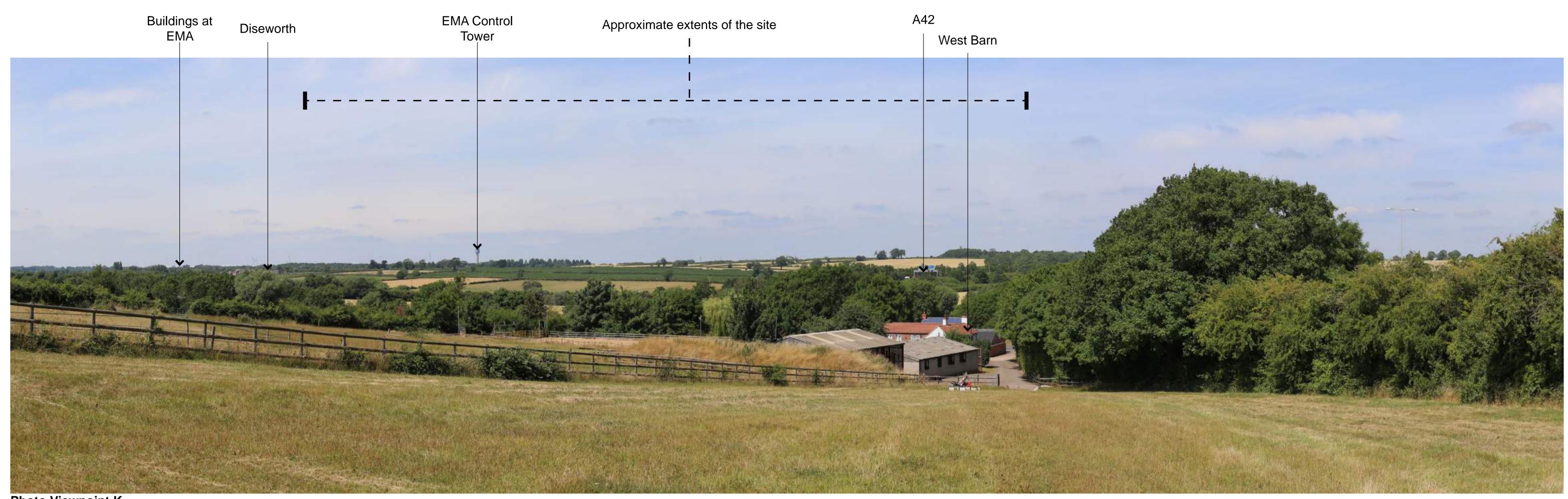


Photo Viewpoint K



EMA Control

Photo Viewpoint L



Photo Viewpoint K

Date & time of photo: July 8, 2022,13:16 PM

Camera make & model, & sensor format:

Canon EOS 6D, FFS

Horizontal Field of View: 87°

Direction of View: 340°, bearing from North



Photo Viewpoint L
Date & time of photo: July 8, 2022,13:42 PM
Camera make & model, & sensor format:
Canon EOS 6D, FFS
Horizontal Field of View: 87°
Direction of View: 355°, bearing from North

Visualisation Type: Type 1 Projection: Cylindrical Enlargement factor: 100%

Printing note: To give the correct viewing distance the sheet should be printed at a scale of 1:1 on A1. To be viewed at comfortable arms length.

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East Midlands Gateway 2 TOCT PHOTO VIEWPOINTS K & L

SJL/TRJ 11 March 2024 Figure 8



Photo Viewpoint M



Photo Viewpoint N



Photo Viewpoint M
Date & time of photo: March 23, 2023 10:12 Camera make & model, & sensor format: Canon EOS 6D, FFS Horizontal Field of View: 87° Direction of View: 330°, bearing from North



Photo Viewpoint N

Date & time of photo: March 23, 2023 10:12

Camera make & model, & sensor format: Canon EOS 6D, FFS Horizontal Field of View: 87° Direction of View: 280°, bearing from North Printing note: To give the correct viewing distance the sheet should be printed at a scale of 1:1 on A1. To be viewed at comfortable arms length.

Visualisation Type: Type 1 Projection: Cylindrical Enlargement factor: 100% This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without written consent of FPCR Environment and Design Ltd. Ordnance Survey material - Crown Copyright. All rights reserved. Licence Number: 100019980 (Centremapslive. com)



East Midlands Gateway 2

PHOTO VIEWPOINTS M & N SJL/TRJ 11 March 2024

figure number Figure 8



Photo Viewpoint O

General direction of the site





Photo Viewpoint O

Date & time of photo: Dec 7, 2022 13:18 PM

Camera make & model, & sensor format:

Canon EOS 6D, FFS

Horizontal Field of View: 87°

Direction of View: 270°, bearing from North



Photo Viewpoint P
Date & time of photo: July 8, 2022,13:54 PM
Camera make & model, & sensor format: Canon EOS 6D, FFS Horizontal Field of View: 87° Direction of View: 275°, bearing from North

Printing note: To give the correct viewing distance the sheet should be printed at a scale of 1:1 on A1. To be viewed at comfortable arms length.

Visualisation Type: Type 1 Projection: Cylindrical Enlargement factor: 100% This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without written consent of FPCR Environment and Design Ltd. Ordnance Survey material - Crown Copyright. All rights reserved. Licence Number: 100019980 (Centremapslive. com)



East Midlands Gateway 2

PHOTO VIEWPOINTS O & P SJL/TRJ 11 March 2024

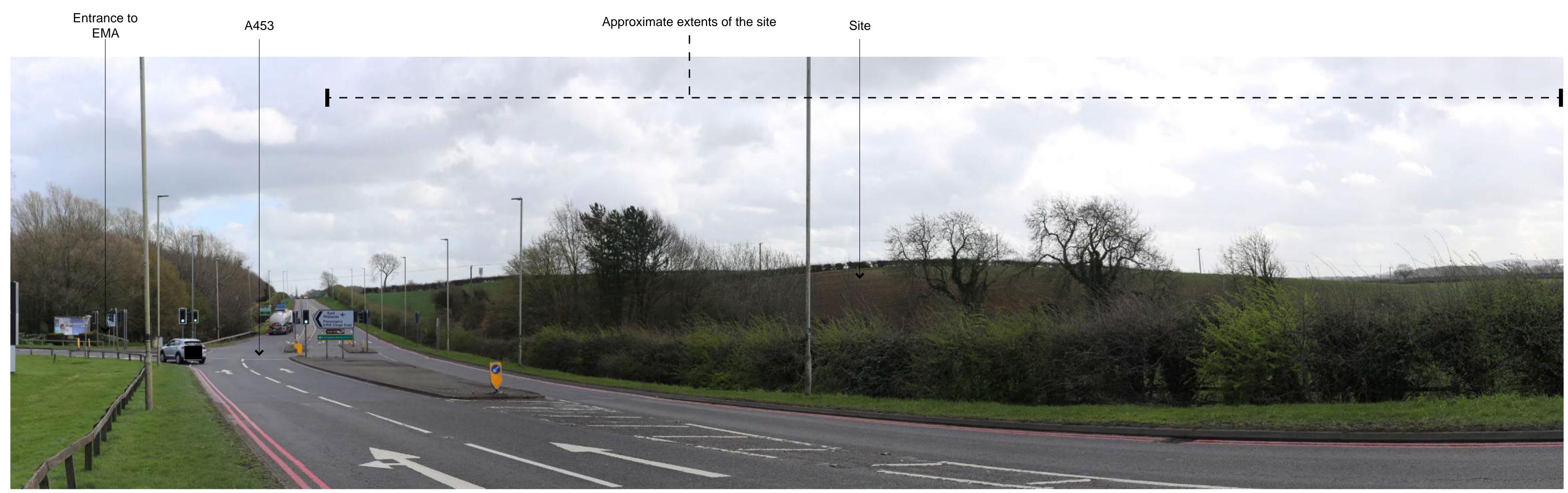


Photo Viewpoint Q



Photo Viewpoint R



Photo Viewpoint Q Date & time of photo: March 23, 2023 11:21 Camera make & model, & sensor format: Canon EOS 6D, FFS Horizontal Field of View: 87° Direction of View: 280°, bearing from North



Photo Viewpoint R Date & time of photo: March 23, 2023 11:21

Camera make & model, & sensor format: Canon EOS 6D, FFS Horizontal Field of View: 87° Direction of View: 95°, bearing from North Printing note: To give the correct viewing distance the sheet should be printed at a scale of 1:1 on A1. To be viewed at comfortable arms length.

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East Midlands Gateway 2

PHOTO VIEWPOINTS Q & R SJL/TRJ 11 March 2024





Photo Viewpoint T



Photo Viewpoint S

Date & time of photo: July 8, 2022 14:14PM

Camera make & model, & sensor format:

Canon EOS 6D, FFS

Horizontal Field of View: 87°

Direction of View: 100°, bearing from North

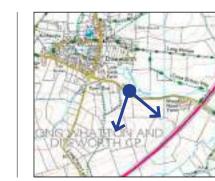


Photo Viewpoint T
Date & time of photo: 23 Mar 2023,12:27 PM
Camera make & model, & sensor format:
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Horizontal Field of View: 87°
Direction of View: 160°, bearing from North

Printing note: To give the correct viewing distance the sheet should be printed at a scale of 1:1 on A1. To be viewed at comfortable arms length.

Visualisation Type: Type 1 Projection: Cylindrical Enlargement factor: 100%

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SEGRO

General direction

of the site

Fast Midlands Gateway 2

PHOTO VIEWPOINTS S & T SJL / TRJ 11 March 2024



Photo Viewpoint U

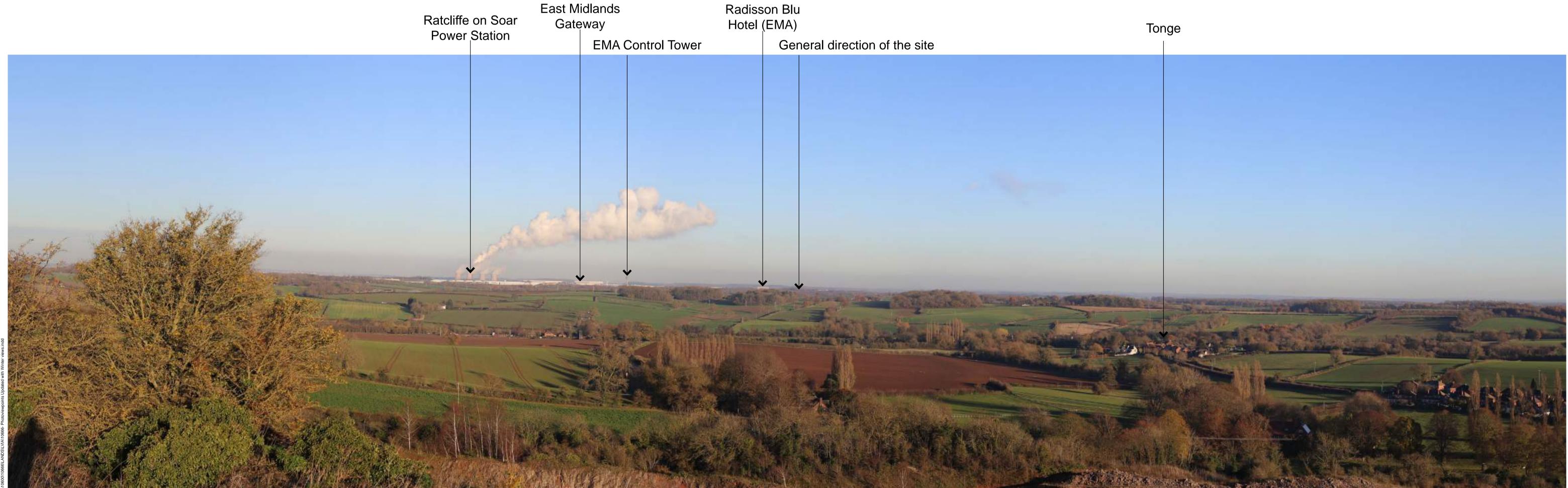


Photo Viewpoint V



Photo Viewpoint U (Long Distance)
Date & time of photo: 7 Dec 2022,15:21 PM
Camera make & model, & sensor format:
Canon EOS 6D, FFS
Horizontal Field of View: 87°
Direction of View: 60°, bearing from North



Photo Viewpoint V (Long Distance)
Date & time of photo: Dec 7, 2022 15:12 PM
Camera make & model, & sensor format:
Canon EOS 6D, FFS
Horizontal Field of View: 87°
Direction of View: 60°, bearing from North

Printing note: To give the correct viewing distance the sheet should be printed at a scale of 1:1 on A1. To be viewed at comfortable arms length.

Visualisation Type: Type 1 Projection: Cylindrical Enlargement factor: 100% This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without written consent of FPCR Environment and Design Ltd. Ordnance Survey material - Crown Copyright. All rights reserved. Licence Number: 100019980 (Centremapslive. com)

SEGRO project East Midlar

SEGRO project East Midlands Gateway 2

PHOTO VIEWPOINTS U & V

drawn issue date

SJL/TRJ 11 March 2024

figure number Figure 8



Photo Viewpoint W



com)

General direction of

Photo Viewpoint X



Photo Viewpoint W (Long Distance)
Date & time of photo: Dec 7, 2022 14:42 PM
Camera make & model, & sensor format:
Canon EOS 6D, FFS
Horizontal Field of View: 87°
Direction of View: 5°, bearing from North



Photo Viewpoint X (Long Distance)
Date & time of photo: Dec 7, 2022 13:52 PM
Camera make & model, & sensor format:

Canon EOS 6D, FFS Visualisation Type: Type 1 Projection: Cylindrical Enlargement factor: 100% Horizontal Field of View: 87° Direction of View: 350°, bearing from North

Printing note: To give the correct viewing distance the sheet should be printed at a scale of 1:1 on A1. To be viewed at comfortable arms length.

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SEGRO East Midlands Gateway 2

PHOTO VIEWPOINTS W & X SJL / TRJ 11 March 2024

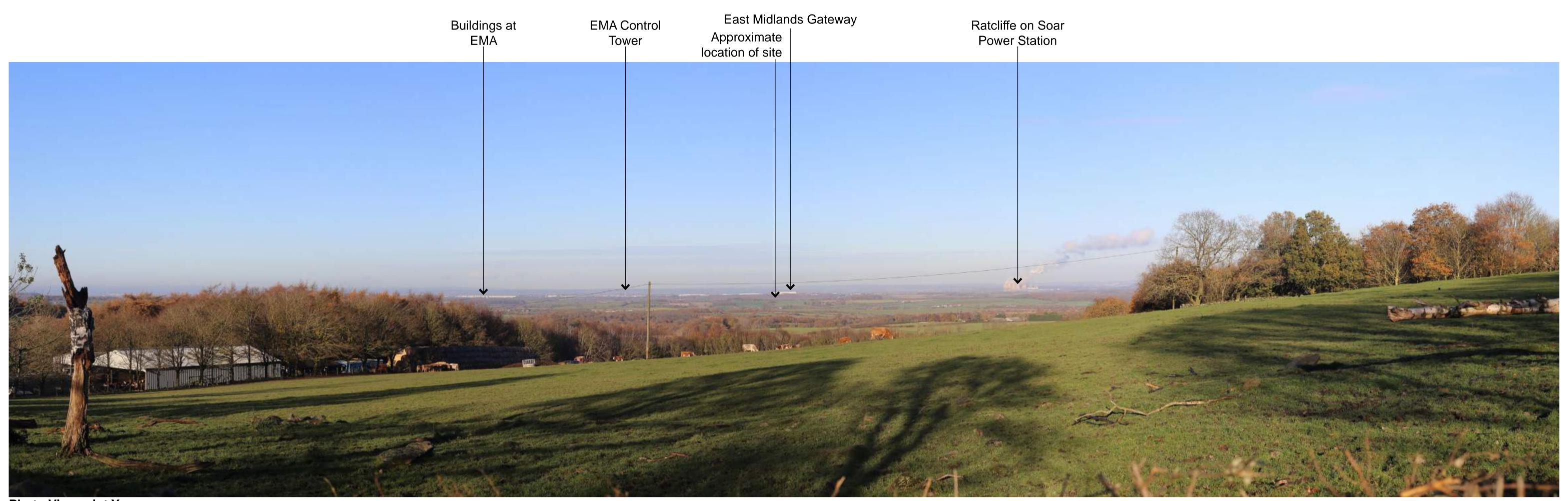


Photo Viewpoint Y

Photo Viewpoint Y (Long Distance)
Date & time of photo: Dec 7, 2022 14:16 PM
Camera make & model, & sensor format: Canon EOS 6D, FFS
Horizontal Field of View: 87°
Direction of View: 0°, bearing from North

Printing note: To give the correct viewing distance the sheet should be printed at a scale of 1:1 on A1. To be viewed at Ltd and is issued on the condition it is not reproduced, retained comfortable arms length.

Visualisation Type: Type 1 Projection: Cylindrical Enlargement factor: 100%

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APPENDIX A

Landscape and Visual Appraisal – Methodology and Assessment Criteria

Appendix A

Landscape and Visual Appraisal - Methodology and Assessment Criteria

Introduction

- 1.0 The following details the criteria considered and used in the LVA.
- 1.1 The purpose of the LVA report is to explore landscape and visual matters in relation to the site and its potential to accommodate future employment based development. It considers the potential of the site and its landscape context to assimilate future change in the form of new employment based development. The level of any impacts and effects on landscape character and visual amenity have not therefore been determined in detail at this stage, although the likely nature of potential change and effects are considered.
- 1.2 As advised in the Guidelines for Landscape and Visual Impact Assessment (3rd Edition) (GLVIA3), the judgements made in respect of both landscape and visual effects are a combination of an assessment of the sensitivity of the receptor and the magnitude of the landscape or visual effect. The following details the definitions and criteria used in assessing sensitivity and magnitude for landscape and visual receptors.
- 1.3 Where it is determined that the assessment falls between or encompasses two of the defined criteria terms, then the judgement may be described as High/ Medium or Moderate/ Minor etc. This indicates that the assessment lies between the respective definitions or encompasses aspects of both.

Landscape

Landscape Sensitivity

- 1.4 Landscape receptors are assessed in terms of their 'Landscape Sensitivity'. This combines judgements on the value to be attached to the landscape and the susceptibility to change of the landscape from the type of change or development proposed. The definition and criteria adopted for these contributory factors is detailed below.
- 1.5 There can be complex relationships between the value attached to landscape receptors and their susceptibility to change which can be especially important when considering change within or close to designated landscapes. For example, an internationally, nationally or locally valued landscape does not automatically or by definition have a high susceptibility to all types of change. The type of change or development proposed may not compromise the specific basis for the value attached to the landscape.

Landscape Value

- 1.6 Value can apply to a landscape area as a whole, or to the individual elements, features and aesthetic or perceptual dimensions which contribute to the character of the landscape. The following criteria have been used to categorise landscape value. Where there is no clear existing evidence on landscape value, an assessment is made based on the criteria/ factors identified below (based on the guidance in the Landscape Institute Technical Guidance Note 02/21 "Assessing landscape value outside national designations", which provides more up to date guidance than Box 5.1 of GLVIA3).
 - Natural Heritage

- Cultural Heritage
- Landscape Condition
- Associations

- Recreational
- Perceptual (scenic)
- Perceptual (Wildness and tranquillity)
- Functional

Landscape	Definition			
Value				
High	Landscape receptors of high importance based upon factors of natural			
	and cultural heritage, condition, distinctiveness, recreational value,			
	perceptual qualities associations and functional aspects.			
Medium	Landscape receptors of medium importance based upon factors of			
	natural and cultural heritage, condition, distinctiveness, recreational			
	value, perceptual qualities and quality, rarity, representativeness,			
	conservation interest, recreational value, perceptual qualities,			
	associations and functional aspects.			
Low	Landscape receptors of low importance based upon factors of natural			
	and cultural heritage, condition, distinctiveness, recreational value,			
	perceptual qualities and quality, rarity, representativeness, conservation			
	interest, recreational value, perceptual qualities, associations and			
	functional aspects.			

Landscape Susceptibility to Change

1.7 This means the ability of the landscape receptor (overall character type/ area or individual element/ feature) to accommodate the change (i.e. the proposed development) without undue consequences for the maintenance of the baseline position and/ or the achievement of landscape planning policies and strategies. The definition and criteria for the assessment of Landscape Susceptibility to Change is as follows:

Landscape Susceptibility to Change	Definition
High	A highly distinctive and cohesive landscape receptor, with positive
	characteristics and features with no or very few detracting or intrusive
	elements. Landscape features intact and in very good condition and/ or
	rare. Limited capacity to accept the type of change/ development proposed.
Medium	Distinctive and more commonplace landscape receptor, with some positive
	characteristics/ features and some detracting or intrusive elements.
	Landscape features in moderate condition. Capacity to accept well planned
	and designed change/ development of the type proposed.
Low	Landscape receptor of mixed character with a lack of coherence and
	including detracting or intrusive elements. Landscape features that may be
	in poor or improving condition and few that could not be replaced.
	Greater capacity to accept the type of change/ development proposed.

Magnitude of Landscape Effects

1.8 The magnitude of landscape effects is the degree of change to the landscape receptor in terms of its size or scale of change, the geographical extent of the area influenced and its duration and reversibility. The table below sets out the categories and criteria adopted in respect of the separate considerations of Scale or Size of the Degree of Change, Reversibility the geographical extent and duration of change are described where relevant in the appraisal.

Scale or Size of the Degree of Landscape Change

Scale or Size of the Degree of Landscape Change	Definition	
High	Total loss of or substantial alteration to key characteristics / features and the introduction of new elements totally uncharacteristic to the receiving landscape. Overall landscape receptor will be fundamentally changed.	
Medium	Partial loss of or alteration to one or more key characteristics / features and the introduction of new elements that would be evident but not necessarily uncharacteristic to the receiving landscape. Overall landscape receptor will be obviously changed.	
Low	Limited loss of, or alteration to one or more key characteristics/ features and the introduction of new elements evident and/ or characteristic to the receiving landscape. Overall landscape receptor will be perceptibly changed.	
Negligible	Very minor alteration to one or more key characteristics/ features and the introduction of new elements characteristic to the receiving landscape. Overall landscape receptor will be minimally changed.	
None	No loss or alteration to the key characteristics/ features, representing 'no change'.	

Geographical Extent

Geographical extent	Definition
Extensive	Notable change to an extensive proportion of the geographic area.
Moderate	Notable change to part of the geographic area,
Minimal	Change over a limited part of the geographic area.
Negligible	Change over a very limited part of the geographical area

Duration

Duration	Definition
Short term	The change will occur for up to 5 years.
Medium Term	The change will occur for between 5 and 10 years.
Long term	The change will occur for over 10 years

Reversibility

Reversibility	Definition	
Irreversible	The development would be permanent and the assessment site could not be returned to its current/ former use.	
Reversible	The development could be deconstructed/ demolished and the assessment site could be returned to broadly its current/ historic use (although that may be subject to qualification depending on the nature of the development).	

Visual

Sensitivity of Visual Receptors

1.9 Visual sensitivity assesses each visual receptor in terms of their susceptibility to change in views and visual amenity and also the value attached to particular views. The definition and criteria adopted for these contributory factors is detailed below.

Visual Susceptibility to Change

1.10 The susceptibility of different visual receptors to changes in views and visual amenity is mainly a function of; firstly, the occupation or activity of people experiencing the view at particular locations; and secondly, the extent to which their attention or interest may therefore be focussed on the views and visual amenity they experience.

