



UNIVERSAL DESTINATIONS & EXPERIENCES UK PROJECT

Former Kempston Hardwick Brickworks
and adjoining land, Bedford

Environmental Statement Volume 1

Chapter 3 - Approach to EIA

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3. APPROACH TO EIA

3.1. INTRODUCTION

- 3.1.1. This chapter sets out the overall approach and methodology relating to the Environmental Impact Assessment (EIA) process and preparation of the Environmental Statement (ES) documentation. This ES presents the information specified in Schedule 4 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) (**Ref. 3.1**). The approach to the assessment is informed by current best practice guidance.
- 3.1.2. An overview of the guidance and methodology adopted for each environmental factor is provided within **Chapters 5 to 18 (Volume 1)** of this ES. The relevant Legislation, Policy and Guidance taken into consideration by each environmental factor is set out in **Appendix 3.1: Legislation, Policy and Guidance for all ES Technical Topics (Volume 3)** whilst detailed descriptions of the significance criteria for each environmental topic is set out in **Appendix 3.2: Significance Criteria for all ES Technical Topics (Volume 3)** or as otherwise indicated in the topic chapter.
- 3.1.3. This chapter has been prepared in support of the planning proposal for the Proposed Development as described in **Chapter 2: Description of the Proposed Development (Volume 1)**. Where the phrase “*cautious worst case*” is used, it means “*a cautious worst case that provides a robust assessment of likely significant effects*”.

3.2. ENGAGEMENT

- 3.2.1. As part of the EIA process, technical engagement has been undertaken with a range of Governmental and other engagement bodies, which is referred to further in each of the technical ES chapters as relevant. In addition, where useful, Summaries of Agreed Position have been prepared that set out matters that have been agreed between the parties such as use of models and datasets, assessment methodology, and proposed mitigation. These documents are provided as **Appendix 4** of the **Planning Statement (Document Reference 6.1.0)**. In summary, technical engagement has been undertaken with the following to inform the EIA:

- Anglian Water;
- Bedford Borough Council (Bedford BC);
- Bedford Group of Internal Drainage Boards;
- Central Bedfordshire Council;
- Civil Aviation Authority;
- Cranfield Airport;
- Department for Culture, Media and Sport;
- Department for Transport (DfT);
- East West Rail Company (EWR);
- The Environment Agency;
- Forest of Marston Vale Trust;

- Health and Safety Executive;
- Historic England;
- Ministry of Housing, Communities and Local Government;
- Natural England;
- National Highways;
- Network Rail;
- The Office for Investment;
- Old Warden Aerodrome; and
- UK Power Networks.

PUBLIC ENGAGEMENT

- 3.2.2. A period of public engagement was undertaken from Monday 8 April 2024 until Friday 3 May 2024. During this time meetings were held with Officers from Bedford BC, Central Bedfordshire Council, Milton Keynes Borough Council and Luton Council, Stewartby and Kempston Hardwick Parish Council and Wixams Parish Council, representatives from business and education groups, blue light services, religious groups and community and voluntary organisations and the traveller community. Furthermore, two on-Site public engagement events were held inviting comments on particular aspects of the Proposed Development, as well as inviting general comments on the proposals. Informal engagement with key statutory bodies including Bedford BC, Central Bedfordshire Council, DfT, and National Highways was also undertaken from Autumn 2023 through Spring 2024. Further detail is set out in the **Public Engagement Report (Document Reference 6.5.0)** submitted with the planning proposal.
- 3.2.3. A formal scoping opinion has not been sought for the Proposed Development. The scope of the assessment has been informed by the responses and comments received during the 30-day engagement period and as a result of the ongoing technical engagement with various bodies as described above. The EIA environmental topics have also been informed by UDX's extensive experience constructing and operating theme parks globally, thereby leading to a strong understanding of the areas of likely interest for development of this nature. The EIA reported on in this ES considers the following environmental topics:
- Traffic and Transport (**Chapter 5: Traffic and Transport (Volume 1)**);
 - Ecology and Nature Conservation (**Chapter 6: Ecology and Nature Conservation (Volume 1)**);
 - Landscape and Visual (**Chapter 7: Landscape and Visual Impact Assessment (Volume 1)**);
 - Air Quality (**Chapter 8: Air Quality (Volume 1)**);
 - Noise and Vibration (**Chapter 9: Noise and Vibration (Volume 1)**);
 - Cultural Heritage and Archaeology (**Chapter 10: Cultural Heritage (Volume 1)**);
 - Ground Conditions and Soils (**Chapter 11: Ground Conditions, Soils and Agricultural Land (Volume 1)**);
 - Water Resources (**Chapter 12: Water Resource (Volume 1)**);