Visual Susceptibility to Change	Definition
High	Residents at home with primary views from ground floor/garden and upper floors. Public rights of way/ footways where attention is primarily focussed on the landscape and on particular views. Visitors to heritage assets or other attractions whose attention or interest is likely to be focussed on the landscape and/ or on particular views. Communities where views make an important contribution to the landscape setting enjoyed by residents.
Medium	Travellers on recognised scenic routes. Residents at home with secondary views (primarily from first floor level). Public rights of way/ footways where attention is not primarily focussed on the landscape and/ or particular views. Travellers on road, rail or other transport routes.
Low	Users of outdoor recreational facilities where the view is less important to the activities (e.g. sports pitches). Travellers on road, rail or other transport where views are primarily focussed on the transport route. People at their place of work where views of the landscape are not important to the quality of the working life.

Value of Views

1.11 The value attached to a view takes account of any recognition attached to a particular view and/ or any indicators of the value attached to views, for example through guidebooks or defined viewpoints or references in literature or art.

Value of	Definition	
Views		
High	A unique or identified view (e.g. shown as such on Ordnance Survey map, guidebook or tourist map) or one noted in literature or art. A view where a heritage asset makes an important contribution to the view.	
Medium	A typical and/ or representative view from a particular receptor.	
Low	An undistinguished or unremarkable view from a particular receptor.	

Magnitude of Visual Effects

1.12 Magnitude of Visual Effects evaluates each of the visual effects in terms of its size or scale, the geographical extent of the area influenced and its duration and reversibility. The table below sets out the categories and criteria adopted in respect of the Scale or Size (including the degree of contrast) of Visual Change. The distance and nature of the view and whether the receptor's view will be stationary or moving are also detailed in the Visual Effects Table.

Scale or Size of the Degree of Visual Change	Definition
High	The proposal will result in a large and immediately apparent change
	in the view, being a dominant and new and/ or incongruous feature in
	the landscape.
Medium	The proposal will result in an obvious and recognisable change in the
	view and will be readily noticed by the viewer.
Low	The proposal will constitute a minor component of the wider view or a more recognisable component that reflects those apparent in the
	existing view. Awareness of the proposals will not have a marked
	effect on the overall nature of the view.
Negligible/ None	Only a very small part of the proposal will be discernible and it will
	have very little or no effect on the nature of the view.

Level of Effect

- 1.13 The final conclusions on effects, whether adverse or beneficial, are drawn from the separate judgements on the sensitivity of the receptors and the magnitude of the effects. This overall judgement is formed from a reasoned professional overview of the individual judgements against the assessment criteria.
- 1.14 GLVIA3 notes, at paragraphs 5.56 and 6.44, that there are no hard and fast rules with regard to the level of effects, therefore the following descriptive thresholds have been used for this appraisal:

Major

- Moderate
- Minor
- Negligible
- 1.15 Where it is determined that the assessment falls between or encompasses two of the defined criteria terms, then the judgement may be described as, for example, Major/ Moderate or Moderate/ Minor. This indicates that the effect is assessed to lie between the respective definitions or to encompass aspects of both.

Appendix 8 – Ecology Summary Note



SEGRO PLC

East Midlands Gateway 2, Land South of East Midlands Airport

Summary Note: Ecology

March 2024

FPCR Environment and Design Ltd
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Company No. 07128076. [T] 01509 672772 [E] mail@fpcr.co.uk [W] www.fpcr.co.uk

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Rev	Issue Status	Prepared / Date	Approved / Date
-	Draft	OJB / 16.02.24	SJA / 23.02.24
Α	Final	OJB / 06.03.24	SJA / 07.03.24
В	Final	OJB / 08.03.24	



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3.0	PROTECTED SPECIES	. 4
4.0	HABITATS	. 7
5.0	BIODIVERSITY NET GAIN	7

Figures

Figure 1: Designated Sites Plan

Figure 2: Phase 1 Baseline Habitat Plan



1.0 NON-TECHNICAL SUMMARY

- 1.1 The following summary note has been prepared by FPCR Environment & Design Ltd. on behalf of SEGRO PLC. It outlines the ecology work undertaken to date to support representations to the Draft Local Plan Consultation dated February 2024, and includes an overview of the habitats and protected species surveys, a summary assessment of their value and potential impacts arising from the proposed development, and commentary on the approach to biodiversity net gain outcome within the scheme.
- 1.2 No statutory designated sites of international importance, or the Impact Risk Zones (IRZs) thereof were identified within 10km of the Site. No statutory designated sites were identified within the 2km search radius though the IRZs of Donington Park SSSI, Lockington Marshes SSSI, and Oakley Wood SSSI do overlap this search distance and Natural England should be consulted should the expected wastewater discharge exceed the threshold stated.
- 1.3 A total of 23 non-statutory sites were identified within 1km of the site boundary. One historic pLWS site falls within the Site though update survey found it no longer met the necessary criteria for consideration. Two cLWSs adjacent to the eastern boundary could be impacted during construction though this can be mitigated with the implementation of best practice site protocols to be detailed in a CEMP once planning consent is granted. The remaining sites are considered to be sufficiently distant from the proposed Site to be deemed at risk from any adverse impacts.
- 1.4 Great crested newts are known to be present in the local area. Mitigation for this species has been assessed and the scheme entered into the Natural England district level licence operated in this LPA.
- 1.5 The transects and static recorders found bat activity levels to be generally low across the Site throughout the year and to comprise predominantly abundant and widespread species. One roost of a single bat was recorded within a tree during surveys. The proposed development of the Site is therefore not considered to represent a significant adverse impact on bats.
- 1.6 The breeding and wintering bird assemblages within the Site were dominated by common and widespread generalists.
- 1.7 Ecological surveys did not identify the presence of any badgers, reptiles, or protected riparian mammals within the Site (a main badger sett is located close to the site boundary) and thus these features are not considered to be negatively affected by the proposed development of the Site.
- 1.8 The individual trees, standing water, running water, and hedgerows were all assessed of being of local conservation importance, whilst the scrub, grassland, ruderal vegetation, and arable fields were all deemed of negligible conservation significance. The nature conservation statuses of the various habitats were assessed as all being between No and Local importance only.
- 1.9 A preliminary biodiversity net gain assessment undertaken by FPCR in 2023 demonstrated that the scheme may be able to deliver the necessary biodiversity net gains improvements within the allocation site boundary. Any shortfall which may be encountered during the detailed design stage will be dealt with through offsite compensation in accordance with BNG legislation and guidelines.
- 1.10 Based on the ecology work undertaken to date, no significant residual impacts are anticipated on either important habitats nor protected species and therefore it is considered that there are no overriding ecological constraints which would prevent the allocation of the Site.



2.0 INTRODUCTION

- 2.1 The Site is bounded to the east by the A42 and M1 and the A453 along the northern boundary (central OS grid reference: SK 461 249). Surrounding land-use is dominated variously by grassland and arable field compartments bordered by hedgerows and scattered mature trees, with Diseworth village to the south-west of the Site.
- 2.2 The Site, approximately 105ha in size, is dominated by arable field compartments bounded by hedgerows, with one improved grassland, one semi-improved grassland field compartment and areas standing water in the form of small ponds also present. The A453 and its associated grassy verges formed the northern extent of the Site.
- 2.3 The zone of influence (referred to as the study area) for the assessment (the area within which ecological features may be affected) was determined with reference to important ecological features on or around the Site including designated sites, the extent and nature of project activities liable to give rise to potentially significant impacts, any incidence of mobile or migratory species, seasonality of ecological features, and ecosystem functioning including interdependencies between ecological features.
- 2.4 The search area for biodiversity information was related to the significance of the site, species and potential zones of influence, as follows:
 - 10km around the application area for sites of international importance (e.g. Special Area of Conservation (SAC), Special Protection Area (SPA), Ramsar);
 - 2km around the application area for sites of National or Regional importance (e.g. Sites of Special Scientific Interest (SSSI)); and
 - 1km around the Application Site for sites of County or Local importance (e.g. Local Wildlife Sites (LWS) or Local Nature Reserves (LNR)) and species records (e.g. Statutory Protected, Species of Principal Importance as listed on S41 of the Natural Environment & Rural Communities (NERC) Act 2006, Leicester, Leicestershire and Rutland Biodiversity Action Plan (LLRBAP) or notable species (e.g. Red Data Book (RDB) Species).

3.0 DESIGNATED SITES

Statutory Sites

3.1 No statutory sites of international conservation importance are located within 10km of the Application Site's boundary.

No nationally designated sites of nature conservation interest were identified within 2km of the Site boundary. The Site falls within the outer Impact Risk Zone (IRZ)) of Donnington Park SSSI, Lockington Marshes SSSI and Oakley Wood SSSI.

Non-statutory Sites

- 3.2 Consultation with the Leicestershire and Rutland Environmental Records Centre (LRERC) identified 23 sites of local conservation importance within 1km of the Site as shown in Figure 1.
- 3.3 Three classifications of LWS were reported within 1km of the Application Site. These were:



- Candidate LWS are sites that meet the criteria for designation. Their status has not been formally agreed with landowner.
- Potential LWS are sites where LRERC has recent evidence that they are likely to meet the LWS criteria, but further survey is needed to confirm this.
- Potential (Historic) LWS are sites that have not been recently surveyed to check their modern status. These sites were designated during the late 1980s/early 1990s, based on comprehensive habitat surveys.
- 3.4 A total of 23 non-statutory designated sites (11 candidate LWS, 2 pLWS, and 10 pLWS (historic)) were identified within 1km of the Site. Pond P3 is an on-site historic pLWS though re-survey showed this pond to no longer meet current LWS selection criteria in the county, and Diseworth Donnington Park Services M1 J23A, Ash Trees and M1 J23A Donnington Park Services Grassland and Scrub are Candidate LWSs located adjacent to the eastern site boundary. Given the location of these sites, there is potential for adverse impacts during construction, such as from dust pollution, hydrological change, and accidental pollution. Precautionary mitigation will be implemented to avoid potential indirect impacts arising as a result of construction activities, including best practice site protocols with regards to potential hydrological impacts, the safe storage of site materials, avoidance of accidental pollution / contamination incidents and dust pollution as detailed in a Construction Environmental Management Plan (CEMP) once planning permission is granted.
- 3.5 The remaining sites are considered to be sufficiently distant from the proposed Site, and it is therefore considered that these are unlikely to be impacted by the construction phase. Given the provision of green infrastructure onsite and nature of the development, it is unlikely that the LWS' will be subject to additional visitor pressures once the development is operational.

4.0 PROTECTED SPECIES

4.1 To assess the potential impact of the proposed development on several protected species groups known to be present, or deemed potentially to be so, at the Site, additional survey work or other compensatory measures have been undertaken as detailed below.

Amphibians

- 4.2 The Site falls within an area covered by a Natural England-led district level licensing (DLL) scheme for mitigating for development proposals that affect great crested newts *Triturus cristatus*. The Site is covered by a DLL Amber Zone where a population of great crested newts is known and have suitable terrestrial and aquatic habitats and dispersal corridors, but where these features are not sufficiently abundant as to represent populations of regional, national, or international significance. Within Amber Zones all types of development can address the impact on great crested newts via joining a DLL scheme.
- 4.3 The development has entered into the Natural England DLL scheme (DLL-ENQ-LEIC-00056) which assumes a worst-case scenario in terms of impacts whereby all of the on-site ponds are destroyed or otherwise rendered unsuitable for great crested newts with compensation to be provided in relation to the number of on-site ponds lost and a proportional consideration to those within 250m of the site boundary which could be impacted. The DLL agreement makes provision for the creation of 8.14 compensatory ponds and the corresponding countersigned IACPC form



has been accepted such that the first two steps in the DLL process have been completed with the further steps, culminating in the issuing of the necessary licence from Natural England, to accompany the full planning application for the scheme.

Badgers

- 4.4 The site was surveyed to determine the presence/absence of setts, latrines, pathways, and evidence of foraging within the Site.
- An offsite sett (S1) was identified within 30m of the site boundary which was assessed as being a well-used main sett. Evidence of foraging and mammal runs were also noted in the immediate vicinity of S1. No other evidence of badger use was noted within the site or within 30 m of the site boundary.
- 4.6 The location of the badger sett identified in the completed assessment is unlikely to pose an ecological constraint to the proposed development as it is located off-site to the west at a distance of approximately 5m from the site boundary. Suitable working measures or a licence from Natural England will be put in place to buffer this sett from impacts.

Bats

Tree Surveys

- 4.7 Tree assessments were undertaken from ground level, with Potential Roosting Features (PRFs) for bats noted to inform further survey work.
- 4.8 A total of 41 trees across the site were identified as providing roosting potential for bats during the ground-based assessment, following the aerial assessments 6 trees were downgraded to negligible potential, leaving 35 trees with bat roost potential.
- 4.9 Nocturnal dusk emergence and dawn re-entry surveys were completed on the remaining trees likely to be impacted by the development. During these surveys a single common pipistrelle roost was identified.

Activity Surveys

- 4.10 Walked transect surveys were completed and covered all areas of the Site to identify activity levels around the features of potential value to bats that are to be most affected by proposals such as hedgerows, tree lines, dense scrub etc.
- 4.11 Static passive recording broadband detectors were also deployed on site to supplement the manual transect surveys.
- 4.12 The transects found bat activity levels to be generally low across the Site throughout the year. The highest activity levels were recorded during summer months. Activity was associated with hedgerows throughout the site, with no recordings of bats utilising field compartments. Most bats were utilising the site for commuting, with relatively low foraging levels recorded.
- 4.13 Static detectors located around the Site recorded a relatively low number of registrations considering the number of detectors deployed over the survey period and the size of the Site. With an average of 98 registrations per night per static detector unit across the 210 nights of deployment, the Site is not considered to be of high value for bat foraging activity.



Birds

- 4.14 An extended two visit scoping Wintering Bird Survey was conducted in January and February 2022 with a subsequent full Breeding Bird Survey undertaken between April and June 2022 inclusive.
- 4.15 The wintering bird assemblages within the Site were typical of those habitats in the region comprising largely common and widespread generalist species, The wintering assemblages associated with the arable land and the hedges, scrub, and trees were considered of Local nature conservation importance while those of the grassland, bare ground and waterbodies were considered of Site, Negligible, and No nature conservation importance respectively.
- 4.16 The breeding bird assemblages within the Site were similarly dominated by common and widespread generalists. The nature conservation status of the habitats was largely the same as for wintering birds with arable land and hedges, scrub, and trees being of Local importance, the grassland being of Site importance, and the bare ground and waterbodies being of No importance.

Reptiles

- 4.17 A reptile presence/absence survey was undertaken at specific locations offering potential habitat within the application site boundary. The survey was undertaken based on methodology detailed in the Herpetofauna Workers Manual (Gent and Gibson, 1998) and the Froglife Advice Sheet 10 Reptile Survey (Froglife 1999). Artificial refugia were placed within the survey area amongst habitats considered most suitable for reptiles to confirm presence/absence.
- 4.18 During the course of the surveys no reptiles were recorded on any occasion, with all surveys completed during suitable weather conditions in April, May and September 2022. Furthermore, desk study results indicated a lack of records in the local area. It is therefore considered that reptiles do not pose a constraint to the proposals at this Site.

Mammals

- 4.19 An assessment of water vole and otter habitat suitability was undertaken as part of the Extended Phase 1 habitat survey of the site on 24th February 2022. This confirmed that potentially suitable aquatic and terrestrial habitat were present both within the application area and directly adjacent to it.
- 4.20 A single ditch was present on the Site, running along field margins in the eastern half of the Site and exiting via the south-eastern corner. This was categorised as a ditch (D1) and measured 0.562km in length. A tributary of Diseworth Brook runs offsite, adjacent to part of the western site boundary.
- 4.21 Two separate presence/absence surveys were undertaken in accordance with the Water Vole Mitigation Handbook 2016 and involved the identification of evidence of water vole activity along the watercourses and within 5m of the bank on each side of the channel. Furthermore, water vole monitoring stations in the form of floating platforms were deployed along ditch D1. During the two water vole surveys, signs of otter activity were also searched for to determine presence/absence and status of otters which may be using the Site.
- 4.22 No evidence to confirm the presence of water vole or otter was recorded during either of the two surveys. Given that no water vole or otter were recorded during the surveys, as well as the lack of



any records within the site or 1km of the site boundary, water vole and otters and not considered to be present on site and therefore do not pose a constraint to the removal of this watercourse.

5.0 HABITATS

- 5.1 Survey methods followed the extended Phase 1 Survey (JNCC, 2010) technique and UKHAB BNG assessment process including condition assessment in accordance with the relevant BNG guidelines. This involved a systematic walk over of the Site to classify the broad habitat types and identify any Habitats of Principal Importance (HPI) for the conservation of biodiversity as listed within Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act 2006. The resultant habitat map is shown in Figure 2.
- 5.2 Hedgerows were broadly assessed against the 'Wildlife and Landscape criteria' contained within The Hedgerow Regulations 1997 to determine whether they qualified as 'Important Hedgerows'. This has been achieved using a methodology in accordance with both the Regulations and DEFRA guidance. It should be noted that hedgerows may also qualify as Important under the Archaeology and History criteria of the Hedgerow Regulations 1997 Act, which is beyond the scope of this assessment.
- 5.3 The majority of the Site comprised a mixture of recently ploughed arable field compartments and arable fields planted with winter wheat, with narrow grassy margins (1-2m). One improved horse grazed field and one semi-improved neutral grassland field are present within the Site. The latter is relatively species-poor supporting common and widespread floral species. Such grassland habitats are frequent and widespread within the UK and Leicestershire.
- 5.4 Three ponds (P1-P3) were present on Site but none do not meet the criteria for Local Wildlife Site designation. Dense hawthorn *Crataegus monogyna*, willow *Salix sp.*, elder *Sambucus nigra* scrub was present in association with ponds P1 and P3.
- 5.5 Two distinct areas were being used for soil and manure storage mounds within a larger area of bare ground. These had become colonised by ruderal vegetation, including bramble, common dandelion *Taraxacum officinale*, cocksfoot grass and common nettle *Urtica dioica*.
- 5.6 There was a network of native species-poor hedgerows present on Site. All comprised at least 80% native woody species. The hedgerows were all heavily managed within their agricultural context, acting as formal field boundaries. Mature and semi-mature trees were present throughout the Site, mainly in association with hedgerows, and no veteran trees were identified by the arboriculture assessment.
- 5.7 A shallow field ditch in poor condition runs through the south-east of the site, feeding into an offsite subterranean drainage system whilst beyond the western boundary, a small tributary of the Diseworth Brook runs from north to south.

6.0 BIODIVERSITY NET GAIN

The Site was assessed using the UKHab Survey technique as recommended by Natural England and the Chartered Institute of Ecology and Environmental Management. Condition assessments for each habitat following the stated criteria within the 3.1 Biodiversity Metric technical supplement. Prior to submission this assessment will be updated to the Statutory BNG Metric as required by the Environment Act.



- 6.2 A River Condition Assessment (RCA) was conducted by accredited MoRPh field surveyors, recording data using the RCA information system and interpreting RCA indicators and scores for baseline and post-intervention scenarios. The levels of 'in-watercourse' and 'riparian' encroachment were also assessed following guidance provided in the DEFRA Biodiversity Metric 3.1 and User Guide and Technical Supplement.
- 6.3 The baseline biodiversity value of the Site was assessed for area habitats, hedgerows, and watercourses. In accordance with the Environment Act 2021 and subsequent secondary legislation the scheme will be required to deliver a minimum of 10% uplift over each of these baseline values.
- A preliminary biodiversity net gain assessment undertaken by FPCR in 2023, using the illustrative masterplan and parameters plan, as presented in the submitted vision document, demonstrated that the scheme may be able deliver the necessary biodiversity net gains for area habitats, hedgerows, and watercourse features within the allocation site boundary.
- No irreplaceable, high or very high distinctiveness habitats are present on-site, and so no like-forlike or bespoke compensation is required under the current proposals.
- 6.6 A small number of medium distinctiveness habitats are present at the Site which require compensation via the provision of habitat of the same broad group e.g. one type of grassland for that or a different type of grassland of equivalent distinctiveness. The preliminary assessment included sufficient areas of this habitat type with conservative condition targets so as satisfy the required provisions for each of the three medium distinctiveness habitat types identified.
- 6.7 Low and very low distinctiveness habitats can be compensated for by the creation of any habitat type such that so long as the proposals deliver an overall gain in biodiversity units the trading requirements are automatically met for such habitat types.
- 6.8 The approach to habitat creation will aim to maximise biodiversity value within the space made available within the proposals for green infrastructure. Biodiversity Net Gain will then be used throughout the design stage to inform the habitat creation and enhancement proposals for the scheme and to guide decisions around additional habitat provision.
- 6.9 In the event that a 10% BNG uplift cannot be delivered on site a suitable offsite provider will be engaged in accordance with the BNG guidelines.

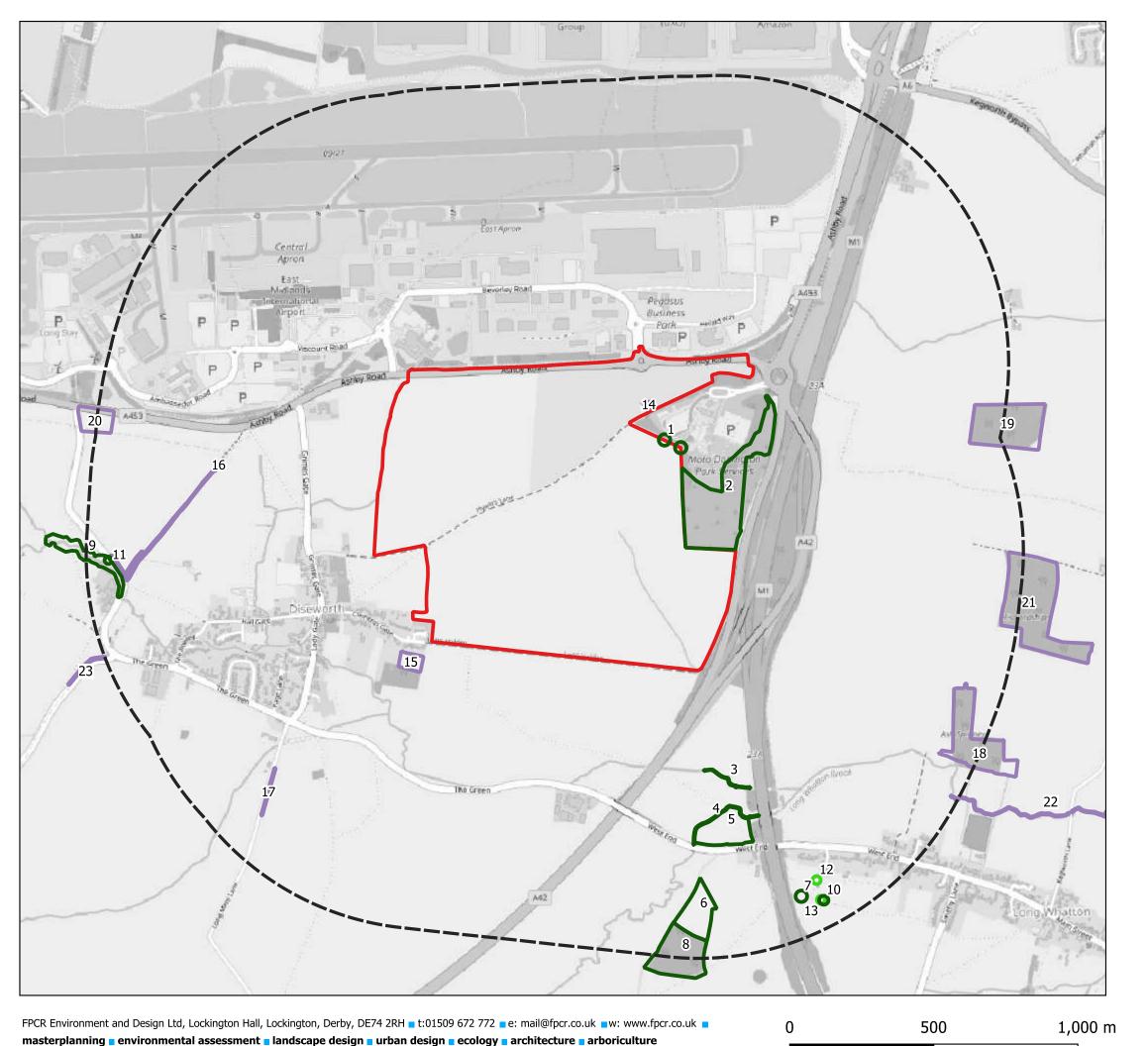
7.0 CONCLUSION

- 7.1 As the scheme progresses the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Ecological Impact Assessment in the UK and Ireland (2018) will be used to determine the likely impacts of the scheme and their significance.
- 7.2 The proposed development is anticipated to have no effect on international or nationally designated sites and a minor effect on locally designated sites.
- 7.3 The habitats present on site are of limited ecological value and are common and widespread in the local area. A small number of protected species have been identified during site surveys, however the numbers and distribution of these species is limited.
- 7.4 Delivery of the proposals will be undertaken following standard mitigation measures, encapsulated within a Construction and Environmental Management Plan (CEMP) or similar document, and as agreed by the LPA, to negate impacts on retained habitats, with additional specific measures



employed to avoid harm to protected species which are known to be present on-site or in the vicinity. These could include, but are not limited to;

- Pollution prevention measures to reduce the risk of accidental pollution, the prevention of siltation of nearby aquatic habitats, potentially affecting water quality, and dust pollution which could affect sensitive flora;
- Protection of retained trees and hedgerows from damage and soil compaction via the maintenance of fenced Root Protection Areas (RPA's) in accordance with BS 5837:2012;
- Installation of appropriate stand-offs and protection fencing for retained habitats where appropriate;
- Best practice with regards to vegetation removal for nesting birds, and other species, (where necessary) e.g. removal of vegetation outside of the bird nesting season,
- Avoidance of lighting sensitive habitats during construction and a lighting plan postdevelopment; and,
- 7.5 The proposals have the opportunity to deliver significant biodiversity benefits, which will be focused western section of the site, which will provide a range of habitats including, scrub, woodland and species rich grassland. These habits will be of significantly higher value than the arable habitats currently present on site.



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Key

- Site Boundary 1 km Buffer Local Wildlife Site (Candidate) Local Wildlife Site (Potential) Local Wildlife Site (Potential: Historic)
- Candidate Local Widlife Sites:
- 1 Diseworth, Donington Park Services M1 J23A, Ash
- 2 M1 J23A Donington Park Services Grassland and Scrub
- Diseworth Brook
- 4 West Meadow Brook
- 5 Long Whatton Meadow 2
- 6 Long Whatton Meadow
- 7 Veteran Ash 2, West End
- 8 Long Whatton Woodland
- 9 Diseworth Brook Woodland
- 10 Veteran Ash 3, West End
- 11 Diseworth Brook Ash 2

Potential Local Wildlife Sites:

- 12 Long Whatton Meadows, Ash 4
- 13 Veteran Ash 1, West End

Potential: Historic Local Wildlife Sites:

- 14 Pond
- 15 The Paddock Semi-Improved Grassland
- 16 Diseworth Green Lane NW of Village
- 17 Long Mere Lane Hedgerow
- 18 Ash Spinney
- 19 Mixed Plantation
- 20 Castle Donington, Charnock Hill Grassland
- 21 His Lordships Woodland
- 22 Long Whatton Brook
- 23 Hedgerow

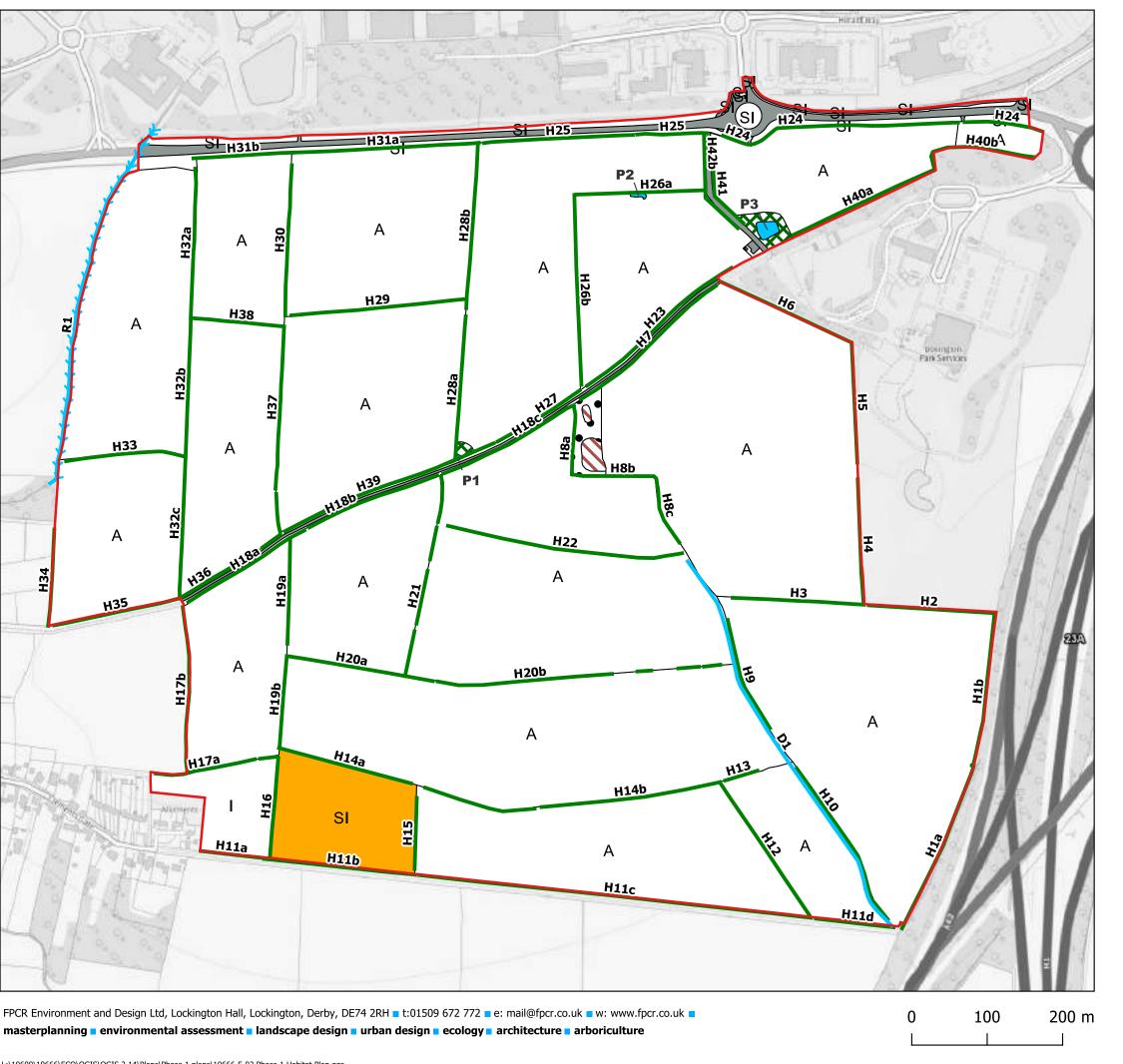


Diseworth Freeport, Diseworth

DESIGNATED SITES PLAN

drawn OJB / HEJ

issue date 16/2/2024



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Key

Site Boundary

Phase 1 Habitats

Bare ground



Built Environment: Buildings/hardstanding



Cultivated/disturbed land - arable



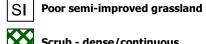
Improved grassland



Neutral grassland - semi-improved



Other tall herb and fern - ruderal



Scrub - dense/continuous

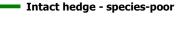


Scrub - scattered



Ponds (Non-Priority Habitat)





Ditch

>>>> Running water



SEGRO

Diseworth Freeport, Diseworth

PHASE 1 HABITAT PLAN



AB / SJA

issue date 6/3/2024

Appendix 9 – Transport Position Statement

EAST MIDLANDS GATEWAY PHASE 2



PROJECT NAME	East Midlands Gateway Phase 2 – Transport Position Statement		
DOCUMENT NUMBER	EMG2-BWB-GEN-XX-RP-TR-0008		220500
AUTHOR	Matt Corner	STATUS	\$2
CHECKED	CHECKED Paul Wilson R		P4
APPROVED	Matt Corner	DATE	01/03/2024

1. EXECUTIVE SUMMARY

This Position Statement has been prepared to support representations to the North West Leicestershire District Council Proposed Policies and Site Allocations Consultations dated February 2024 by summarising the extensive transport work undertaken on the East Midlands Gateway Phase 2 development (EMGP2).

BWB has been in scoping discussions with the Transport Working Group (TWG) since April 2022. As part of this ongoing consultation, a Sustainable Transport Strategy and Travel Plan have been produced with the aim of reducing the number of car trips generated by the development altogether by encouraging sustainable travel, all of which will help to minimise the impacts of the EMGP2. This strategy will follow the success at East Midlands Gateway Phase 1, which has had significant achievements in modal shift away from private car travel. BWB has also completed a significant amount of strategic and detailed transport modelling work to understand the impacts of the EMGP2 development on the surrounding highway network.

The initial results show that, in the absence of any mitigation, the highway network between M1 Junction 24 and M1 Junction 23a/Finger Farm roundabout, in particular, is expected to be experience some stress leading to potential for congestion and queueing at peak hours.

It is therefore proposed that a mitigation strategy is required, to include physical infrastructure improvements along this section of the network which will create additional capacity to sufficiently accommodate the proposed traffic generation from the site. Initial schemes have already been designed for certain junctions, which will be coded into the strategic modelling to understand the wider benefits.

Therefore, it is considered that the traffic impacts of the EMGP2 development can be mitigated through both physical infrastructure improvements and softer travel planning measures to ensure that there are no significant safety or capacity impacts on the highway network and hence the proposals should be acceptable in highways terms. This takes into consideration that the site also has a number of significant benefits in that it is:

- i) located in close proximity to EMG Phase 1 and East Midlands Airport
- ii) within the Freeport and under the management of SEGRO, with the ability to use air and rail transport, in addition to other sustainable modes of transport, and hence not just reliant on the Strategic Road Network.

EAST MIDLANDS GATEWAY PHASE 2



2. INTRODUCTION

2.1 Since April 2022, BWB Consulting Ltd (BWB) has been providing highways and transportation advice on a Phase 2 expansion of the East Midlands Gateway (EMGP2) employment development, located to the south of East Midlands Airport near the village of Diseworth, Leicestershire. The site is being proposed for 300,000sqm of B2/B8 industrial development and forms part of the Government's East Midlands Freeport initiative. Figure 1 shows the site, which is sustainably located.

EAST MIDLANDS
GATTWAM PHASE 1

M1 JUNCTION 24

M2 JUNCTION 24

M3 JUNCTION 24

M4 JUNCTION 24

M5 JUNCTION 24

M6 JUNCTION 24

M6 JUNCTION 25

M6 JUNCTION 25

M7 JUNCTION 25

M8 JUNCTION 25

Figure 1. EMGP2 Site Location

- 2.2 North West Leicestershire District Council's (NWLDC) 'Preferred Options' consultation includes EMGP2 as a 'potential location' for strategic employment development. This Position Statement has been prepared to support representations to the Proposed Policies and Site Allocations Consultations dated February 2024 by summarising the extensive transport work undertaken to date and the subsequent next steps, seeking to demonstrate how there are not expected to be any significant impacts that cannot be mitigated and how the site can provide opportunities for sustainable travel.
- 2.3 Section 5 of the draft Preferred Options document provides details on the East Midlands Freeport sites and from a transport perspective states that key planning considerations include:

"In view of the site's location and the level of traffic that could be generated, it will be important to understand the likely impact on the road network, including both J23a and J24 of the M1"

EAST MIDLANDS GATEWAY PHASE 2



- 2.4 This Transport Position Statement adopts the following structure:
 - Section 2 summarises the detailed transport work completed to date, including scoping discussions, developing the sustainable transport strategy, and modelling work.
 - Section 3 outlines the next steps and the initial strategy for mitigating any significant transport impacts generated by the EMGP2 development, as well as the sustainable transport strategy.
 - Section 4 summarises this Transport Position Statement and concludes that the site is suitable to be allocated in the NWLDC new Local Plan from a transport perspective and sufficient comfort is provided at this stage that any highways impacts can be suitably mitigated.

3. WORK UNDERTAKEN TO DATE

Scoping Discussions

- 3.1 Extensive pre-application discussions have been on-going with the 'Transport Working Group' (TWG) since April 2022. This consists of key statutory highway authorities including Leicestershire County Council (LCountyC local highway authority) and National Highways (NH), along with neighbouring authorities including Derbyshire County Council (DCountyC), Nottinghamshire County Council (NCountyC), Leicester City Council (LCityC), Nottingham City Council (NCityC) and Derby City Council (DCityC).
- 3.2 BWB produced a Scoping Note to set out initial parameters for the Transport Assessment, which was followed by monthly meetings with the TWG to start the pre-application process, with minutes circulated summarising the discussions and actions. Key milestones are recorded on a programme, which logs agreements and provides the TWG with approximate timescales for when new information is to be submitted. Meetings have also been scheduled for the remainder of 2024 following the most recent meeting held on 8 February 2024. The following bullet point list summarises the key agreements made to date with the TWG.
 - The B2 and B8 trip rates and corresponding EMGP2 development traffic generation.
 - That the proposed development would be served by two points of access from the A453 opposite East Midlands Airport, which at this stage, are expected to be in the form of roundabouts (although there is scope to provide signals if ultimately deemed necessary).
 - The strategic transport impacts will be tested using the East Midlands Freeport Model (EMFM), derived from a cordon of the wider Pan Regional Transport Model (PRTM), managed by AECOM on behalf of LCountyC.
 - The EMFM model has undergone a detailed base model review confirming it validates well against surveyed flows and journey time information.
 - The details within the EMFM proforma, including the opening and future assessment years, development traffic distribution methodology, uncertainty log information/planning data assumptions and modelling scenarios.

EAST MIDLANDS GATEWAY PHASE 2



- The EMFM has been run by AECOM who have provided a Forecasting Report summarising the results as well as various outputs for BWB to use in the Transport Assessment.
- A Walking, Cycling and Horse-Riding Assessment and Review (WCHAR) has been completed which will feed into the design of off-site infrastructure improvements.
- The use of VISSIM to test the key strategic junctions, with the base model fully validated and agreed.
- The furnessing methodology to derive forecast traffic flows from the EMFM for input into the detailed VISSIM and Junctions 10/LinSig models.
- A minimum study area has been agreed and initial model runs have been undertaken to understand where mitigation could be required.
- Consideration of a 'sensitivity test' assessing the cumulative impacts of the wider East Midlands Freeport and Isley Woodhouse development.

Sustainable Transport

- 3.3 Softer measures are being explored to reduce the amount of traffic generated by EMGP2 and hence the impacts.
- 3.4 Integrated Transport Planning (ITP), the Travel Plan Co-ordinator of EMG Phase 1, have produced draft Sustainable Transport Strategy and Framework Travel Plan documents for EMGP2. The aim is to ensure that infrastructure is delivered to provide future occupiers with opportunities to use sustainable modes of travel and to provide a range of incentives that encourage the take up of the sustainable modes over private car use, all of which will help in reducing the impacts of the EMGP2 development.
- 3.5 To date, the following infrastructure improvements are being considered as part of the EMGP2 proposals:
 - Delivery of a new footway/cycleway along the A453 connecting EMG Phase 1 with EMGP2.
 - Footway/cycleway infrastructure within the site itself connecting to each of the units and to the A453, with suitable crossing facilities on the A453 itself.
 - Improvements to Hyam's Lane, a registered Public Right of Way that bisects the site, including resurfacing and provision of low-level lighting. There would be multiple connections to the site from Hyam's Lane along the key desire lines.
 - Providing a new purpose-built bus interchange within the site which would be served by existing public services as well as an internal shuttle bus.
- 3.6 The Travel Planning work undertaken at EMGP1 has had significant success in reducing staff car trips. From the most recent surveys, the current mode share of single occupancy car travel is approximately 48%, with car sharing having a 25% mode share and bus travel at a 24% mode share. Given the success at EMG Phase 1 and the similarities in the two schemes, ITP are adopting a similar approach to EMGP2. A strategy has been agreed to provide a purpose-built bus interchange within the development, which will include dedicated bays for commercial bus services to call at, as well as dedicated on-site shuttle services that will call at the interchange and transfer staff and

EAST MIDLANDS GATEWAY PHASE 2



- visitors to the main part of the development. Trent Barton have confirmed that they would be open to diverting an existing service into the development.
- 3.7 There will also be cycle hire at the bus interchange for staff and visitors to use as a coordinated journey with public transport. Significant emphasis will therefore be placed on encouraging car share, particularly for shift-based staff, to reduce the number of cars travelling to the site each day.
- 3.8 The above therefore relates to the Arup NWLDC Infrastructure Delivery Plan: Part 1: Baseline Infrastructure Capacity Report dated September 2022 which states that from an Active Travel Planning perspective "development would provide options to develop the network of active travel routes between Castle Donington, Kegworth, the East Midlands Gateway and East Midlands Airport, partly mitigating potential impacts on the highway network".
- 3.9 The report also states that with regards to bus services "development would provide a modest boost to the usage and viability of bus services to and within Castle Donington, and could provide a limited amount of funding for capital improvements that further boost the attractiveness of services. In our discussions with Erewash Borough Council, the ongoing improvement of bus services between East Midlands Airport, Castle Donington and Long Eaton were highlighted as priorities".
- 3.10 It is also important to note that in addition to the site's excellent location to the strategic highway network, the site also benefits from close proximity and access to the rail freight terminal at East Midlands Gateway and air freight facility at East Midlands Airport. This will help achieve net zero targets by reducing HGV traffic generation and increasing the volume of freight traffic travelling by rail and air. This modal shift is already apparent on East Midlands Gateway with both Amazon and Kuehne and Nagel already using both the rail and air freight facilities available.

Strategic Transport Modelling

- 3.11 A significant amount of strategic modelling has been completed using the EMFM. This began in November 2022, initially with AECOM undertaking a base year model review, concluding that the EMFM validates well and is suitable to test the impacts of the EMGP2 development.
- 3.12 A Forecasting Report was issued in April 2023 summarising the EMFM modelling results. This identified potential for congestion during the peak hours around the strategic roads between M1 Junction 24 and M1 Junction 23a/Finger Farm roundabout which could have knock on impacts elsewhere on the network with vehicles seeking to avoid the congested parts of the network.
- 3.13 Highway mitigation will primarily be focussed at M1J23a/Finger Farm Roundabout and M1 Junction 24. The purpose of focusing mitigation at the above junctions is to draw development traffic that is currently predicted to re-route elsewhere back to the Strategic Road Network and to limit the impacts of the development on the most sensitive parts of the network, including local villages.

EAST MIDLANDS GATEWAY PHASE 2

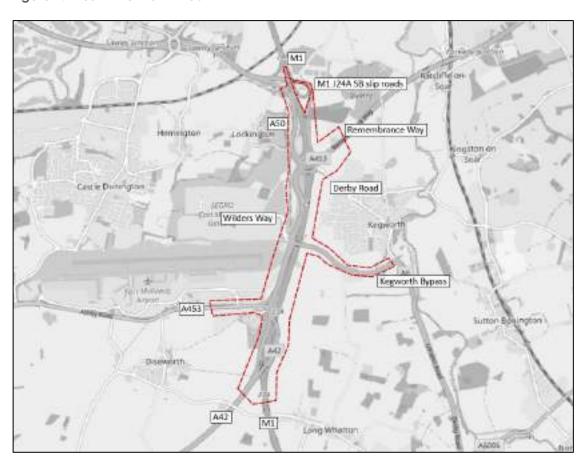


3.14 M1J23a is also referenced in the Arup NWLDC Infrastructure Delivery Plan report which states that "a priority for National Highways that has been included as part of its Roads Investment Strategy pipeline is a scheme to provide extra capacity to the M1 between Junctions 21 and 23A – a stretch partly within North West Leicestershire. As set out in the Road Investment Strategy 2 (March 2020), these works are anticipated to enter development before 2025".

VISSIM Modelling

- 3.15 Given the proximity of the site and the potential for congestion identified within the EMFM during the peak hours, it has been agreed that the following five junctions are modelled using microsimulation VISSIM modelling. This aligns with the advice in the draft 'Preferred Options' document which highlights the importance of understanding traffic impacts at these locations (Figure 2 shows the VISSIM network area):
 - A453/Site Access Roundabout
 - A453/Hunter Road Roundabout
 - Finger Farm Roundabout
 - A453/EMGP1 Signal Gyratory
 - M1 Junction 24

Figure 2. VISSIM Network Area



EAST MIDLANDS GATEWAY PHASE 2



3.16 A VISSIM network model of base year 2012 was originally produced to support EMG Phase 1. The model has been cordoned and re-validated to a base year of 2022 using new survey data and the results were combined within a Local Model Validation Report. The TWG confirmed that the VISSIM model calibrates well against surveyed data, in line with industry standard guidelines. Therefore, the VISSIM model will provide a thorough assessment of the future performance of these key junctions and form the basis for any subsequent mitigation.

Individual Junction Modelling

3.17 The remaining junctions within the study area will be modelled using industry standard software within Junctions 10 (priority junctions and roundabouts) and LinSig (signal-controlled junctions). All models have been built and validated with the results combined in a Base Model Validation Note confirming they all accurately reflect the survey results. The Base Model Validation Note was issued to the TWG in January 2024 and BWB are liaising with the TWG on the subsequent responses received.

Summary

3.18 The above details have summarised the significant amounts of transport work completed to date and key milestones that have been agreed with the TWG. The vast majority of the EMFM modelling has been completed, which sets the foundations for BWB to undertake the detailed VISSIM and Junctions 10/LinSig modelling to understand where the key traffic impacts are expected to occur and where mitigation should be focussed. At this stage, the focus is likely to be along the A453 corridor between M1 Junction 24 and M1 Junction 23a/Finger Farm. BWB should have an initial understanding of mitigation requirements and have preliminary schemes designed by March/April 2024, which will be shared with the TWG and developed before being finalised.

4. NEXT STEPS

Sustainable Transport

4.1 The sustainable transport strategy set out for the site in the above section will be developed further. This will take into consideration the fact that employees and visitors at site will have the ability to use sustainable modes of transport to travel to and from it, and hence will not just be reliant on travelling by car.

EMGP2 Modelling

- 4.2 The last TWG meeting took place in February 2024 to discuss the next steps. This will include key tasks such as the following:
 - Running the future forecast traffic flows within the VISSIM and Junctions 10/LinSig models to understand capacity levels and where mitigation is required to address any significant impacts generated by EMGP2).
 - Producing initial schemes of mitigation to address the impacts of the EMGP2 development, whilst drawing traffic back to the Strategic Road Network

EAST MIDLANDS GATEWAY PHASE 2



- Once an agreement has been made with the TWG on the initial mitigation strategy,
 the designs will be coded into the EMFM to understand the wider benefits on the
 network. There is likely to be a need for amendments to the mitigation designs to
 ensure the benefits are maximised and so this will be an iterative process in
 collaboration with the TWG. The final schemes would then undergo Stage 1 Road
 Safety Audits and WCHAR Reviews.
- The mitigation identified for EMGP2 can then be built upon when looking at the impacts of the wider East Midlands Freeport and Isley Woodhouse developments.