- Socio-Economics (**Chapter 13: Socio-Economics (Volume 1)**);
- Greenhouse Gases (**Chapter 14: Greenhouse Gases (Volume 1)**);
- Climate Resilience (**Chapter 15: Climate Resilience (Volume 1)**);
- Major Accidents and Disasters (**Chapter 16: Major Accidents and Disasters (Volume 1)**);
- Population and Human Health (**Chapter 17: Population and Human Health (Volume 1)**); and
- Cumulative Effects (**Chapter 18: Cumulative Effects (Volume 1)**).

3.3. APPROACH TO THE ASSESSMENT OF THE PROPOSED DEVELOPMENT

3.3.1. This section outlines the approach to the assessment methodology, relating to the following aspects:

- Consideration of reasonable alternatives;
- Defining the study area;
- Existing baseline scenario;
- Future baseline scenario;
- Assessment scenarios;
- Cautious worst case scenario for assessment that provides a robust assessment of likely significant effects, recognising that that may vary between technical topics and/or require consideration of multiple scenarios;
- Assessment criteria;
- Approach to mitigation;
- Approach to the Cumulative Assessment;
- Waste management; and
- Report to inform Habitat Regulations Screening Assessment.

3.3.2. Various methodologies have been applied to determine the likelihood for significant environmental effects as a result of the Construction (including demolition) and Operational Phases of the Proposed Development. Where construction effects are referred to, these effects also take account of demolition effects. There is no assessment of decommissioning as it is expected that further investment will keep the Entertainment Resort Complex (ERC) viable and continuously evolving to meet the changing needs of the consumer market after 2051, and as such there are no plans to decommission. Iterative improvements to the ERC which may include removal, demolition and construction are included in the Construction Phase assessment as set out below at Paragraph 3.3.18. The technical discipline methodologies are provided in each of the technical chapters (**Chapters 5 to 18**) whilst topic specific significance criteria is presented in **Appendix 3.2: Significance Criteria for All ES Technical Topics (Volume 3)**.

3.3.3. In summary, the assessment has taken account of the Description of the Proposed Development and parameters as described in **Chapter 2: Description of the Proposed Development (Volume 1)** and **Appendix 2.1: Environmental Statement Basis of Assessment (Volume 3)**.

CONSIDERATION OF REASONABLE ALTERNATIVES

- 3.3.4. Schedule 4, Paragraph 2 of the EIA Regulations (**Ref. 3.1**) states that an ES should include:
- “A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects”.*
- 3.3.5. An overview of the reasonable alternatives considered is set out in **Chapter 4: Consideration of Reasonable Alternatives (Volume 1)**, which takes account of the following:
- New A421 Junction Designs;
 - Drainage Design Options for the Core Zone; and
 - EWR Station.

DEFINING THE STUDY AREA

- 3.3.6. Topic-specific study areas differ depending on the requirements of the specific topic, sensitive receptors and the approach to assessment/methodology following specific guidelines and legislation. As such, study areas relating to specific environmental topics are defined/justified in the relevant environmental topic chapters of this ES.

EXISTING BASELINE SCENARIO

- 3.3.7. Schedule 4, paragraph 3 of the EIA Regulations (**Ref. 3.1**) states that an ES should include “a description of the relevant aspects of the current state of the environment (baseline scenario)”.
- 3.3.8. Likely significant effects as a result of the Proposed Development are described in the each of the technical ES chapters, in relation to the deviation from the baseline environment within the Site and/or relevant technical study areas. The baseline environment comprises the existing environmental characteristics and conditions, based upon surveys undertaken and information available at the time of the assessment.
- 3.3.9. The approach to establishing baseline conditions is set out in the relevant environmental topic chapters. The baseline environment comprises the prevailing existing environmental characteristics and conditions of the Site, based upon:
- Site visits and surveys;
 - Desk-based studies;
 - Review of existing Site-specific information;
 - Modelling; and
 - Engagement with the relevant statutory and non-statutory consultees.
- 3.3.10. Specific years have been used as appropriate within relevant disciplines for the existing baseline scenario based on the availability of data and methodological requirements (e.g. the Air Quality assessment uses 2022 as the baseline year, while 2023 is used for Noise and Vibration, Traffic and Transport and Greenhouse Gases).