Wider Cumulative Modelling

- 4.3 The focus of BWB's work to date has been on the Transport Assessment for the EMGP2 development. The TWG has stressed the importance of running a sensitivity test assessment that includes the wider East Midlands Freeport and Isley Woodhouse sites.
- 4.4 Whilst BWB are committed to doing this, it is understood that AECOM has recently been appointed by NWLDC to assist with developing its new Local Plan transport needs evidence base and consider the likely impacts of the preferred spatial growth option, which includes these developments. It is understood that funding is being made available for subsequent detailed modelled and identification of mitigation requirements to accommodate the cumulative impacts of all developments, including EMGP2. The locations of the East Midlands Freeport and Isley Woodhouse sites are shown on Figure 3.

EAST MIDLANDS
INTERMODAL PARK

BLEMANATOR
INTERMODAL

BLEY

BLEY WALTON

Figure 3. Locations of East Midlands Freeport Sites

4.5 A base model review of the EMFM network has been undertaken and a report issued confirming that the level of validation meets industry standard criteria and hence the EMFM is suitable to inform the next stages of the assessment work. The programme suggests that by the end of Q3 2024, the EMFM modelling will be complete so that mitigation can be explored, which could build on the schemes identified by BWB as part of the EMGP2 development. Hence, there are plans in place to look at each site

TRANSPORT POSITION STATEMENT

EAST MIDLANDS GATEWAY PHASE 2



cumulatively and ensure that infrastructure can be delivered to accommodate the planned growth in the area, with BWB assisting where necessary.

5. SUMMARY

- 5.1 This Position Statement has summarised the transport work completed to date on the EMGP2 development and set out the next steps to be.
- 5.2 In summary, the TWG has been formed since April 2022 and since this time a large number of key milestones have been reached in agreeing key parameters for the Transport Assessment. A significant amount of strategic and detailed junction modelling has been undertaken, including building a new VISSIM model to test the key junctions along the A453 corridor up to M1 Junction 24.
- 5.3 Initial schemes of mitigation are being considered for mitigating the EMGP2 impacts on the Strategic Road Network, which would then need to be tested in the EMFM and revised as part of an iterative process.
- 5.4 A detailed Sustainable Transport Strategy and Framework Travel Plan have also been produced to reduce the number of car trips generated by EMGP2 which would further lessen the impacts on the road network. This will build on the success achieved at EMGP Phase 1 and take into consideration the fact that employees and visitors at site will have the ability to use sustainable modes of transport to travel to and from it, and hence will not just be reliant on travelling by car and Strategic Road Network.
- 5.5 Further work is also being undertaken by NWLDC as part of the new Local Plan, which includes transport modelling of the East Midlands Freeport and Isley Woodhouse developments. This will be followed by a package of mitigation aimed at addressing the impacts of all planned development in the local area, which could build on the schemes produced for EMGP2.
- 5.6 Overall, the significant amount of work undertaken to date shows the progress that has been made on the EMGP2 development. There are options in place for mitigating the impacts of the development through physical infrastructure improvements and softer Travel Planning measures. There is also work in place through NWLDC to consider the traffic impacts cumulatively with the other East Midlands Freeport and Isley Walton sites.
- 5.7 Hence, it is considered that the EMGP2 represents sustainable development in a suitable location that, with appropriate mitigation, would not have any significant impacts on the surrounding highway network.
- 5.8 As a result, the site is suitable for an employment allocation within NWLDC's new Local Plan from a transport perspective and sufficient comfort should be provided at this stage of the process that any highways impacts can be suitably mitigated.

Appendix 10 – Sustainable Travel Strategy



SEGRO

East Midlands Gateway
Phase 2

Sustainable Travel Strategy

January 2024

East Midlands Gateway Phase 2 Sustainable Travel Strategy

Version 1-0 January 2024

Produced by:



For:



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1. Introduction

- 1.1 North West Leicestershire District Council is developing a new Local Plan, to guide future planning decisions within the District. As part of this, the District Council is considering the potential locations of strategic distribution sites. A potential location for one of these distribution sites is on land south of East Midlands Airport. This site is approx. 1km south of an existing strategic distribution site called SEGRO Logistics Park East Midlands Gateway (EMG1). As the land south of East Midlands Airport is being put forwards by the same developer (SEGRO) and it is located so close to EMG1 and with a similar proposed use class, it will be referred to within this document as SEGRO Logistics Park East Midlands Gateway Phase 2 (EMG2).
- Integrated Transport Planning Limited (ITP) has been appointed by SEGRO to prepare a Sustainable Travel Strategy (STS) to demonstrate how EMG2 could be connected by sustainable transport to Leicester, Derby and Nottingham, as well local connections to Diseworth, Castle Donington and Kegworth, to ensure any future employees have the option of commuting by sustainable means and to help mitigate the possible impacts of the development on the local highway network.
- 1.3 This STS considers the existing sustainable transport network and how this could be enhanced if EMG2 is selected for development. It also draws on evidence from the highly successful EMG1 to demonstrate levels of sustainable commuting that have been achieved and how this could also be applied to EMG2.
- 1.4 This focus on sustainable transport aligns with SEGRO's 'Responsible SEGRO' framework which centres on sustainability and low carbon growth for all new developments. Sustainable commuting is integral to this framework; hence why an STS has been developed to demonstrate a clear priority to reduce carbon emissions by promoting sustainable commuting, supporting access to employment, and improving the health and wellbeing of the workforce.

Report Structure

- 1.5 The remainder of the STS is structured as follows:
 - Section 2 provides an overview of the proposed development.
 - Section 3 summarises the sustainable travel policy context.
 - Section 4 identifies existing sustainable transport options.

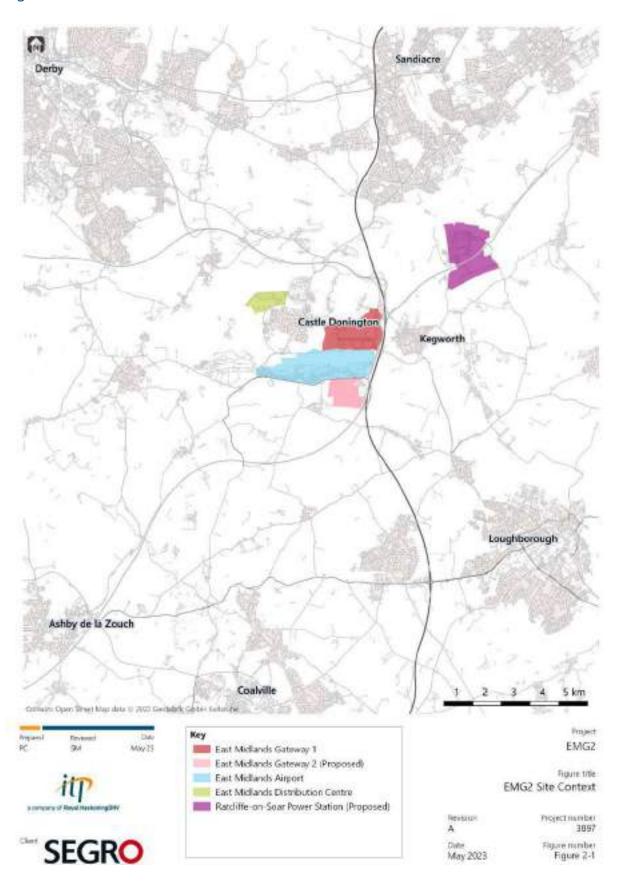
- Section 5 outlines the existing travel patterns of the local population and workforce.
- Section 6 explains the initial stakeholder engagement that has taken place to inform the STS.
- Section 7 sets out the proposed sustainable travel strategy.
- Section 8 details how it will be managed.
- Section 9 explains the anticipated impacts of the strategy.

2. Proposed Development

Location

- 2.1 EMG2 is located immediately south of the A453 and East Midlands Airport and just 1km from the entrance of EMG1. Diseworth village is to the west of the site and the M1 Junction 23A is to east, with Moto Donington Motorway Services bordering to the northeast. Long Holden along the southern boundary of the development.
- Regionally, EMG2 is positioned between the key settlements of Loughborough (approximately 15 km to the south-east), Nottingham (approximately 25 km to the north-east) and Derby (approximately 25 km to the north-west).
- The site is also within the newly established <u>East Midlands Freeport</u>, which has been developed to drive economic regeneration across the East Midlands. There are three clusters within the Freeport area and EMG2 would fall within the <u>East Midlands Airport and Gateway Industrial Cluster (EMAGIC)</u>. The proposed site is located immediately south of East Midlands Airport (EMA) and <u>EMG1</u>; which could serve as an extension to the latter. Figure 2-1 visualises the geographic context of the site.
- The wider EMAGIC cluster complements two other proposed developments within the East Midlands Freeport, the <u>Ratcliffe-on-Soar Power Station</u> site in Nottinghamshire, which was granted Local Development Order planning status in July 2023; and the <u>East Midlands Intermodal Park</u> (EMIP) in South Derbyshire. The site's relationship with these other proposed strategic developments has been considered within this STS.

Figure 2-1: EMG2 Site Context



Use & Operations

- Initial scoping of EMG2 suggests an area circa 259 acres, with the option of approximately 300,000sqm gross floor area (GFA) of industrial use, which would include B8 (storage and distribution) and B2 (industrial). This is likely to be accompanied by ancillary offices and associated roads, parking, and landscaping.
- 2.6 It is anticipated that the proposed development could create ~4,000 new jobs and when combined with the existing workforces at EMG1 (approx. 6,000 employees) and East Midlands Airport (approx. 10,000 employees) it would create a regionally significant employment hub of around 20,000 employees.
- Due to the industrial nature of EMG2 it is envisaged the site would have a 24 hour/7-day operation. Businesses will likely operate some shift patterns for their employees. Taking EMG1 as an example, these shift patters could be:
 - 06:00 14:00
 - 14:00 22:00
 - 22:00 06:00
- 2.8 For any office and administration employment opportunities, other employees may work 09:00 17:30.
- As with EMG1, the shift patterns of each occupier would be staggered as operations are mobilised to elongate the arrivals/departures window of EMG2. Staggering the shift patterns means employees arrive and depart throughout the day, therefore supporting the operation of bus services and ensuring there are fare-paying passengers on early and late evening services as well as on those during the day.

3. Relevant Policy

3.1 This section sets out the national and local policy context and how the EMG2 STS aligns with them to support the relevant sustainability objectives.

National Planning Policy Framework

- Chapter 9 of the National Planning Policy Framework (NPPF) sets out ways in which developments should be promoting sustainable transport, highlighting that transport should be considered at the earliest stages of plan-making and development proposals. The reasons for considering transport issues are detailed in paragraph 104 including addressing the impacts on transport networks, utilising opportunities from existing infrastructure and technology, promoting walking, cycling and public transport usage and considering the environmental impacts of traffic and transport infrastructure.
- Paragraph 116a specifically states that "applications for development should give priority first to pedestrian and cycle movements, both within the scheme and neighbouring areas; and facilitate access to high quality public transport services, and appropriate facilities that encourage public transport use".
- This Sustainable Transport Strategy meets these policy objectives as it sets out the possible active travel infrastructure provision and how the site could integrate with the current bus network and make best use of existing transport facilities alongside proposed enhancement to existing bus services to ensure their capacity can manage the increased demand stimulated by the development.

Leicestershire Local Transport Plan

- One of the key parts of Leicestershire's Public Transport Plan (LTP3) is to encourage more active and sustainable travel to reduce congestion, but also to reduce carbon emissions from road transport, provide enhanced access to jobs and training and improve people's health. The short-term approach focuses on improving the marketing of, and information on existing facilities and services that enable people to travel by bike, on foot, by bus and by rail.
- The STS supports these goals by setting out the sustainable transport options for getting to the proposed development site, but also the wider marketing and engagement activities with end-occupiers and their employees to embed sustainable commuting within the new workforce.

Leicestershire Bus Service Improvement Plan

- Leicestershire County Council's (LCC) Bus Service Improvement Plan (BSIP) focuses on targets to improve passenger growth, customer satisfaction, journey times, reliability, and bus emission standards across Leicestershire's bus network. The BSIP acknowledges that EMG1 is one of the major employment areas in Leicestershire and that it is vital for public transport to be maximised for workers at EMG. Although LCC did not receive central government funding for BSIP initially, it has been successful in securing £1.7m of BSIP+ funding in 2023/24 and £1.7m for 2024/25. A further £4m has been secured through BSIP (Phase 3) 2024/25, taking the funding award to £7.4 million from 2023 to 2025. LCC, local bus operators and district councils are using this funding to move forward with the BSIP plan through Leicestershire's Enhanced Partnership.
- This development could support Leicestershire to work towards its BSIP targets by promoting and encouraging public transport use amongst employees and therefore creating increased patronage on the existing network.

Leicestershire Local Cycling & Walking Strategy

- The vision for Leicestershire's Cycling and Walking Strategy is for "Leicestershire to become a county where walking and cycling are safe, accessible and an obvious choice for short journeys and a natural part of longer journeys, helping to deliver healthier, greener communities".
- Policy 2 of the strategy sets out that "new residential and employment developments should be built in line with current walking and cycling guidance with land developers providing funding for revenue measures. Policy 4 is to maximise opportunities for people to undertake cycling and walking as part of journeys linking up with passenger transport (bus and rail)".
- In line with this, the proposed development could promote connectivity to other modes of transport through the provision of appropriate walking and cycling routes through the EMG2 site, including Hyam's Lane footpath. Further to this there are plans to put in place on-site bike hire schemes with docking stations and cycle parking provided at the EMG2 interchange.

4. Existing Transport Options

This section outlines the existing sustainable transport options including any on and off-site active travel infrastructure and public transport services.

Active Travel

On-site Infrastructure

There is a registered Public Right of Way (PRoW) called Hyam's Lane (L45), which bisects EMG2 with a north-east to south-west alignment. The route connects to the existing L45 footpath heading north towards EMG1 and Kegworth; and to the south-west the village of Diseworth. Hyam's Lane is currently used by pedestrians, cyclists and equestrians, providing connectivity between Diseworth Village and Donington Park 'Moto' Services.

Off-site Infrastructure

The area surrounding EMG2 benefits from an existing network of PRoW footpaths and bridleways, offering the potential to attract future employees from the local area who may find it convenient to walk the short distance to the site, as well as providing infrastructure to facilitate last-mile journeys by these active modes. There are existing PRoW connections from Diseworth, Kegworth and Castle Donington. Hemington and Lockington could be accessed via EMG1. The existing cycle and Public Right of Way (PRoW) network is shown in Figure 4-1

Barton-in-Fable. Local Authority Soundary EMG2 This improve Fulblic Right of Way Streat William National Cycle Network Batcliffe en Soor Primer Station - On Road Auton on Twit - Nittle Free Rateliffe in Soar Sworkstown Basing - Raikeay Weston on Bent Road Network Stanton by Bridge EMG1 **Grigs Newto** Perpesus Business Park Melanome licity.Walton **SEGRO** Breeslon on the HDI East Midlands Gateway Phase 2 Existing Cycle Infrastructure and PRoW PRODUCED TO BE Egrenanies Figure 4-1 66ay 2001.

Figure 4-1: Off-site existing Cycle Routes and Public Rights of Way

Public Transport

Bus

- There are four existing high frequency bus services which pass EMG2: the skylink Express, skylink Nottingham, skylink Derby-Leicester and Airway 9. A fifth bus service, my15, terminates at East Midlands Airport, which is within walking distance of EMG2.
- These five services provide bus connectivity between the key settlements of Nottingham, Derby, Ilkeston and Leicester as well as East Midlands Airport, EMG1 and the NET Tram at Clifton Park and Ride. The skylink Derby-Leicester service is operated by Kinchbus, the skylink Express, skylink Nottingham, the my15 by Trentbarton and the Airway9 by Diamond bus. Trentbarton and Kinchbus are both subsidiaries of the Wellglade Group.
- In addition to the fixed route bus services outlined above, Nottinghamshire County Council introduced a new Demand Responsive Transport service in May 2023 called Notts Bus on Demand which operates within the West Rushcliffe Zone (Zone 4) providing a bus service from settlements in south Nottinghamshire to East Midlands Airport, East Midlands Parkway, EMG1 and University of Nottingham's Sutton Bonington campus. The proposed development would fall within the West Rushcliffe Zone, providing local services for those not on conventional bus routes and a new connection to East Midlands Parkway train station.
- 4.7 A summary of the existing bus services close to EMG2 is provided in Table 4-1 and visualised in Figure 4-2 and Figure 4-3. This demonstrates the existing reach of bus services across Nottinghamshire, Derbyshire and Leicestershire serving EMA, EMG1 and the proposed development.

Table 4-1: Existing bus service routes, frequencies and hours of operation (2023)

Service	Operator	Route	Frequency ¹	Hours of operation
skylink Derby- Leicester	Kinchbus	Leicester – Loughborough - Kegworth – EMG – EMA1 – Castle Donington - Derby	3 Buses per Hour	24/7

¹ May 2023 typical bus service frequencies

		EMG1- Loughborough	3 Buses per hour (7:00am- 9:00pm) 2 Buses per hour (5:00am- 7:00am) 1 Bus per hour (9:00pm- 5:00am)	24/7
skylink Express	trentbarton	Nottingham - Clifton - non-stop to EMG1	2 Buses per Hour	4:00am- 11:00pm
skylink Nottingham	trentbarton	Nottingham - Long Eaton - Castle Don ington – EMA – EMG1	3 Buses per Hour (2 Buses per Hour at EMG)	24/7
		EMA – Diseworth – Long Whatton - Coalville	1 Bus per Hour	4:30am- 7:00pm
Airway 9	Diamond Bus	Horninglow – Burton – Ashby – Melbourne – EMA – EMG1	1 Bus per Hour ²	4:15am- 10:30pm
my15	trentbarton	Ilkeston – Stapleford – Old Sawley – Castle Donington - EMA	1 Bus per Hour	5:00am- midnight
Nottsbus DRT	Nottinghamshire County Council and trentbarton	West Rushcliffe Zone ³	Flexible	7:00am- midnight

 $^{^{2}}$ Does not serve EMG on Sundays between 07:25 – 17:05

³ NottsBus On Demand operates in four zones in Nottinghamshire, the West Rushcliffe Zone covers EMG1 and EMA with the zone map available here https://www.nottinghamshire.gov.uk/media/5081614/z4-west-rushcliffe-zone-leaflet.pdf

Figure 4-2: Existing Regional Bus Services Map

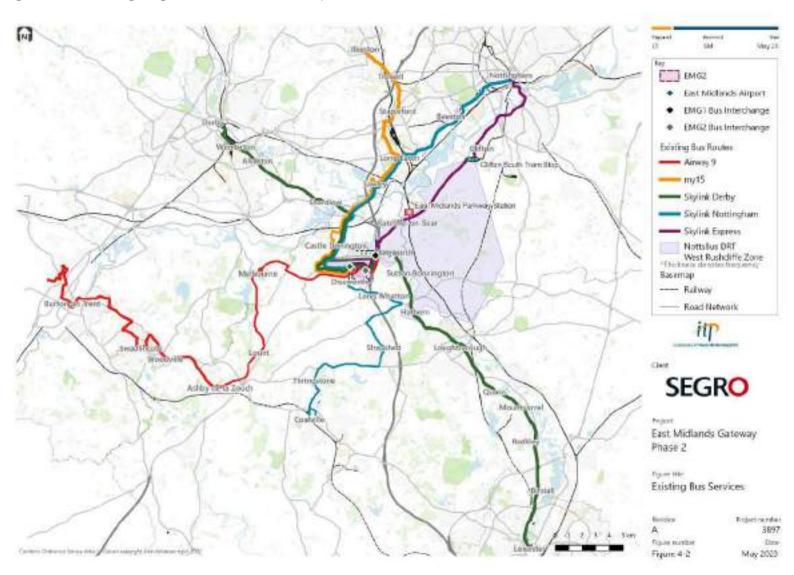
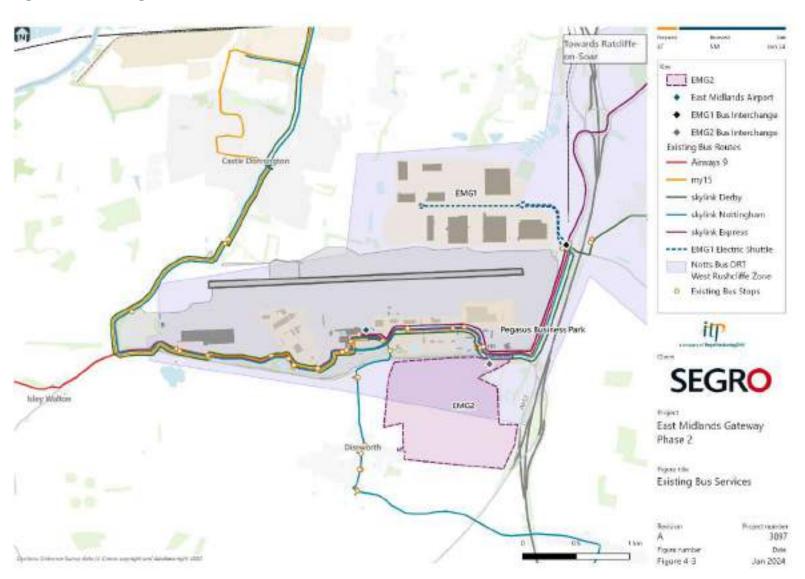


Figure 4-3: Existing Bus Services EMAGIC Cluster



Rail

4.8 East Midlands Parkway train station is located 5 miles to the north-east of EMG2, with direct trains to Leicester, Loughborough, Derby and Nottingham as well as services outside of the East Midlands to London St Pancras and Sheffield (Table 4-2). Prior to the introduction of the Notts Bus On Demand service earlier this year, there were no direct public transport connections between East Midlands Parkway and the developments within the EMAGIC Freeport cluster. This new service now unlocks access to the rail station for existing employees at EMG1, East Midlands Airport and the proposed development, explaining the potential sustainable travel options for those commuting within the East Midlands and visitors from further afield.

Table 4-2: Existing rail service routes and frequencies (2023)

Train Operator	Route Beginning and End	Additional Calling Points	Frequency
East Midlands Railway	London St Pancras - Nottingham	Kettering, Market Harborough, Leicester, Loughborough, EMP, Beeston, Nottingham	2 per hour
East Midlands Railway	London St Pancras - Sheffield	Leicester, Loughborough EMP, Long Eaton, Derby, Belper, Chesterfield, Dronfield	2 per hour
East Midlands Railway	Leicester - Lincoln	Syston, Sileby, Barrow-upon-Soar, Loughborough, EMP, Beeston, Nottingham, Carlton, Burton Joyce, Thurgaton, Bleasby, Fiskerton, Rollerston, Newark Castle, Swinderby, Hykeham, Lincoln	Hourly

Tram

The nearest tram stop is 8 miles to the north-east of EMG2 at Clifton P&R, which is the terminus station for the route. From here there are direct trams to/from Nottingham city centre with onward connections into the wider urban area. Whilst the tram stop isn't near the proposed development, the Notts Bus On Demand and skylink Express both call at the Clifton Park and Ride tram stop which would enable passengers to interchange onto these services to reach EMG2.

Smarter Driving

- 4.10 Existing local authority strategies to support smarter driving focus on sharing vehicles for commuting and business trips, using electric or low emission vehicles, and reducing the need to travel.
- 4.11 SEGRO has invested in a <u>car share journey matching platform for EMG1</u> which is hosted by Liftshare. This platform connects people who can give or would like to receive a lift from people travelling along the same route as them. Although this platform is intended for use by EMG1 business and their employees, the system also offers the option to match with car share partners in the open national Liftshare database which also covers those registering to give or receive a lift within the local area. Leicestershire County Council also has its own Liftshare platform, 'Leicestershare', which covers people looking to give or receive lifts from within Leicestershire.
- A review of public electric vehicle car charging locations on <u>ZapMap</u> show there are four EV chargers at Moto A42 services. Whilst these could provide ad hoc charging facilities for people travelling to / from work at the proposed development, it would not be appropriate to use them for charging whilst at work.

Conclusion

To conclude, the location of EMG2 means there are already numerous sustainable transport connections within close proximity to the site. Public transport, and in particular the bus, offers frequent connections to the three major cities in the East Midlands, alongside settlements on the routes. The recent introduction of the Notts Bus On Demand service has further expanded the potential for public transport commuting, by providing a connecting service to the nearest railways station and tram stop. Whilst active travel is only likely to be a possibility for those that live within the neighbouring villages of Diseworth and Castle Donington, existing PRoW are in place, and which could be upgraded, to ensure they are suitable for commuting purposes.

5. Existing Travel Behaviour

This section draws on available data to review the travel patterns of the local population and the workforce at EMG1 as a proxy for the likely travel patterns of those commuting to EMG2.

Residents

- The travel patterns of the local population have been assessed using the Census 2011 and 2021 travel to work data for the wards surrounding the proposed development. The percentages in Table 5-1 and Table 5-2 detail the proportions of the totals excluding those who work mainly at or from home.
- 5.3 For the 2011 Census, the travel to work data for the wards of Breedon, Castle Donington and Kegworth and Whatton has been presented in Table 5-1. The proposed development is located within the ward of Breedon and the existing EMG1 is located within the Castle Donington ward. The travel to work data date for Kegworth and Whatton ward has been included as these wards are located to the north-east of the development and are a useful indicator as local residents in the Kegworth and Whatton ward would also be within easily commutable distance.
- The journey to work data from the 2021 census is split into smaller wards (Table 5-2). In this census the proposed development lies within the Worthington and Breedon and Long Whatton & Diseworth wards. For comparison with the table above, data for the Castle Donington, Daleacre Hill and Kegworth wards has also been included.
- When comparing the data from the two census periods the average mode share for those driving alone ranges from 79.6% in 2011 through to 81.1% in 2021. 3.9% of the local population reported that they commuted by a form of public transport (train, tram, bus) in 2011, but this reduces to 3.3% in 2021 (it is worth noting that the travel to work data for the 2021 census was collected during the Covid-19 pandemic at a point when people were encouraged not to travel, particularly using public transport). Finally, 10.8% of the population reported that they commuted by active travel modes in 2011 and this increased to 11.3% in 2021. This data suggests that a high proportion of the local population continue to use the private car to travel to work, walking offered the highest potential for sustainable commuting (based on existing trends) and public transport use has been declining, which is in line with national trends.

Table 5-1: 2011 Journey to work modal split data

Wards	Driving car or van	Passeng er in car or van	Train	Tube / tram	Bus / minibus / coach	Bicycle	On Foot	Taxi	M'bike/ scooter /moped	Other
Breedon	86.6%	3.3%	0.9%	0.2%	1.0%	1.8%	4.8%	0.1%	0.5%	0.8%
Castle Donington	76.9%	4.1%	1.0%	0.1%	3.9%	2.5%	9.9%	0.03%	0.6%	0.9%
Kegworth and Whatton	75.3%	5.1%	0.6%	0.05%	4.0%	2.3%	11.2%	0.05%	1.0%	0.5%
Average	79.6%	4.2%	0.8%	0.1%	3.0%	2.2%	8.6%	0.1%	0.7%	0.7%

Table 5-2: 2021 Journey to work modal split data

Wards	Driving car or van	Passeng er in car or van	Train	Tube / tram	Bus / minibus / coach	Bicycle	On Foot	Taxi	M'bike/ scooter /moped	Other
Worthington & Breedon	89.2%	4.0%	0.0%	0.1%	1.1%	0.5%	3.2%	0.4%	0.9%	0.7%
Long Whatton & Diseworth	84.5%	4.9%	0.2%	0.1%	1.7%	1.7%	5.5%	0.0%	0.2%	1.0%
Castle Donington Castle	71.3%	5.4%	0.1%	0.0%	5.8%	2.2%	13.7%	0.4%	0.7%	0.4%
Castle Donington Central	83.6%	2.6%	0.5%	0.3%	2.1%	0.4%	8.6%	0.3%	0.0%	1.6%
Castle Donington Park	81.6%	3.6%	0.5%	0.0%	3.4%	1.8%	6.8%	0.5%	0.5%	1.5%
Kegworth	78.2%	4.5%	0.4%	0.1%	2.8%	0.8%	10.9%	0.1%	0.3%	1.9%
Daleacre Hill	78.9%	4.8%	0.5%	0.0%	3.5%	1.8%	8.5%	0.4%	0.5%	1.0%

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Average	81.1%	4.3%	0.3%	0.1%	2.9%	1.3%	8.2%	0.3%	0.4%	1.1%
, werage	0 / 0	1.370	0.570	0.170	2.370	1.570	0.270	0.570	0.170	1.170

Employees

- Whilst the Census data can provide insight into local residents' travel patterns, the workforce for the proposed development is likely to have a much wider geographic reach than the surrounding villages. Indeed, the job roles are likely to be similar to those at EMG1, with a mixture of management, skilled, semi-skilled and unskilled roles within the proposed warehousing facilities. Considering this, the travel patterns of existing employees at EMG1 have been analysed to provide an indication of where future employees are likely to travel from and how they may choose to commute (based on similar sustainable transport connectivity).
- 5.7 Businesses at EMG1 provided a data set of anonymised home postcodes for their workforces in 2023 as part of travel plan monitoring. Figure 5-1 shows this information visually and is supported by a breakdown of postcodes by local authority area in Table 5-3.
- Over 5,800 postcodes have been provided and of those, 93% were located within one of the East Midlands authority areas. The largest proportions of these employees commute from within the Leicester City (31%) and Derby City (23%) administrative boundaries.

Table 5-3: EMG1 employee's home postcodes local authority districts (2023)

County/City	Number of postcodes	Percentage of total postcodes
Derby	1,332	23%
Derbyshire	571	10%
Leicester	1,844	31%
Leicestershire	451	8%
Nottingham	620	11%
Nottinghamshire	624	11%
Outside East Midlands	435	7%
Total	5,877	100%

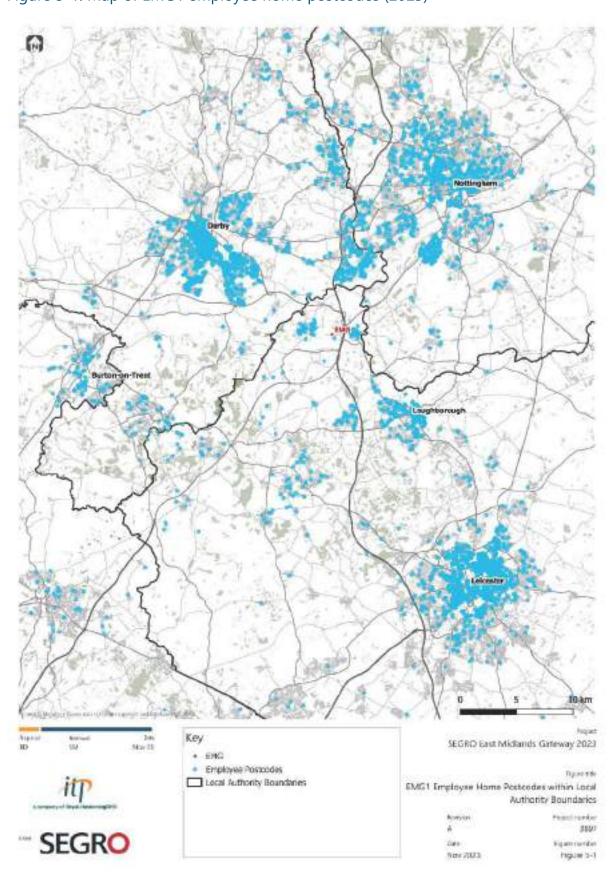


Figure 5-1: Map of EMG1 employee home postcodes (2023)

- Turning now to how these employees commute, Table 5-4 shows the results of the employee travel surveys conducted at EMG1 from 2019 to 2023. Businesses are required to conduct these surveys as part of the Occupier Travel Plan monitoring onsite. The surveys are optional for employees to complete, but they are incentivised with a prize draw to encourage participation.
- This table sets out the EMG1 travel plan targets which need to be achieved by 2028. Alongside this is the sitewide average mode share per year (collected via the employee travel surveys). This shows that for all five years that the data has been collected, the number of employees commuting sustainably by car sharing or using public transport is higher than the targets set. This is especially impressive since the headcount on-site has been increasing year-on-year as the site moves towards full occupation. As the site moves into 2024, which is 'Year 6' in travel plan monitoring terms, it has almost reached the level of full occupation at ~6,000 employees. This demonstrates that with the right initiatives in place, it is possible to influence commuting patterns to achieve a high sustainable travel mode share.

Table 5-4: EMG1 Travel Plan Target and Employee Travel Patterns

Mode	Target (2028)	EMG1 Employee Travel Survey				
		2019	2020	2021	2022	2023
Drive alone	68%	58%	43%	43%	42%	51%
Car share	17%	31%	36%	26%	38%	25%
Public transport	10%	8%	15%	28%	14%	18%
Active Travel	5%	1%	2%	0%	3%	2%
Other	n/a	3%	4%	3%	3%	4%

6. Stakeholder Engagement

- 6.1 EMG2 is located within Leicestershire County Council's administrative boundary, as the local transport authority, but the strategic significance of the site and its location within East Midlands Freeport means that several neighbouring local authorities and local stakeholders are likely to have a vested interest in any potential development and its impact on the transport network. ITP participated in the EMG2 Transport Working Group (chaired by BWB) during 2023 to understand the transport considerations of stakeholders to shape this STS. Stakeholders participating in the EMG2 Transport Working Group include:
 - Highway Development Management teams at Leicester City and Leicestershire County Councils.
 - Highway Development Management teams at Nottingham City and Nottinghamshire County Councils.
 - Highway Development Management teams at Derby City and Derbyshire County Councils.
 - National Highways.
- Additional meetings have been held with the following stakeholders, to discuss specifics around connecting existing transport services to EMG2:
 - Initial meeting with the Highway Development Management and Behaviour Change teams at Leicestershire County Council.
 - Initial meeting and data sharing with the Travel Plan Coordinator at EMG1.
 - Initial meeting with Trentbarton (local bus operator) to discuss the challenges and opportunities with serving the EMG2 site.
- 6.3 These meetings highlighted the need to explore:
 - Lessons learnt from delivering high sustainable mode share at EMG1.
 - The location of any proposed bus interchange to maximise the potential to connect with existing high frequency services.
 - Ease of buses exiting EMG2 onto the A453, to minimise any potential delays to existing passengers.
 - Capacity constraints on bus services at shift changeover.
 - Capacity constraints at East Midlands Airport bus interchange due to a limited number of bus bays.

- 'Last-mile' sustainable transport connections within the site (walk cycle, bus).
- 6.4 Possible solutions to address each of these challenges have been set out within the next chapter.

7. Proposed Sustainable Transport Strategy

This section sets out the potential options for ensuring that sustainable transport alternatives are available to employees to use from first occupation. As this STS is not supporting a planning application, but rather a Local Plan consultation response, the strategy below sets out the potential of what *could be* delivered on-site should the land be allocated for development.

Overview

- Learning from the experience of successfully embedding sustainable commuting at EMG1, those strategies that are having the most impact would be carried forwards to EMG2. This includes working closely with local stakeholders, transport authorities and operators to jointly deliver strategies through the EMG1 Sustainable Transport Working Group and reporting to stakeholders annually to demonstrate progress.
- 7.3 Experience also highlights the need for realistic sustainable transport options to be provided from first occupation (and not when development tiggers are reached) to ensure there are viable and attractive sustainable options available from the outset. It would be the intention to work closely with tenants' HR teams, recruitment consultants and local jobcentres to provide sustainable transport information in job adverts, at recruitment fares and in screening interviews.

Aims

- 7.4 The proposed STS would aim to:
 - Ensure EMG2 is served by sustainable transport from the first stage of development, and
 - Ensure employees have a reasonable alternative to the private car for their journey to work.

Objectives

7.5 It is recommended that the following objectives are set to support this aim:

Active Travel

• To provide the necessary new / upgraded infrastructure and services to facilitate last mile journeys *within* the proposed development by foot, bike or bus.

• To ensure any proposed off-site active travel improvements connect to nearby villages and existing infrastructure.

Public Transport

- To deliver a network of bus services which directly access the proposed development, serving the main local urban areas.
- To ensure the network of local bus services are frequent, reliable and of a high quality, and operate with sufficient capacity and at suitable times of day.
- To ensure any bus service enhancements are developed with a clear intention to become commercially viable within a defined time period.
- To ensure good quality and timely information is provided to employees to enable them to make informed choices about their travel options.
- To ensure the time and cost of journey by bus to / from the development is not prohibitive (when compared to the car-based equivalent).

Smarter Driving

- To extend the existing EMG1 journey matching platform to cover the proposed development to enable existing and prospective employees to car share together.
- To provide EV charging provision for 20% of car parking spaces within the development to encourage low carbon options for those that choose to drive.
- 7.6 Potential mode-specific strategies for achieving these objectives have been set out in the following sections.

Active Travel

- Multiple pedestrian and cyclist access points would be incorporated into EMG2 to ensure future employees and the general public can move through the site quickly, easily and safely. Along the main estate roads, shared pavements would be provided, as they are at EMG1, to ensure pedestrians and cyclists are separated from the vehicle and HGV traffic.
- It is likely that the existing Public Right of Way footpath (L45), Hyam's Lane, which bisects the site on a north-east to south-west alignment would be retained and could provide an active travel spine route through the site. The route connects to the existing L45 footpath heading north towards EMG1 and Kegworth; and to the south-west the village of Diseworth. As part of the development, one option could be to explore

- surfacing Hyam's Lane and providing low-level lighting along part of the route, increasing suitability for all expected users, all-year round.
- 7.9 It is acknowledged that not all employees may want to use Hyam's Lane, especially during winter months or in the evening if improvements are not made. An additional shared-use path could be explored to connect from the proposed bus interchange and the main estate road.
- 7.10 Contributions to off-site active travel routes could also be explored to upgrade an existing unsurfaced PRoW route between EMG2 and EMG1, to provide greater connectivity between the two sites and onwards towards Kegworth.
- 7.11 In addition to active travel routes, provision could also be made to encourage tenants to provide secure, covered cycle parking at each employment unit as well as shower and changing facilities.
- Proposals would also consider a free onsite bike hire scheme to allow employees to cycle from the new EMG2 bus interchange to their workplace within the site. It could operate in a similar way to the bike hire scheme at EMG1 with employees able to hire bikes from a bike rack near the bus interchange and to dock them in the secure cycle stands at each employment unit. This would be



reviewed and discussed with the EMG1 Sustainable Transport Working Group.

Public Transport

Infrastructure

A purpose-built bus interchange is being explored for the north-east of the site, close to the proposed access from the existing roundabout on the A453. The preferred location of the interchange has emerged following discussions with local bus operator (trentbarton). The location of the interchange from the existing roundabout allows for the interception of existing bus services travelling along the A453.



Along with the bus interchange building, there would be dedicated bus bays to allow both commercial bus services and the proposed on-site shuttle service to call at the interchange. This means any employees arriving at the site by bus can seamlessly interchange onto the on-site shuttle bus to reach their workplace. Provision could be made for electric charging points at the interchange should the use of an electric vehicle for the shuttle service be considered.

7.15 The bus interchange building would be equipped with real-time bus information, seating, lighting, heating, and toilets, to create a safe and comfortable waiting area for employees. This is like the provision at EMG1.

7.16 In addition to the main interchange, there would be bus stops along the length of the estate road, with bus stops positioned close to the entrances of the employment units.

Each bus stop would have a flagpole, shelter, and timetable information, and served by the



on-site Gateway Shuttle bus, providing a direct connection from the bus interchange to each employment unit. Real time information will be provided in the foyers of the employment units, as it is at EMG1, rather than at the bus stops themselves.

Gateway Shuttle

7.18 The bus interchange within the proposed development would also act as the hub for the proposed Gateway Shuttle service once the site is occupied. The shuttle would connect employees arriving at the EMG2 bus interchange with the bus stops along the estate road.

7.19 The hours of operation for the shuttle service would align with the occupier's shifts. Initially this is likely to be focused on the morning and evening shift changeover,



however as the site is built out this will be extended to meet demand.

At EMG1 the Gateway Shuttle service now operates from 04:45 until 23:15. During its hours of operation, the shuttle operates on a continuous loop between the bus interchange and the bus stops along the estate road, providing a 'turn up and go' service for employees on-site. As with EMG1, it is likely the shuttle would be funded through the site's management charge to businesses and will be free for employees to use. The aspiration would be for the service to be fully electric to meet SEGRO's sustainability ambitions.

Commercial Services

It is envisaged that the routes of the existing bus services could be modified to include a stop at the proposed bus interchange to provide four high frequency bus services connecting to EMG2 from the first occupation. Early discussions with trentbarton, suggests they would be open to serving the site with the Skylink Express, Skylink Derby-Leicester and Skylink Nottingham. Discussions will also be held with Diamond Bus (operator of Airway 9) and Nottinghamshire County Council (operator of Notts Bus On Demand) prior to any planning application being submitted. As the hours of operation of these existing services consider the employee shift patterns at East Midlands Airport and EMG1, it means they already operate in the early morning and late evening, which is also likely to align with the shift patterns at EMG2.

Network Constraints

7.22 Through initial scoping discussions with trentbarton and LCC a potential challenge was highlighted that some bus services are likely to reach capacity at peak times due to an

increased number of passengers travelling to / from EMG2, alongside passenger growth caused by other strategic developments within the East Midlands Freeport. Their concern focused on skylink Derby-Leicester and skylink Express services reaching passenger capacity at shift changeover. The anticipated timescales for each service reaching capacity varied, but it is anticipated the skylink Derby-Leicester could reach the capacity threshold around the time of first occupation and the skylink Express around 2028/2029, if the other strategic developments within the East Midlands Freeport start occupying.

- FMG1 employee home postcode data verifies that if this site draws from similar labour pools, there could be increased demand from settlements along the skylink Derby-Leicester corridor from Derby, Derbyshire, Leicester and Leicestershire. Feeding this demand data into the bus passenger forecasting, it further highlighted the need for investment in the skylink Derby-Leicester service as the priority. This is evidenced further in Chapter 9.
- Trentbarton and LCC also identified potential bus bay capacity constraints at East Midlands Airport bus interchange. Whist this is outside of the EMG2 boundary, it has been highlighted as a constraint because any increases to the number of vehicles operating on a route (e.g. skylink Derby-Leicester) will create further congestion at an already busy interchange. SEGRO does not have the ability to make infrastructure improvements on private land which is owned by the airport, however they would be willing to be part of discussions to phase any investment in services to tie in with improvements EMA could be considering to the layout of the interchange.

Proposed Service Enhancements

7.25 To address the capacity constraints for the Skylink Derby-Leicester service, SEGRO would work alongside the bus operator and LCC to agree a funding contribution for the skylink Derby-Leicester route. These vehicles would create the forecast passenger capacity needed in the peak hour. Extra vehicles would also provide the added benefit of improved service frequency, increasing from every 20 minutes to every 15 minutes.

Phasing

7.26 Table 7-2 sets out a proposed approach to phasing improved public transport connectivity to the site. If a planning application is submitted in the future these would be discussed in detail with LCC and local bus operators.

Table 7-1: Proposed Bus Service Improvements

Phase	Trigger
Phase 1: Ensure construction of EMG2 bus interchange, bus stops along the main estate road are complete.	Prior to the first unit reaching practical completion.
Phase 2: Ensure EMG2 is served by the skylink Derby- Leicester, skylink Express, skylink Nottingham, Airway 9 and NottsBus services.	When the first unit reaches practical completion.
Phase 3: Ensure the Gateway Shuttle service connecting the EMG2 bus interchange and the bus stops along the main estate road is introduced.	When the first unit begins first commercial operations.
Phase 4: Ensure funding is provided to support increased capacity on the skylink Derby-Leicester service from every 20mins to every 15mins.	When commercial operations are underway at 1mil sqft of development

Real Time Information

7.27 All skylink bus services are fully enabled for real time information and hence the bus interchange could provide display screens showing real time arrivals and departures.

Each of the individual employers on site would be provided with the digital real time information link to display on a screen in the main foyer, showing the departure times of the next services to leave the interchange, enabling them to plan their departure via the site shuttle bus.



Ticketing

- 7.28 'Taster tickets' for bus services, allowing employees to try the bus for free to encourage them to commute regularly by bus would be considered. A similar taster ticket scheme is in place at EMG1 where new or existing employees can apply to get a free weekly taster ticket for any of the bus services to EMG1. The criterion for accessing a taster ticket at EMG1 is:
 - Have a contract of employment with a business at EMG.

- Live on a bus route connecting to EMG.
- Not already using the bus for commuting to EMG.
- Not having already applied for / received a free taster bus ticket.
- 7.29 Whilst longer-term taster ticket options would be explored (e.g. 6 months), based on experience at EMG1, a one-week taster bus ticket is usually sufficient for the employee to try the bus and to decide if they would like to continue commuting that way.

Smarter Driving

7.30 Although all employees would be encouraged to use active and public modes of transport, it is acknowledged that these will not be appropriate for everyone as some employees may live too far from the site to walk/cycle, or not live on a bus route. For this reason, car sharing and the promotion of low carbon vehicles would also be considered.

Car Share

- At EMG1 there is already a car share platform in place to facilitate journey matching for the commute, funded by SEGRO. This platform is accompanied by promotional campaigns to 'launch' the service to each new business and their employees when they occupy the site. The intention would be to expand the reach of the existing platform to encompass EMG2 too.
- 7.32 The benefits of this are twofold, it means there is only one car share platform to promote across both parks making it easier to understand and communicate from an employee perspective but also the more employees that sign up to the same platform, the more opportunity there is for employees at both parks to find a car share match.
- As with EMG1, it would be proposed that any new business moving to EMG2 would be provided with support from the EMG2 Travel Plan Coordinator to set up appropriate car sharing policies, introduce





car share bays in preferential locations near to employee entrances, receive a car share

launch campaign, have access to 'trip authentication' to provide an added layer of safety for those choosing to share the commute together, and to access the EMG1 car share leader board, for the chance to win prizes for sharing together.

Electric Vehicles

7.34 To future-proof the proposed development for the increase in electric vehicles (EVs) over the next 10 years and accelerate the transition from internal combustion engine vehicles to low emission / electric vehicles, SEGRO would provide capability for EV charging.

Information, Engagement & Promotion

- For the aims and objectives of this STS to be met, it will be crucial that the tenants and their employees are fully aware of the options available to them. Prior to occupation, SEGRO would develop appropriate resources for promoting sustainable travel. Digital travel information packs would be given to all businesses, recruitment consultants and jobcentres to ensure future employees are aware of their travel options. Hard copies would be available for those that are offered a contract. The travel information provided in the packs is likely to include:
 - Maps showing walking and cycling routes from neighbouring villages.
 - Maps showing the direct public transport services from Nottingham, Derby and Leicester, links to timetable information and information about the taster bus ticket.
 - Information regarding the EMG2 journey matching platform to help find a car share partner.
- The existing EMG1 transport website, which collates travel information relevant to EMG1, would be updated to include travel information for the proposed development too. This contains links to relevant travel information pages, provides downloadable copies of transport maps and timetables and provides a live news section detailing travel campaigns happening at the development.

8. Delivery

8.1 This section sets out how the STS would be managed and funded.

Management

- The STS sets out the overarching approach for encouraging and facilitating sustainable commuting at the proposed development. Should the site be selected for development, a Framework Travel Plan (FTP) would be developed to set out how the STS would be delivered, by whom and how it will be funded over the lifetime of the travel plan period.
- 8.3 The management structure for delivering the STS and FTP is likely to entail:
 - A Sustainable Transport Working Group (STWG) of strategic stakeholders steering the direction of sustainable travel interventions on-site;
 - A Site Wide Travel Plan Coordinator (SWTPC) who works with the businesses and stakeholders to deliver the measures set out in the FTP;
 - Occupier Travel Plan Coordinators at each unit to communicate measures to their workforces.
- This is the same management structure used to implement the successful travel plan at EMG1, hence we would propose the same approach for this site.
- 8.5 As there is already an established STWG at EMG1, and many of the stakeholders will be the same for both developments, the intention would be to extend the remit of the existing group to also cover EMG2. The only new stakeholders required to join the group, who are not already part of it, would be the end-occupiers/tenants. The group meet every 6-months to discuss progress towards targets and new initiatives to be delivered.



The group is currently chaired by the EMG1 SWTPC (ITP) and for continuity across both sites it is anticipated that ITP would fulfil this role at EMG2 too, as there are already established relationships with all local stakeholders and partners. The STWPC would be in post for the duration of the EMG FTP delivery period.

8.7 The SWTPC would also be responsible for supporting each of the end-occupiers at EMG2 to prepare an Occupier Travel Plan for approval by the local authority and supporting them to promote the site wide travel plan measures to their workforces.

Funding

- At EMG1 there are two ring-fenced funds that have been established by SEGRO to enable the delivery of the EMG1 Travel Plan and Public Transport Strategy. Approval to draw on the funds to deliver both strategies is given by the voting members of the EMG1 Sustainable Transport Working Group, the constitution of which is set out in the Development Consent Order (b). The voting members of the group are SEGRO, Leicestershire County Council, Leicester City Council, Derbyshire County Council, Derby City Council, Nottinghamshire County Council and Nottingham City Council. The approach to flexibly administering funds to deliver sustainable initiatives, with input from all voting stakeholders has been a successful route for joint working with local authority partners. One approach to funding the sustainable transport measures at EMG2 could be to set up a similar mechanism, for SEGRO to ring-fence funding for improving sustainable transport connections during the travel plan delivery period (approx. 10 years).
- Unlike the measures to be delivered during the travel plan period, a different funding mechanism is likely to be required for the Gateway Shuttle service, to future-proof the service so there will be a continuous funding stream to operate the service, even after the Travel Plan delivery period has ended. One option would be to fund the Gateway Shuttle service through the site's management charge, which is an annual levy paid by all occupiers for the provision of site-wide services. This is the same funding mechanism used at EMG1.
- 8.10 Both funding options will be considered in more detail at the point a planning application is submitted.

9. Expected Impacts

This section details the expected impacts of providing sustainable transport connections in terms of the geographic reach by active travel and public transport and the number of people we anticipate using sustainable modes.

Improving Site Accessibility

Active Travel

- Figure 9-1 visualises the 60-minute cycling catchment of the site, providing active travel infrastructure is delivered to connect EMG2 with the existing PRoW and National Cycle Network routes. This map considers cycling on all roads, except motorways, as well as any designated off-road cycle routes. It shows that the villages in the immediate vicinity of the site Diseworth and Kegworth are within a 15mins cycle. Castle Donington, Shepshed and East Midlands Parkway Railway Station are within a 30mins cycle. The south-eastern fringe of the Nottingham urban area (e.g. Clifton, Long Eaton, Sandiacre, Sawley) are within a 60min cycle.
- Using the EMG1 workforce data (2022) as a proxy for where future employees could be drawn from, it shows that 25% of the workforce could be within a 60min cycle of the site. Whilst this is significantly higher than the active travel mode share currently recorded at EMG1 (2%), it must be appreciated that longer-distance cycle connections (e.g. 30min+) may not be appealing to employees working 10-12hr shifts in a warehouse, who also start very early in the morning or late in the evening. Considering this, any future active travel mode share targets should consider the quality of the surrounding active travel network, the working hours of employees and the distance employees are commuting.

Public Transport

- The site is within close proximity to existing high frequency bus services and introducing an on-site bus interchange would facilitate those services stopping at the site, making it possible for employees to commute by bus; as well as interchanging onto tram or rail services.
- Figure 9-2 visualises the 60min public transport catchment for the site. It shows that all the major settlements in the East Midlands, including Loughborough, Leicester, Derby, and Nottingham, would be accessible within an hour, highlighting a wide geographic

catchment for public transport commuting. The possible investment in the skylink Derby-Leicester service to improve service frequency will not have an impact on the geographic extent of the public transport catchment, but will improve the attractiveness of the service for employees, and increase capacity of the service for the operator.

9.6 Using the workforce data from EMG1 (2022), 32% of the workforce live within a 60min public transport commute of the proposed development. This suggests that if EMG2 employees are drawn from similar settlements, there is high potential for them to have access to commuting by public transport and could therefore achieve a similar mode share to EMG1.

Figure 9-1: EMG2 Cycling Accessibility

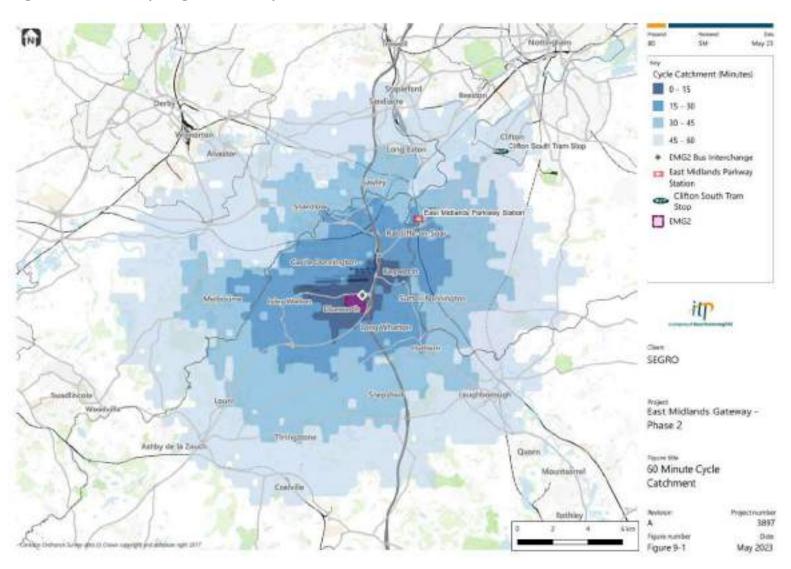
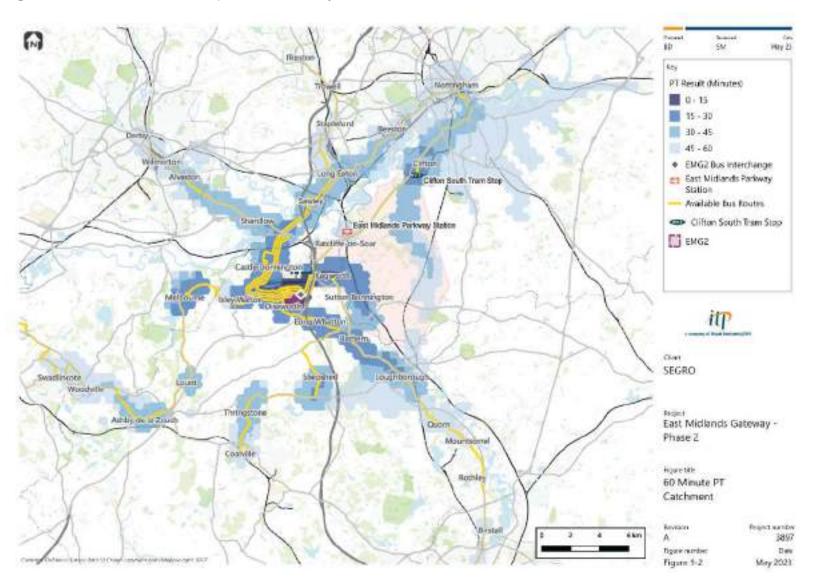


Figure 9-2: EMG2 Public Transport Accessibility



10. Conclusion

- 10.1 A clear strategy for connecting the site by sustainable means has been set out in this document. It considers the likely sustainable travel infrastructure and services required during the build / pre-occupation phase, as well as the engagement that would take place when the first tenants begin operations. The strategy is built on a sound evidence base of the effective measures that have been delivered at EMG1 and have seen the site positively exceed the travel plan targets with 45% of employees commuting using sustainable modes (bus, car share and active travel). The similarities between EMG1 and the proposed site in terms of location, existing transport connections, planned operations and type of employment, mean applying the same approach to embedding and promoting sustainable commuting, should lead to high sustainable commuting outcomes.
- 10.2 The key highlights from the proposed strategy are summarised below:
 - Expansion of the EMG1 Sustainable Transport Working Group to encompass the proposed development and invitation to all businesses to join existing stakeholder discussions.
 - A dedicated Site Wide Travel Plan Coordinator in post for the duration of the 10year travel plan delivery period.
 - A new bus interchange at the entrance to EMG2 and bus stops with shelters along the main estate road.
 - Four high frequency bus services and an on-demand service calling at EMG2 bus interchange from first occupation.
 - A Gateway Shuttle bus connecting the bus interchange with bus stops along the main estate road to make it quick and easy to reach the employment units.
 - Consideration for the Gateway Shuttle to be electric to meet sustainability ambitions for the site.
 - Financial investment to increase frequency of the skylink Derby bus service from every 20mins to every 15mins to increase passenger capacity.
 - Provision of one-week taster bus tickets to enable employees to try the bus.
 - Expansion of the existing EMG1 car share platform to encompass the proposed development to help employees from both sites to find a car share partner.
 - EV chargers provided for employees to use.

•	Provision of internal active travel infrastructure to support last mile connections
	within the site.

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Appendix 11 – Noise Monitoring Locations and Key Noise Sensitive Receptor Locations Plan

Figure 1: Noise Monitoring Locations



Figure 2: Key Noise Sensitive Receptor Locations







ENVIRONMENT

SEGRO

East Midlands Gateway 2 Land South of East Midlands Airport Summary Note: Flood Risk and Drainage

January 2024

Document Number:	EMG2-BWB-ZZ-XX-RP-YE-0003_SN1
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EXECUTIVE SUMMARY

This Summary Note has been prepared to support representations to the Draft Local Plan Consultation dated February 2024 with a focus on - Proposed Housing and Employment Allocations consultation document. An overview of the potential sources of flood risk and proposed mitigation measures at the East Midlands Gateway 2 development site are provided.

The Environment Agency (EA) Flood Map for Planning shows the site to be located entirely within Flood Zone 1, this is land at a low probability of flooding from rivers and the sea.

The nearby village of Diseworth has experienced numerous recent flood events. These events prompted Leicestershire County Council (LCC) to commission the production of the Long Whatton and Diseworth Flood Risk Mitigation and Resilience Study, with an accompanying Integrated Catchment Model.

The LCC detailed hydraulic model confirms that the fluvial floodplain largely remains within bank past the site, it also identifies that public sewers and the neighbouring East Midlands International Airport drainage infrastructure do not pose a flood risk at the site. There is the potential for surface water overland flow pathways to form over the site. However, these are generally relatively shallow and are a product of runoff from within the site itself, rather than being driven by runoff from upstream third-party land.

The minor flood risk posed by the shallow surface water runoff will be addressed through the implementation of a surface water drainage strategy. The drainage strategy will be designed to intercept and store rainwater falling on the development, before discharging it to the local watercourse at the equivalent annual average runoff rate. In a typical rainfall event, this will mimic the existing runoff rate from the site, but in larger storm events this will represent a reduction in runoff, thereby providing a reduction in downstream flood risk.

Additionally, the drainage strategy seeks to direct all surface water from the development to a minor watercourse located in the southern-eastern corner of the site, this means that all surface water runoff from the development will be discharged downstream of the village of Diseworth.

The surface water drainage principals have been built into the integrated Long Whatton & Diseworth hydraulic model, which predicts a reduction in equivalent downstream flood depths. The benefits are most pronounced under large storm events on the Hall Brook through Diseworth, because runoff is now directed away Diseworth; and on the Diseworth Brook upstream of the A42 embankment, because surface water runoff from the development area is now attenuated at the QBAR rate.



1. INTRODUCTION

- 1.1 This Summary Note has been prepared to support representations to the Draft Local Plan Consultation dated February 2024 with a focus on Proposed Housing and Employment Allocations consultation document.
- 1.2 The site is located to the south of East Midlands International Airport (EMIA) and Ashby Road (A453). Donnington Park Services are located immediately adjacent to the northeast corner of the site. The A42 and the M1 are located off the eastern boundary. The south of the site is bound by Long Holden public byway with agricultural fields beyond. The west of the site is also bound by agricultural fields. The village of Diseworth is located approximately 150m to the south-west of the site. A public byway, known as Hyam's Lane, bisects the site from southwest to northeast.
- 1.3 The site location and generalised topography, derived from Environment Agency (EA) Light Detection and Ranging (LiDAR) data, are illustrated within **Figure 1.1**.

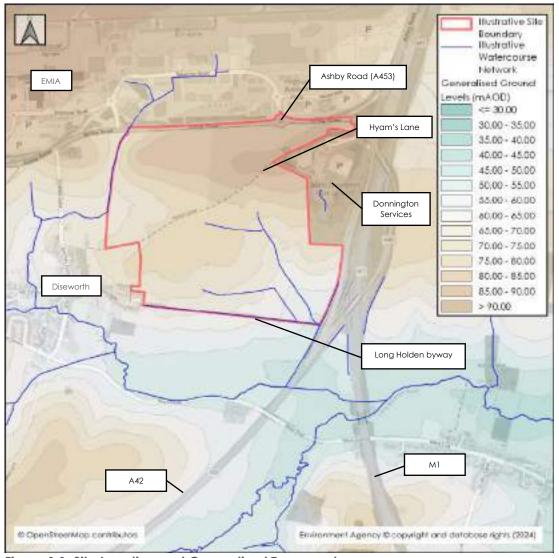


Figure 1.1: Site Location and Generalised Topography



2. SOURCES OF FLOOD RISK

Fluvial, Surface Water, and Sewer Flood Risk

2.1 The EA Flood Map for Planning shows the site to be located entirely within Flood Zone 1; this is land at a low probability of flooding from rivers and the sea. As shown in **Figure 2.1**, the nearest Flood Zone extents are located approximately 260m south of the site and are associated with the Diseworth Brook.

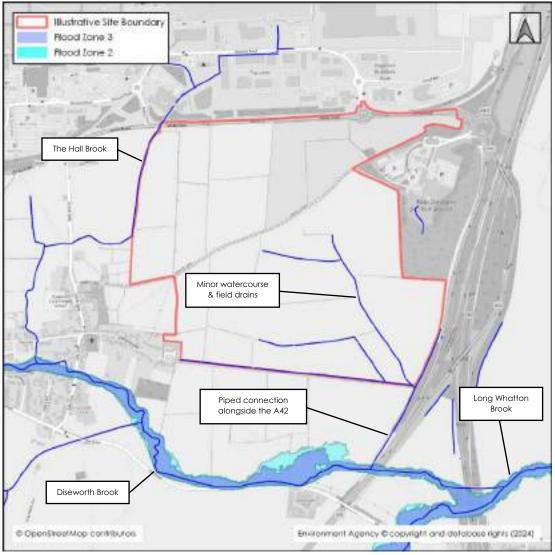


Figure 2.1: Flood Map for Planning

2.2 The Hall Brook flows along a portion of the western boundary before flowing in a south-westerly direction to its confluence with the Diseworth Brook, approximately 500m southwest of the site. A minor watercourse and series of field ditches are present in the southeast corner of the site. These exit the site via a piped outfall (500mm diameter) to larger pipe system (525mm to a 700mm diameter) which runs alongside the A42 and outfalls to the Diseworth Brook beneath the A42 road bridge.



- 2.3 A 375mm diameter public surface water sewer is also present in the east of the study site. This runs in parallel to the piped watercourse between the Donnington Park Services and the Diseworth Brook, outfalling just upstream of the A42 culvert. A public foul water rising main is shown to flow along Hyam's Lane in a north-easterly direction. The rising main originates from a pumping station to the west off Grimes Lane and enters a public foul water gravity sewer to the north of the site beyond Ashby Road.
- 2.4 The site falls across two topographical catchments roughly separated by Hyam's Lane. The northern catchment falls in a westerly direction and towards the Hall Brook, the southern catchment falls in a southeasterly direction and towards the Diseworth Brook.
- 2.5 It is reported that the village of Diseworth has experienced historical flooding, most recently in 2000, 2012, 2017, 2018, 2019 and 2020. There are also reports of high flows occurring in January 2024. The past events prompted Leicestershire County Council (LCC) to commission the production of the Diseworth and Long Whatton Catchment Study¹ and subsequently the Long Whatton and Diseworth Flood Risk Mitigation and Resilience Study². To inform the latter, a bespoke 1D-2D InfoWorks Integrated Catchment Model was produced to identify flood depths, extents and mechanisms within the catchment. The model combines fluvial, surface water, private drainage (including the EMIA), highway drainage, and public sewers sources, to provide a holistic appraisal of potential flood risk in the catchment.
- 2.6 LCC provided a copy of the hydraulic model to allow assessment of flood risk at the site. The model was updated to include additional site-specific detail from the topographical survey as well as a CCTV survey of the public sewer and piped watercourse in the east of the site.
- 2.7 Modelled baseline flood outlines are presented within **Figure 2.2**.
- 2.8 The hydraulic modelling has shown that the Hall Brook floodplain is contained to its channel next to the site during all modelled events, confirming that the site is at a low fluvial flood risk. Additionally, the local public sewer network and the EMIA drainage is not predicted to affect the site.
- 2.9 The modelling has identified that, in the 1 in 100-year storm event and above, there is the potential for surface water overland flow pathways to form over the site. However, these are relatively shallow and generally of a low flood hazard. For example, at the 1 in 100-year +40% design event the overland flows are generally between 0.05 to 0.15m deep. Greater depths and hazards only occur within low-lying areas, such as in the drainage channels and the minor watercourse. Importantly, the overland flow pathways are shown to predominately originate from within the site itself there are no significant overland flow pathways passing through the site from upstream third-party land. Therefore, this source of flood risk can be resolved through developing the site and implementing appropriate drainage measures.

¹ Diseworth and Long Whatton Catchment Study (URS, January 2014)

² Long Whatton & Diseworth Flood Risk Mitigation & Resilience Study (Arcadis Consulting (UK) Limited, August 2020



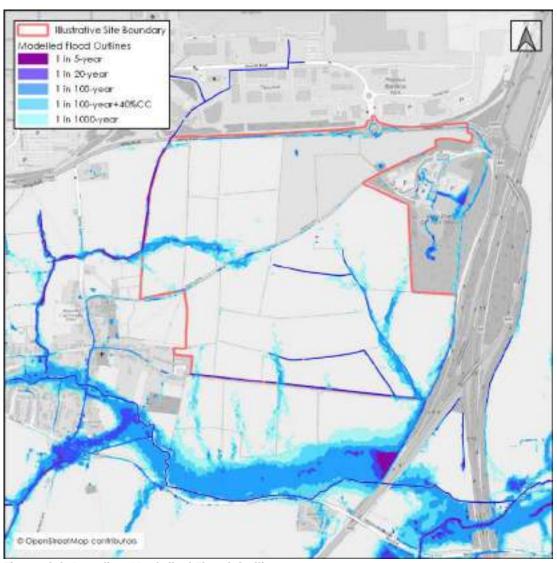


Figure 2.2: Baseline Modelled Flood Outlines

Groundwater Flood Risk

- 2.10 The LCC Strategic Flood Risk Assessment (SFRA)³ does not include groundwater flood risk mapping. However, while the site does not fall within Nottinghamshire, the Greater Nottingham SFRA⁴ includes groundwater susceptibility mapping that provides coverage at the site. This data suggests that the site falls within an area where 25% to 50% of the land is potentially susceptible to groundwater flooding. The site is relatively elevated in comparison to the surrounding area, and it is raised above the nearby watercourses and floodplains. Therefore, the land identified to be potentially susceptible to groundwater flooding is most likely to be associated with the low-lying areas around the site, such as the Diseworth Brook floodplain.
- 2.11 Intrusive ground investigations have been undertaken by Fairhurst in 2023 which have identified that the underlying bedrock geology is comprised predominantly of mudstone with siltstone and sandstone horizons. Based on the underlying geology

³ Strategic Flood Risk Assessment Update (Atkins, June 2015) & Strategic Flood Risk Assessment Climate Change Addendum (Atkins, November 2016)

⁴ Greater Nottingham Strategic Flood Risk Assessment Addendum (AECOM, September 2017)



across the site it is anticipated that there will be limited infiltration potential for surface water.

- 2.12 It was reported that the ground investigations found the minor watercourse in the site to be dry throughout the works, and that the monitoring identified groundwater levels were generally lower than the bed of the watercourse. Therefore, the minor watercourse is likely to be seasonally dry, with its main purpose to drain surface water runoff from the adjacent fields. Groundwater levels across the site were found to be between 4.60-19m below ground level.
- 2.13 Based on the low permeability of the geology, the local topography, and the measured depth of groundwater, the risk of groundwater emergence in the site is considered to be low. Any potential emergence would most likely occur in the low-lying river valleys and floodplains of the Hall Brook and Diseworth Brook.

Flood Risk from Reservoirs & Large Waterbodies

- 2.14 Flooding can occur from large waterbodies or reservoirs if they are impounded above the surrounding ground levels or are used to retain water in times of flood. Although unlikely, reservoirs and large waterbodies could overtop or breach leading to rapid inundation of the downstream floodplain.
- 2.15 To help identify the area potentially at risk, reservoir failure flood risk mapping has been prepared by the EA, this shows the largest area that might be flooded if a reservoir were to fail and release the water it holds. The map displays a worst-case scenario and is only intended as a guide. An extract of the mapping is shown in Figure 2.3.
- 2.16 There are two flooding scenarios shown on the reservoir flood maps: a 'dry-day' and a 'wet-day'. The 'dry-day' scenario predicts the flooding that would occur if a dam or reservoir failed when rivers are at normal levels. The 'wet-day' scenario predicts how much worse the flooding might be if a river is already experiencing an extreme flood.
- 2.17 There is shown to be a slight encroachment of 'dry day' and 'wet day' reservoir failure extents in the very west of the site. The flood extents are associated with the Central East Area Balancing Pond of the EMIA. The reservoir is operated and maintained by EMIA who have ultimate responsibility for the safety of their reservoir assets. Their responsibilities include regular safety inspections, any necessary design or repairs undertaken where required and an annual statement produced on the operation and maintenance regime. Based on the safety legislation in place and the maintenance and repair responsibilities of EMIA, the actual probability of a significant failure is considered to be low.
- 2.18 No built development is proposed within the reservoir failure floodplain. Therefore, it does not pose a flood risk to the development.



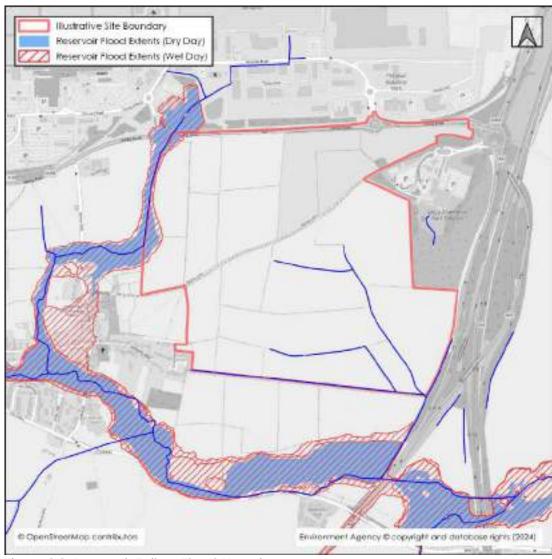


Figure 2.3: Reservoir Failure Flood Mapping

Summary

2.19 The risk of flooding from all potential sources is considered to be low and should not pose a barrier to development, subject to appropriate management of surface water runoff.



3. FLOOD RISK MITIGATION

Surface Water Drainage Strategy - Quantity

- 3.1 The proposed development aims to address the minor flood risk posed by shallow surface water flows routes through the implementation of a surface water drainage strategy. The drainage strategy will be designed to intercept and store rainwater falling on the development before releasing it to the downstream watercourse.
- 3.2 The drainage strategy will include a restricted surface water discharge rate, limiting runoff to the annual average runoff rate (QBAR). In a typical rainfall event, this will mimic the existing peak runoff rate from the site. However, in larger storm events, up to and including the design event, this will represent a reduction in peak flows leaving the site, thereby providing a reduction in flood risk downstream.
- 3.3 The excess surface water runoff will be stored within the development. The drainage infrastructure will be designed to accommodate storm events up to and including the 1 in 100-year storm with an uplift to reflect future climate change.
- 3.4 As previously discussed, a proportion of the site north of Hyam's Lane currently falls towards the Hall Brook. This forms part of the catchment contributing runoff to Diseworth estimated to represent approximately 3% of the total Diseworth Brook catchment. The surface water drainage strategy aims to provide some downstream benefit through the redirection of all surface water runoff from the development to the minor watercourse in the south-eastern corner of the site, thereby bypassing the village entirely. This will reduce the volume and rate of surface water runoff directed towards the existing downstream flood risk issues in Diseworth.
- 3.5 The surface water drainage principals have been built into the integrated Long Whatton & Diseworth hydraulic model, to allow them to be tested and ascertain the potential impact of the development on the downstream Hall Brook and Diseworth Brook catchment. The post-development modelled floodplain extents are provided in **Figure 3.1**.



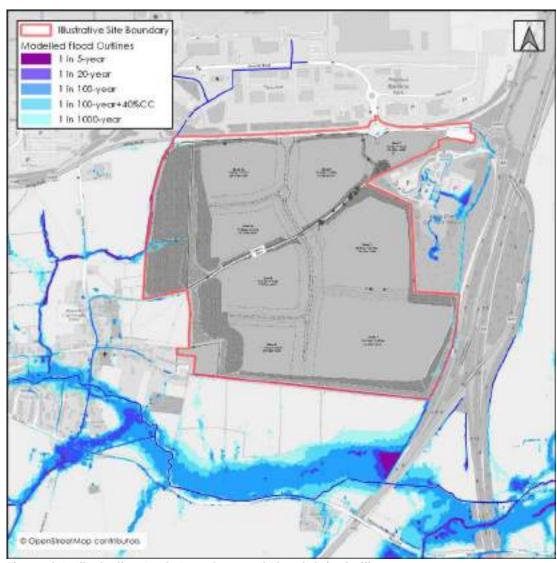


Figure 3.1: Illustrative Post- Development Floodplain Outlines

- 3.6 Peak flood depths have been compared against the equivalent baseline scenario to identify changes to flood risk outside of the development area. This analysis has been mapped for the 1 in 100-year +40% design event as an example, which is included as **Figure 3.2** and as **Appendix 1**.
- 3.7 The development is shown to offer a marginal reduction in downstream flood risk. The most benefit is predicted on the Hall Brook through Diseworth, due to the redirection of runoff from the development area away from the Hall Brook. The benefit on the Diseworth Brook upstream of the A42 embankment, is a result of surface water runoff from the development area now being attenuated at the QBAR rate.
- 3.8 The level of predicted betterment reduces at smaller flood events as the return period gets closer to the attenuated discharge rate. However, while the level of betterment is not as significant, due to the proposed measures, the development will not result in any detrimental impacts on flood risk.



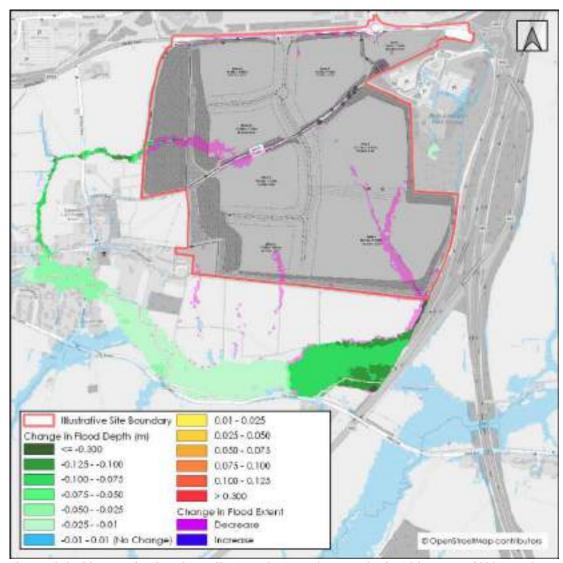


Figure 3.2: Change in Flood Depths Due to Development 1 in 100-year +40% Event

Surface Water Drainage Strategy – Quality

- 3.9 The proposed scheme includes a series of cascading swales and basins that run along the western and southern edges of the development. These will provide treatment to the surface water runoff from the development. Their design will include numerous online weirs to keep velocities low and to help settle out pollutants.
- 3.10 Additionally, a 'Downstream Defender' (a hydrodynamic vortex separator), or similar, will be used at the end of the system to capture and retain any sediment, oils, and floatable debris from surface water prior to it being discharged from the site.
- 3.11 Also, where necessary, additional levels of treatment will be provided on the development plots, which could include preliminary treatment measures and source control, such as gullies, permeable paving, and oil separators. All these measures will ensure that surface water runoff from the development receives appropriate levels of treatment before outfalling from the site.



Watercourse Realignment

3.12 The proposals include for a realignment of the minor watercourse from its current location in the south-eastern corner of the site to the eastern boundary. The realignment of the watercourse will aid in the interception of any off-site exceedance flows from the upstream Donnington Park Services that may be present on the eastern boundary.

Foul Water Drainage Strategy

3.13 Foul water will be drained from the development separately to surface water. It is expected that foul drainage from the development will outfall to the public sewer in Hyam's Lane. There will be early and ongoing consultation with Severn Trent Water to confirm the most appropriate point of discharge for foul drainage and to allow time for any necessary infrastructure improvements to be implemented.



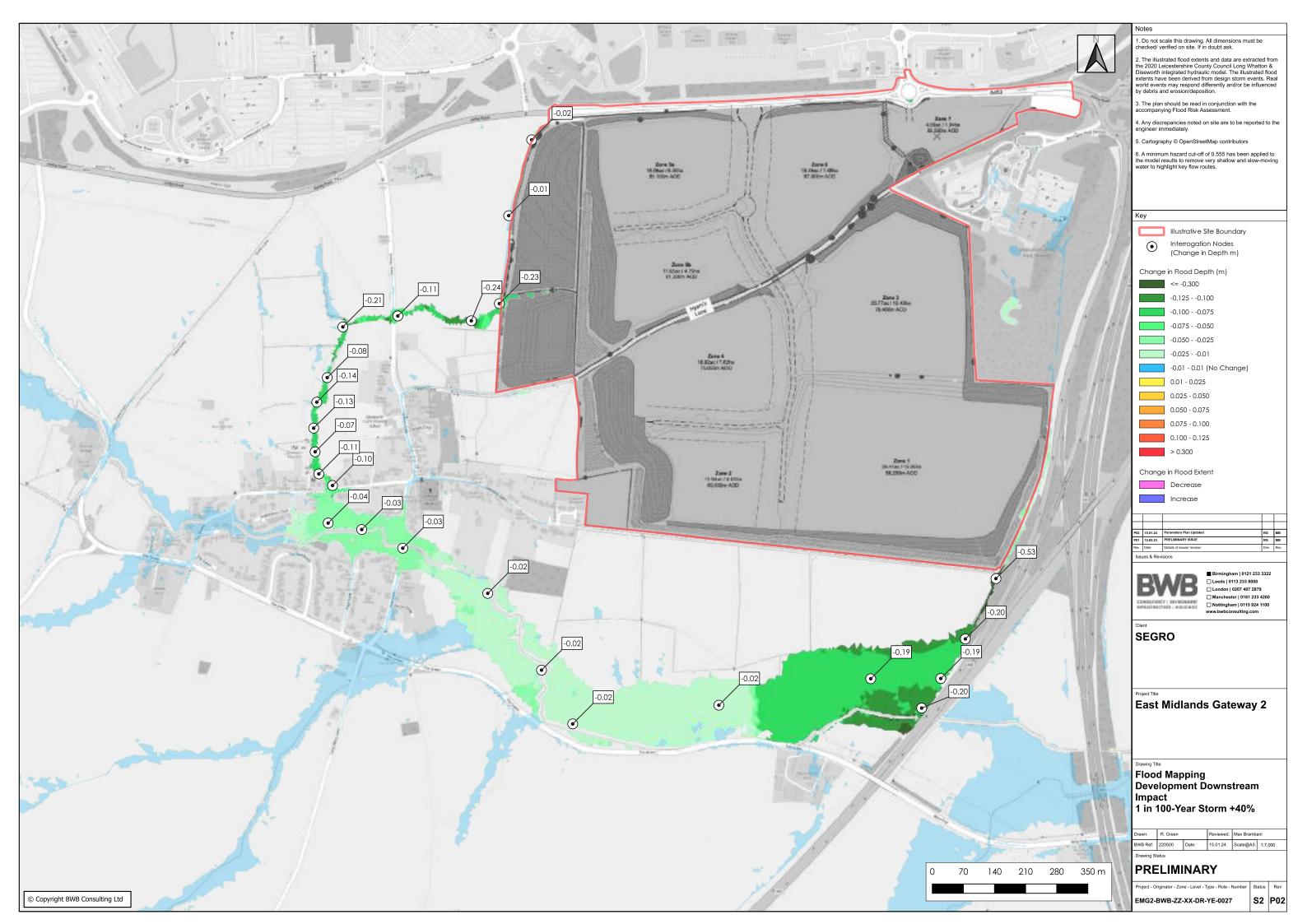
4. SUMMARY & CONCLUSIONS

- 4.1 The site is shown to be located entirely within Flood Zone 1. It is at a low flood risk from groundwater sources and from the failure of reservoirs and large waterbodies. Hydraulic modelling has shown that the Hall Brook floodplain is contained to its channel next to the site, confirming that the site is at a low fluvial flood risk. Additionally, the local sewer network and the EMIA drainage is not predicted to affect the site.
- 4.2 Hydraulic modelling has identified that there is the potential for surface water overland flow pathways to form over the site during large storms. However, even at the 1 in 100-year +40% design event, these are relatively shallow and generally of a low flood hazard. The overland flow pathways are shown to predominately originate from within the site itself.
- 4.3 The proposed development will address the minor flood risk posed by surface water runoff through the implementation of a surface water drainage strategy. The drainage strategy will be designed to intercept and store rainwater falling on the development, before discharging it to the local watercourse at the equivalent QBAR rate.
- 4.4 Additionally, all surface water runoff from the development will be directed to the minor watercourse in the southern-eastern corner of the site, thus reducing the volume and rate of surface water runoff directed towards the existing downstream flood risk issues on the Hall Brook. This arrangement will ensure that there is no detrimental impact on flood risk resulting from the development, and it will provide a reduction in downstream flood risk, especially in large storm events.
- 4.5 In compliance with the requirements of NPPF, and subject to the mitigation measures proposed, the development could proceed without being subject to significant flood risk. Moreover, the development would offer a degree of betterment to flood risk in the wider catchment area due to the proposed management of surface water runoff discharging from the site.

East Midlands Gateway 2, Land South of East Midlands Airport Summary Note: Flood Risk and Drainage January 2024 EMG2-BWB-ZZ-XX-RP-YE-0003_SN1



Appendix 1 – Post Development Floodplain Analysis

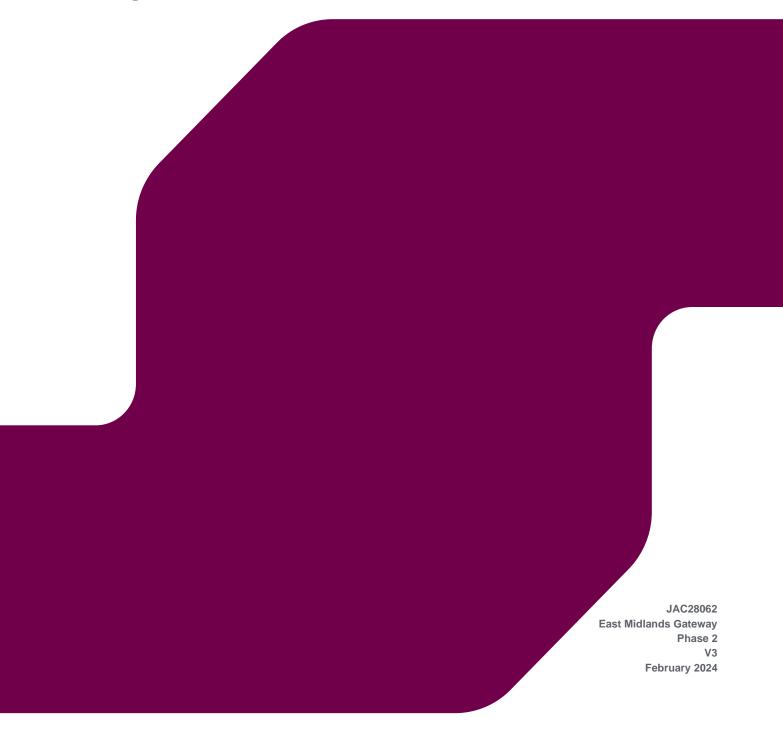


Appendix 13 – Heritage Position Statement



EAST MIDLANDS GATEWAY PHASE 2, LAND SOUTH OF EAST MIDLANDS AIRPORT, LEICESTERSHIRE

Heritage Position Statement



Document status					
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Approval for issue	
Jonathan Smith	20 February 2024

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EXECUTIVE SUMMARY

This Heritage Position Statement has been prepared by RPS, on behalf of SEGRO in order to assist the promotion of the proposed East Midlands Gateway, Phase 2, in response to the Draft Local Plan Consultation dated February 2024. This statement summarises the results of heritage assessments undertaken to date, and the initial assessment of proposed impacts to such assets.

In summary, the proposed development will generate a low level of less than substantial harm to the significance of Diseworth Conservation Area, while the proposals are also likely to give rise a medium level of less than substantial harm in relation to the Grade II* Listed Church of St Michael and All Angels. This harm can be mitigated, to a degree, through the inclusion of bunds and deep buffers within the development along the Site's western and south-western boundaries that will reduce the visual levels of impact in those views of the Conservation Area and Grade II* Listed church. Additionally, the proposed planting of bunds and buffers will further reduce levels of harm over time as the planting matures. The assessments have confirmed that the development proposals will not impact any other designated heritage assets within the proximity of the Site.

In relation to below-ground archaeology, an extensive programme of archaeological evaluation has taken place at the Site, comprising geophysical survey, fieldwalking, geoarchaeological investigation, and trial trenching. As a result of this programme of investigation, it has been established that localised remains of interest dating to the Iron Age or Roman period are present in two discrete areas of the Site. The significance of such remains is considered to be of a level where, if development were to take place, the ongoing archaeological interest of the Site could be secured by means of an appropriately worded condition attached to planning consent requiring a targeted programme of archaeological mitigation.

Based on the existing heritage assessments undertaken, both in terms of Built Heritage and Archaeology, it has been identified that any heritage impacts associated with the proposed development will be focused and that such impacts can be subject to a programme of mitigation in order to reduce the levels of harm identified. As such, following the implementation of the required mitigation programme, no significant residual impacts are anticipated, and therefore it is considered that there are no overriding heritage constraints which would prevent the allocation of the Site.

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Figures

Figure 1 Site Location

Figure 2 Designated Heritage Assets

1 INTRODUCTION

- 1.1 This Heritage Position Statement has been prepared by RPS, on behalf of SEGRO in order to assist the promotion of the proposed East Midlands Gateway, Phase 2 (hereafter referred to as 'the Site') [Fig.1], in response to the Draft Local Plan Consultation dated February 2024. The Site is centred at SK 4613 2497 and measures approximately 100ha in size.
- 1.2 As part of preparing a proposed planning application for the Site, SEGRO have commissioned a series of detailed Built Heritage and Archaeological Assessments for the Site, in order to identify any potential heritage constraints associated with proposals and the requirement for mitigation in order to address such constraints in line with the NPPF and local planning policy. This document seeks to summarise such heritage assessment work undertaken so far.
- 1.3 The Site is located in an area of south facing, rising ground, with the southern boundary associated with the 60m-65m contour, and the northern boundary associated with the 85m-90m contour. The highest point within the Site lies at 93m aOD and is associated with a triangulation point located adjacent to Hyam's Lane in the north-eastern corner of the Site. The course of the Long Whatton Brook is located c.250m to the southwest of the Site, while a minor tributary of the Brook forms part of the Site's western boundary. To the north of the Site, set on the ridge, is the East Midlands Airport. Adjacent to the Site's north-eastern corner is Donnington Park Services (off junction 23A of the M1) and, to the west and southwest, the village of Diseworth. Hyam's Lane runs diagonally through the Site north-east to south-west towards the village of Diseworth.
- 1.4 The Site does not contain any designated heritage assets. In terms of the wider landscape, the Scheduled Monuments of The Moated Site with Fish Ponds and Flood Banks at Long Whatton both lie approximately 1.2km to the southeast of the study site.
- 1.5 The historic core of Diseworth, located c100m to the southwest of the Site, is designated as a Conservation Area and includes 22 listed buildings, of which the Church of St. Michael and All Angels is Grade II* Listed, while the remaining designated structures are Grade II Listed. The Grade I Church of St Mary and St Hardulph in Breedon-on-the-Hill, located 5km to the west of the Site, has also been taken into consideration due to its prominent position within the wider landscape.
- 1.6 In terms of other designated heritage assets, there are no World Heritage Sites, Registered Parks and Gardens, Historic Battlefields, or Historic Wreck Sites within a 2km radius of the Site.
- 1.7 To inform the initial programme of heritage assessment RPS were commissioned to produce a detailed Built Heritage Statement and Archaeological Desk-Based Assessment. The archaeological assessment was supplemented by evaluation fieldwork. In the first instance this consisted of a programme of geophysical survey of the study site undertaken in May 2022, followed by an extensive programme of fieldwalking, geoarchaeological assessment, and trial trenching undertaken between September and November 2022.
- 1.8 Consultations, in relation to potential heritage impacts, with the Senior Conservation Officer to North West Leicestershire District Council and Archaeological Officer at Leicestershire County Council, are ongoing.

2 LEGISLATIVE AND PLANNING CONTEXT

- 2.1 The statutory requirements and national and local policy provide a framework for the consideration of development proposals that affect the historic built environment. The Planning (Listed Buildings and Conservation Areas) Act 1990, provides the overarching statutory requirements in the determination and assessment of development proposals in the built historic environment. The National Planning Policy Framework (NPPF) sets out the Government's policies and requirements at a national level and the Planning Practice Guidance reflects the Secretary of State's views on the way Government policy should be applied. It is acknowledged that matters of legal interpretation are determined in the Courts but the NPPF and the Practice Guidance set out clearly the Government's priorities and aspirations for planning and the historic built environment in England.
- 2.2 Documents produced by Historic England provide technical advice that is designed to explain and assist in the implementation of legislation and national policy. Therefore, there is a clear hierarchy of statutory duty, policy and best practice and this has been applied, as relevant, to inform the assessment of the application proposals that is included in this report.
- 2.3 The current national legislative and planning policy system identifies, through the National Planning Policy Framework (NPPF), that applicants should consider the potential impact of development upon 'heritage assets'. This term includes designated heritage assets which possess a statutory designation (for example listed buildings and conservation areas); and non-designated heritage assets, typically compiled by Local Planning Authorities (LPAs) and incorporated into a Local List. In this case 'Unlisted Buildings of Interested' are identified and considered from within Diseworth Conservation Area.
- 2.4 National legislation regarding archaeology, including scheduled monuments, is contained in the Ancient Monuments and Archaeological Areas Act 1979, amended by the National Heritage Act 1983 and 2002, and updated in April 2014.
- 2.5 Recent amendments enacted to the Town and Country Planning Act 1990 and the Planning (Listed Buildings and Conservation Areas) Act 1990 are set out in the Levelling Up and Regeneration Act 2023, Chapter 3. The effect of the Act [Clause 102] in regard to the setting to scheduled monuments is that these now have the same statutory status to those of listed buildings. Clause 102 also enacts amendments to the two Acts such that a desirability to not only 'preserve' a designated asset (World Heritage Sites; Scheduled Monuments; Registered Parks and Gardens; listed buildings and Protected Wrecks, but not conservation areas) and its setting, but now a desirability to 'preserve or enhance' such a designated asset and its setting.

National Planning Policy

National Planning Policy Framework (Department for Levelling Housing and Communities, July 2021, updated December 2023)

- 2.6 The NPPF is the principal document that sets out the Government's planning policies for England and how these are expected to be applied.
- 2.7 It defines a heritage asset as a: 'building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest'. This includes both designated and non-designated heritage assets (in this case 'Unlisted Buildings of Interest').
- 2.8 Section 16: Conserving and Enhancing the Historic Environment relates to the conservation of heritage assets in the production of local plans and decision taking. It emphasises that heritage assets are 'an irreplaceable resource and should be conserved in a manner appropriate to their significance'.

- 2.9 For proposals that have the potential to affect the significance of a heritage asset, paragraph 200 requires applicants to identify and describe the significance of any heritage assets that may be affected, including any contribution made by their setting. The level of detail provided should be proportionate to the significance of the heritage assets affected. This is supported by paragraph 201, which requires LPAs to take this assessment into account when considering applications.
- 2.10 Under 'Considering potential impacts', the NPPF emphasises that 'great weight' should be given to the conservation of designated heritage assets, irrespective of whether any potential impact equates to total loss, substantial harm or less than substantial harm to the significance of the heritage assets.
- 2.11 Paragraph 207 states that where a development will result in substantial harm to, or total loss of, the significance of a designated heritage asset, permission should be refused, unless this harm is necessary to achieve substantial public benefits, or a number of criteria are met. Where less than substantial harm is identified paragraph 208 requires this harm to be weighed against the public benefits of the proposed development.
- 2.12 Paragraph 209 states that where an application will affect the significance of a non-designated heritage asset (in this case an 'Undesignated Building of Interest'), a balanced judgement is required, having regard to the scale of harm or loss and the significance of the heritage asset with the public benefits of the proposed development.

National Guidance

Planning Practice Guidance (Department for Levelling Housing and Communities)

- The Planning Practice Guidance (PPG) has been adopted to aid the application of the NPPF. It 2.13 reiterates that conservation of heritage assets in a manner appropriate to their significance is a core planning principle. It also states that conservation is an active process of maintenance and managing change, requiring a flexible and thoughtful approach. It highlights that neglect and decay of heritage assets is best addressed through ensuring they remain in active use that is consistent with their conservation.
- 2.14 Key elements of the guidance relate to assessing harm. It states that substantial harm is a high bar that may not arise in many cases and that while the level of harm will be at the discretion of the decision maker, substantial harm is a high test that will only arise where a development seriously affects a key element of an asset's special interest. It is the degree of harm, rather than the scale of development, that is to be assessed.
- 2.15 Importantly, it is stated that harm may arise from work to the asset, or from development within its setting. Setting is defined as 'the surroundings in which an asset is experienced and may be more extensive than the curtilage'. A thorough assessment of the impact of proposals upon setting must take into account, and be proportionate to, the significance of the heritage asset and the degree to which proposed changes enhance or detract from that significance and the ability to appreciate it.
- 2.16 The PPG defines the different heritage interests as follows:
 - archaeological interest: As defined in the Glossary to the National Planning Policy Framework, there will be archaeological interest in a heritage asset if it holds, or potentially holds, evidence of past human activity worthy of expert investigation at some point.
 - architectural and artistic interest: These are interests in the design and general aesthetics of a place. They can arise from conscious design or fortuitously from the way the heritage asset has evolved. More specifically, architectural interest is an interest in the art or science of the design, construction, craftsmanship and decoration of buildings and structures of all types. Artistic interest is an interest in other human creative skill, like sculpture.

rpsgroup.com Page 4 historic interest: An interest in past lives and events (including pre-historic). Heritage assets
can illustrate or be associated with them. Heritage assets with historic interest not only provide
a material record of our nation's history, but can also provide meaning for communities derived
from their collective experience of a place and can symbolise wider values such as faith and
cultural identity.

GPA2: Managing Significance in Decision-Taking in the Historic Environment (March 2015)

- 2.17 This document provides advice on numerous ways in which decision making in the historic environment could be undertaken, emphasising that the first step for all applicants is to understand the significance of any affected heritage asset and the contribution of its setting to that significance. In line with the NPPF and PPG, the document states that early engagement and expert advice in considering and assessing the significance of heritage assets is encouraged. The advice suggests a structured, staged approach to the assembly and analysis of relevant information:
 - 1. Understand the significance of the affected assets;
 - 2. Understand the impact of the proposal on that significance;
 - 3. Avoid, minimise and mitigate impact in a way that meets the objectives of the NPPF;
 - 4. Look for opportunities to better reveal or enhance significance;
 - 5. Justify any harmful impacts in terms of the sustainable development objective of conserving significance balanced with the need for change; and
 - Offset negative impacts to significance by enhancing others through recording, disseminating and archiving archaeological and historical interest of the important elements of the heritage assets affected.

GPA3: The Setting of Heritage Assets (Second Edition; December 2017)

- 2.18 This advice note focuses on the management of change within the setting of heritage assets. As with the NPPF the document defines setting as 'the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve'. Setting is also described as being a separate term to curtilage, character and context. The guidance emphasises that setting is not a heritage asset, nor a heritage designation, and that its importance lies in what the setting contributes to the significance of the heritage asset, or the ability to appreciate that significance. It also states that elements of setting may make a positive, negative or neutral contribution to the significance of the heritage asset.
- While setting is largely a visual term, with views considered to be an important consideration in any assessment of the contribution that setting makes to the significance of an asset, and thus the way in which an asset is experienced, setting also encompasses other environmental factors including noise, vibration and odour. Historical and cultural associations may also form part of the asset's setting, which can inform or enhance the significance of a heritage asset.
- 2.20 This document provides guidance on practical and proportionate decision making with regards to the management of change within the setting of heritage assets. It is stated that the protection of the setting of a heritage asset need not prevent change and that decisions relating to such issues need to be based on the nature, extent and level of the significance of a heritage asset, further weighing up the potential public benefits associated with the proposals. It is further stated that changes within the setting of a heritage asset may have positive or neutral effects.
- 2.21 The document also states that the contribution made to the significance of heritage assets by their settings will vary depending on the nature of the heritage asset and its setting, and that different

heritage assets may have different abilities to accommodate change without harming their significance. Setting should, therefore, be assessed on a case-by-case basis.

- 2.22 Historic England recommends using a series of detailed steps in order to assess the potential effects of a proposed development on significance of a heritage asset. The five-step process is as follows:
 - 1. Identify which heritage assets and their settings are affected;
 - 2. Assess the degree to which these settings and views make a contribution to the significance of a heritage asset(s) or allow significance to be appreciated;
 - 3. Assess the effects of the proposed development, whether beneficial or harmful, on the significance or on the ability to appreciate it;
 - 4. Explore ways to maximise enhancement and avoid or minimise harm; and
 - 5. Make and document the decision and monitor outcomes.

HEAN12: Statements of Heritage Significance: Analysing Significance in Heritage Assets (October 2019)

- 2.23 This advice note provides information on how to assess the significance of a heritage asset. It also explores how this should be used as part of a staged approach to decision-making in which assessing significance precedes designing the proposal(s).
- 2.24 Historic England notes that the first stage in identifying the significance of a heritage asset is by understanding its form and history. This includes the historical development, an analysis of its surviving fabric and an analysis of the setting, including the contribution setting makes to the significance of a heritage asset.
- 2.25 To assess the significance of the heritage asset, Historic England advise that the analysis describes various interests. The headline heritage interests are identified in the NPPF and PPG and comprise: archaeological interest; architectural interest; artistic interest; and historic interest

Local Planning Policy and Guidance

2.26 In considering any planning application for development, the LPA will be mindful of the framework set by government policy (the NPPF) by current Development Plan Policy and by other material considerations. In this instance the determining authority is North West Leicestershire Council. The Local Plan was adopted November 2017 and was re-adopted, following review, in March 2021.

North West Leicestershire Local Plan

- 2.27 Policy HE1 Conservation and enhancement of North West Leicestershire's historic environment:
 - '1. To ensure the conservation and enhancement of North West Leicestershire's historic environment, proposals for development, including those designed to improve the environmental performance of a heritage asset, should:
 - a) Conserve or enhance the significance of heritage assets within the district, their setting, for instance significant views within and in and out of conservation areas;
 - b) Retain buildings, settlement patterns, features and spaces, which form part of the significance of the heritage asset and its setting;
 - c) Contribute to the local distinctiveness, built form and scale of heritage assets through the use of appropriate design, materials and workmanship; and
 - d) Demonstrate a clear understanding of the significance of the heritage asset and of the wider context in which the heritage asset sits.

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- 2. There will be a presumption against development that will lead to substantial harm to, or total loss of significance of a designated heritage asset. Proposals will be refused consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh the harm or loss or all of the following apply:
 - a) The nature of the heritage asset prevents all reasonable uses of the site; and
 - b) No viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and
 - c) Conservation by grant-funding or some form of charitable or public ownership is demonstrably not possible; and
 - d) The harm or loss is outweighed by the benefit of bringing the site back into use. Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.
- 3. Where permission is granted, where relevant, the Council will secure appropriate conditions and/or seek to negotiate a Section 106 obligation to ensure that all heritage assets are appropriately managed and conserved.
- 4. The District Council will support development that conserves the significance of non-designated heritage assets including archaeological remains'.

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3 BUILT HERITAGE

- 3.1 Within the 2km study radius, 35 listed buildings and two conservation areas were identified [Fig.2]. However, it is considered that for the vast majority of these heritage assets, the Site does not form part of their setting.
- 3.2 This is collectively the case for those built heritage assets in Long Whatton. While the village is only *c*.800m at its nearest point from the Site's south-eastern corner, the discrete, enclosed and linear form of the village and the lack of any visually apparent tall building (the towered church is at the far eastern end of the village) with, more significantly, the profound screening effect of the raised and treed embankments of the north-south aligned A42 and M1 positioned between the Site and the village, result in no legibility of the assets' significance from the Site and no meaningful intervisibility. There is no evidence of historical association or ownership between the Site and built heritage assets in Long Whatton. Consequently, the Site does not form a part of the setting to built heritage assets associated with Long Whatton.
- 3.3 Similarly, for the former Langley Priory, located *c.*2.5km southwest of the Site's south-western corner [Fig.2], the Site does not form any part of these assets' setting. While parts of the Site had some ownership association with the former Priory up to the early twentieth century, the topographic position of the former Priory, set low in the landscape and screened by intervening woodland, there is no intervisibility and no legibility of these assets' significance from any part of the Site.
- 3.4 A Grade I Church is located at Breedon-on-the-Hill in a prominent cliff-top location *c*.5.2km to the west of the Site's south-western corner. Other built heritage assets identified as potentially having a part of their setting being formed by the Site (and, therefore, potentially having their significance effected by the Site's development) include the Church of St Michael and All Angels in the centre of Diseworth, *c*.350m from the southwest corner of the Site, and Diseworth Conservation Area, *c*.85m from the Site at its nearest point. In addition to the 22 listed buildings, nearly 50 buildings identified in the Diseworth Conservation Area Appraisal as 'Unlisted Buildings of Interest' are located in the Area.
- In summary, the only built heritage assets that require initial identification and consideration of their significance in this case are the:
 - Grade I Church of St Mary and St Hardulph, Breedon-on-the-Hill;
 - Grade II* Church of St Michael and All Angels, Diseworth; and
 - Diseworth Conservation Area (consideration of which includes, as individually appropriate, designated and non-designated built heritage assets within the Area).

Church of St Mary and St Hardulph

- 3.6 The Church of St Mary and St Harulph is located *c*.5.2km to the west of the south-western corner of the Site at Breedon-on-the-Hill. It is positioned at the top of a prominent landscape hill above a quarried, *c*.80m high cliff when viewed from the east (including the Site). The Church was designated December 1962 at Grade I.
- 3.7 The architectural value of the Church is extremely high. This arises from its incorporated Anglo-Saxon decorative masonry and the medieval fabric. The decorative Anglo-Saxon stonework reused in the interior of the Church is the largest and possibly the most important collection of rare (in European terms) Anglo-Saxon decorative stonework.
- 3.8 The Church also holds very high historic value. The site of the Church is an important religious centre associated with the Anglo-Saxon royal family, the burial place of four pre-conquest saints (one an Anglo-Saxon king) and was from where an eighth-century Archbishop of Canterbury was

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- drawn. The current Church was founded in the late Anglo-Saxon period, with later medieval and nineteenth-century modifications.
- 3.9 The Church holds group value with the designated and non-designated monuments in the Church's cemetery. There is group value too with archaeological remains of the Anglo-Saxon monastery and, to a lesser extent, with the preceding Iron Age hillfort.

Setting

- 3.10 The immediate setting of the asset comprises its cemetery (group value of associated monuments is noted above) and the prominent hilltop, the site of a former Iron Age hillfort. These elements of setting have a primary contribution to the asset's significance.
- 3.11 The wider setting, due to the Church's highly prominent hill-top position, visually takes in thousands of hectares of Leicestershire and Derbyshire countryside. From the Site, there are very long-distance views of the Church's tower, the eastern gable of the nave and the lancets of the east window. These views are largely available from most of the Site excepting the far north-eastern field and from lower elevations of the Site to the southwest and immediately adjacent to Clements Gate.
- 3.12 The heritage asset is legible as a church from the Site, but it is not clear what date it is. There is no perception of the Anglo-Saxon historic associations, the site of the former monastery and the European-wide important collection of Anglo-Saxon decorated stonework within the Church.
- 3.13 An element of the Church's wider setting includes the large-scale industrial units, warehousing, towers, masts and associated infrastructure set on the ridge to the north and northwest of the Site, all part of or surrounding the East Midlands Airport. The backdrop to this element of the Church's wider setting are the four monumental cooling towers and the tall exhaust tower of the redundant Ratcliffe-on-Soar power station.
- 3.14 There is no evidence of any historical association between the Church and the Site.
- 3.15 The immediate setting, the cemetery, the monuments therein and the site of the former monastery also provide a primary level of contribution to the asset's significance. The Site forms a very tiny part of the asset's huge wider setting predominantly made up of rural fields, woodland belts and intermittent settlements. Consequently, the Site has no meaningful contribution to the asset's significance.

Church of St Michael and All Angels

- 3.16 The Church of St Michael and All Angels is located in the centre of Diseworth, *c*.350m from the southwest corner of the Site. It is positioned to the southeast of the crossroads to the village's four gate streets. The Church was designated December 1962 at Grade II*.
- 3.17 The architectural and historic value of the Church is high. This arises from the architectural and aesthetic value of its medieval form and fabric and this fabric's age. The Church holds group value with the cemetery and the associated monuments. There is group value too with the historic core of Diseworth, and the individual historic buildings therein, which the Church serves.

Setting

- 3.18 The immediate setting of the asset comprises its cemetery and the immediate historic core of Diseworth. These elements of setting have a primary contribution to the asset's significance.
- 3.19 The broach spire to the Church is a prominent landmark within the historic core of Diseworth (the Conservation Area). It is noted by the Council as being visible in much of the approach to 'the Cross' along Hall Gate from the west. It is not noted as being prominent from any other location.
- 3.20 The wider setting, due to the Church's spire height, extends to the fields surrounding Diseworth. From this area the Church is largely legible as an historic church set in the centre of an historic

- village. Views of the spire are largely available from most of the Site excepting the far northeastern field. The kinetic view of the spire, and its setting within the village, strengthen as one descends Hyam's Lane towards Diseworth from the higher part of the Site.
- 3.21 Views of the Church's spire in the centre of Diseworth from the southwest of the village includes some of the upper fields of the Site as a backdrop. However, these views include, as a skyline backdrop, some of the large-scale industrial units, warehousing, towers, masts and associated infrastructure set on the ridge to the north of the Site, all part of or surrounding the East Midlands Airport.
- 3.22 There is no evidence of any direct historical association between the Church and the Site, although it is clear that this agricultural land is the setting to this historic agricultural settlement in which it sits and serves.
- 3.23 The wider setting, of which the Site is a small part, provides a secondary level of contribution to the asset's significance. Consequently, the Site, as a small part of the asset's wider historic agricultural, rural context, provides a low level of contribution to the asset's significance.

Diseworth Conservation Area

- 3.24 Diseworth Conservation Area was first designated February 1974. The Area was revised extended April 2021. The Diseworth Conservation Area Appraisal and Study was published April 2021.
- 3.25 The Conservation Area Appraisal concludes that most properties in the Area are of two storeys in height though some farmhouses have three storeys. Consequently, the one landmark building is the Church of St Michael and All Angels, although the spire is only noted as standing out from within the Area from the west along New Hall Gate.
- 3.26 There are 22 listed buildings noted in the Conservation Area predominantly dating from the sixteenth to the eighteenth centuries and these largely display local vernacular building traditions. The Conservation Area Appraisal also identifies nearly 50 'Unlisted Buildings of Interest'. Many of these building also reflect local vernacular traditions.
- 3.27 Excepting for the Church of St Michael and All Angels, the *c*.70 designated and non-designated historic buildings within the Area are largely subsumed within the built form of the village and screened from the Site. This is to such a degree that none of these individual historic buildings' significance is meaningfully legible from the Site and intervisibility with the Site is profoundly limited. Therefore, in this case, the individual historic buildings (excepting the Church) are appropriately dealt with as a collective whole with the Conservation Area.

Setting

3.28 In terms of the Conservation Area's relationship with the surrounding landscape, therefore including the Site, the Conservation Area Appraisal notes that:

'the agricultural land surrounding the village with its straight boundaries and surviving hedgerows appears to reflect the landscape created by the enclosure of Diseworth Parish in 1794. [...].

The location of the village within a shallow valley means that views out of the Area are restricted. [...] The curvature of the principal streets also presents a further restriction to views out of the Area'.

3.29 The Conservation Area Appraisal only notes good views southwards out of the Area to the surrounding countryside to the rear of properties on the southern side of Clements Gate over the Diseworth Brook. It is also noted that where views are afforded from the countryside south of the village, the backdrop includes industrial structures and buildings associated with the East Midlands Airport, including the recently completed control tower.

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- 3.30 While there is some legibility of Diseworth as an historic village (the roofscape of the historic core) from many parts of the Site, this legibility is mainly signified by the landmark presence of the Church spire.
- 3.31 The Conservation Area Appraisal also notes the twentieth-century residential infills along the gate streets. It was published, however, before the more extensive back land and rear residential development behind the eastern side of Grimes Gate. This includes, at the northern end, Old Hall Court. This small residential estate is on the south side of Hyam's Lane at it enters Diseworth and screens the built heritage assets at Hall Farm to the west from the Site. All the eastern back lands to Grimes Gate to the south of Old Hall Court, excluding a small area adjacent to the cricket pavilion, have been infilled with recent residential development, including Cheslyn Court accessed from Grimes Gate and Diseworth Grange accessed off the north side of Clements Gate.
- 3.32 All these recent developments on the north-eastern side of the village fall within the boundary of the Conservation Area and are all likely to fall in the setting of listed buildings. All these recent developments strengthen the screening of the individual designated and non-designated built heritage assets within the Area from the Site.
- 3.33 The character and appearance (significance) of the Diseworth Conservation Area primarily relates to the medieval morphology of the four principal gate streets (set around the one landmark building of the Church of St Michael and All Angels); the c.70 designated and non-designated bult heritage assets, largely of local vernacular traditions, therein; and the enclosed, discrete nature of the Area. It is the historic morphology of the village and the historic buildings therein (their form, fabric, architectural and aesthetic value, and age) that provides the primary contribution to the asset's significance.
- 3.34 The Area's setting is formed by the open agricultural land within the shallow valley around the village. The historic core of the village is largely discrete within this setting. There are few views available from within the Area to the surrounding landscape.
- 3.35 The Site is a small part of the Conservation Area's setting, which itself provides a secondary level of contribution to the asset's significance. Consequently, the Site provides a low level of contribution to the significance of Diseworth Conservation Area.

4 ARCHAEOLOGY

- In order to inform a potential planning application for the Site a staged programme of archaeological evaluation has been undertaken.
- 4.2 The first phase of archaeological evaluation consisted of the production of a detailed Archaeological Desk-Based Assessment. In terms of designated archaeological assets, the document concluded that there will be no impact to the setting or significance to the Scheduled Monuments of the Moated Site with Fish Ponds, and Flood Banks at Long Whatton. Within the Site the document considered there to be a high potential for activity associated with the Iron Age and Roman periods, and a low potential for archaeological remains of interest in relation to all other periods.
- The second phase of archaeological evaluation consisted of a geophysical survey undertaken in May 2022. Anomalies of archaeological origin were identified to the north of Hyam's Lane in the form of long linear ditched features and partial and full enclosures. Anomalies of agricultural origin in the form of former field boundaries, ridge and furrow ploughing were also recorded in this area. The survey results to the south of Hyam's Lane were of a lower quality, although multiple anomalies of undetermined origin were noted as being present. The form of the enclosure and long linear features identified suggest they could be Iron Age or Roman in date.
- Archaeological Officer indicated that a third phase of archaeological evaluation would be required comprising fieldwalking, geoarchaeological investigation and trial trenching. This phase of evaluation fieldwork was undertaken between September and October 2022. The resulting fieldwork included the excavation of 388 trial trenching, the fieldwalking of twenty individual fields, and geoarchaeological monitoring of geotechnical site investigations. As a result of these investigations, it was noted that the earliest archaeological features recorded were pits and ditches of Iron Age or Roman date, with such features principally concentrated in two areas: immediately north of Hyam's Lane in the centre of the site; and in proximity to the south of Hyam's Lane at the western edge of the site. Limited features of a similar date were found in the western part of the Site, while the remaining features encountered across the Site were dated to the Post-Medieval or Modern periods and considered of limited interest. The geoarchaeological assessment did not identify any deposits of significance.

5 INITIAL ASSESSMENT OF HERITAGE IMPACT

Church of St Michael and All Angels

- 5.1 The impact of the scheme on the significance of the Church of St Michael and All Angels will include changes to views of the Church from within the Site and to longer-distance views from the surrounding landscape. There are views of the spire from large parts of the Site, with the broach spire forming a local landmark. The proposals will remove or alter these views, with the introduction of large-scale built form, bunding and structural landscaping. This will diminish the rural setting of the listed building and reduce the ability to appreciate its architectural interest from the Site and from within these wider rural surrounds. The visual impact will be reduced by the retention of Hyam's Lane and the neighbouring planting which will retain some sense of rurality within the Site and the sequential, kinetic views of the Church when approaching it from the northeast.
- The proposals will also affect views of the spire within longer views from the west of Diseworth. This will alter the backdrop to the listed building and remove the existing rural context provided here. A degree of the landmark status of the building will be reduced and partly obscured by the development beyond.
- The proposals will therefore affect the architectural and historic interest of the listed building, through the reduction in views of it from its rural setting, the change in land use and character within the Site and the alteration of long-distance views which will, to a degree, diminish its landmark status in terms of views from the northeast. This will give rise to less than substantial harm to the significance of the listed building, which is likely to represent a medium level of less than substantial harm.
- This harm can be mitigated, to a degree, through the inclusion of bunds and deep buffers within the development along the Site's western and south-western boundaries that will reduce the visual levels of impact in those long-distant views of the Church that have parts of the Site as a backdrop. Additionally, the proposed planting of the bunds and buffers will further reduce levels of harm over time as the planting matures.

Diseworth Conservation Area

- 5.5 The impact of the proposed scheme on the significance of Diseworth Conservation Area will include changes to the rural approach to the Conservation Area from the north-east, beyond the recent development at its eastern edge, and changes in views from and to the Conservation Area and in the wider landscape.
- The development will alter one element of the Conservation Area's rural setting, which reflects its historic development as a rural settlement dependent primarily on an agricultural economy. This will be apparent on approaches into the Conservation Area but will not be visible in many views from within or beyond the Conservation Area. The valley setting of the Conservation Area means that the majority of it is obscured in views from the surrounding landscape. There is no appreciation of the morphology or architectural interest of the Area from these views as a result, with only the presence of the spire of the Church of St Michael indicating the presence of a historic settlement.
- 5.7 The proposed development will, therefore, affect the wider rural setting of the Conservation Area, but this will have a limited impact on important views of and into the Area and will not affect its character and appearance, or the ability to appreciate this. The proposed development represents a low level of less than substantial harm to the significance of the Conservation Area through the further alteration of its rural setting, which will diminish something of its historic interest.

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This harm can be mitigated, to a degree, through the inclusion of bunds and deep buffers within the development along the Site's western and south-western boundaries that will reduce the visual levels of impact in long-distant views of the Area that have the Site as a backdrop and in views from the eastern and north-eastern edges of the Area that include parts of the Site. Additionally, the proposed planting of the bunds and buffers will further reduce levels of harm over time as the planting matures.

The Church of St Mary and St Hardulph

5.9 It has been assessed that the Site makes no meaningful contribution to the Grade I Listed Church of St Mary and St Hardulph, as such, the proposed development will have no meaningful impact upon the asset's significance.

Archaeology

5.10 A comprehensive programme of archaeological evaluation has been undertaken at the Site, and the potential for below-ground archaeological features fully assessed. As a result of this programme of investigation, it has been established that localised remains of interest dating to the Iron Age or Roman period are present in two discrete areas of the Site. The significance of such remains is considered to be of a level where, if development were to take place, the ongoing archaeological interest of the Site could be secured by means of an appropriately worded condition attached to planning consent requiring a targeted programme of archaeological mitigation.

Conclusion

5.11 Based on the existing heritage assessments undertaken, both in terms of Built Heritage and Archaeology, it has been identified that any heritage impacts associated with the proposed development will be focused and that such impacts can be subject to a programme of mitigation in order to reduce the levels of harm identified. As such, following the implementation of the required mitigation programme, no significant residual impacts are anticipated, and therefore it is considered that there are no overriding heritage constraints which would prevent the allocation of the Site.

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