- 3.3.11. The origin of all third-party data is clearly presented, alongside any limitations and assumptions. Baseline data which is deemed to be confidential in nature, such as that relating to protected species, is provided in separate confidential appendices to the ES, due to the sensitivity of such species records.

FUTURE BASELINE SCENARIO

- 3.3.12. Schedule 4, paragraph 3 of the EIA Regulations (**Ref. 3.1**) states that an ES should include “...an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge”.
- 3.3.13. Future baseline conditions refer to the description of the likely evolution of the baseline scenario without the implementation of the Proposed Development, as far as natural changes from the baseline scenario can be assessed with reasonable effort and on the basis of available environmental information and scientific knowledge.
- 3.3.14. The future baseline for Water Resources considers the projected changes to baseline conditions due to climate change. With regards to traffic flow data, presented in **Chapter 5: Traffic and Transport (Volume 1)**, future traffic flow scenarios have been identified and subsequently assessed in **Chapter 5: Traffic and Transport (Volume 1)**, **Chapter 8: Air Quality (Volume 1)**, **Chapter 9: Noise and Vibration (Volume 1)** and **Chapter 14: Greenhouse Gases (Volume 1)**.
- 3.3.15. Each environmental topic chapter sets out the approach to establishing future baseline scenario(s) and how they are used in the assessment process.

ASSESSMENT SCENARIOS

- 3.3.16. The ES considers both construction and operation. **Table 3-1** and **Table 3-2** set out the years considered by the EIA for both Phases of the Proposed Development and the rationale for each.
- 3.3.17. The Transport Assessment (**Appendix 5.1: Transport Assessment (Volume 1)**) and ES are based on reasonable assumptions in relation to land uses and phasing/delivery. It is likely and expected that delivery of individual aspects (visitor accommodation/retail) will be subject to the evolution of the ERC on the ground as the market demands. The approach taken in terms of transport and highways is to ensure that the maximum parameters assessed allow for the flexibility for individual aspects to come forward within the envelope of movements assessed on the transport network. As long as the envelope of movements assessed within the Transport Assessment from both a construction and operational perspective, are not exceeded, then from a traffic assessment standpoint, the development can come forward in any order.
- 3.3.18. **Construction Phase:** The period during which the Proposed Development will be constructed, including the Primary Phase and the Full Buildout. The term has been used within the technical assessments to refer to the construction works that have been assessed during the years in **Table 3-1** to identify the likely significant effects of the construction of the Proposed Development.

Table 3-1 – Construction Years for Assessment

Construction Scenario	Years	Assumptions
Primary Phase Construction	2026 – 2031	<p>The initial Primary Phase Construction programme to deliver the ERC designed to accommodate 8.5M annual visitors and 55,000 visitors per peak day consisting of:</p> <ul style="list-style-type: none"> ■ A "destination" (meaning "international" as opposed to "regional" or "local") Theme Park of at least 32.37 hectares in size (excluding guest parking) with emphasis on highly immersive storytelling and theming with an international draw, focused on providing a first-class guest experience; ■ Dining and entertainment venues available to ticketed and non-ticketed visitors to the ERC; ■ Visitor accommodation with a minimum of 500 hotel rooms; ■ Associated services and uses for any operational or administrative functions, such as office buildings and warehouse/storage facilities; ■ Vehicles and cycle parking, maintenance and servicing and transportation hubs, including a minimum of 7,106 car parking spaces, 100 coach parking spaces, and 250 cycle [spaces]; ■ Access routes and circulation spaces; ■ Green infrastructure including environmental enhancement areas to be provided at a combined minimum of 49.3 hectares and landscaping; and ■ Active travel routes throughout the Site, which will facilitate connections from the ERC to the surrounding active travel network. <p>Associated infrastructure, including:</p> <ul style="list-style-type: none"> ■ Utility infrastructure, and utilities generation, storage, collection, treatment, and processing facilities; ■ New A421 Junction and dual carriageway access road into the Core Zone; ■ Realigned and upgraded Manor Road to a dual carriageway access road between Ampthill Road and the Marston Vale Railway Line; ■ Public Road A, and Public Road B, segment 1 (as shown in Parameter Plans – Access and Roadways (Document Reference 1.11.0)); ■ An expanded 4-platform Wixams Rail Station; and ■ Shuttle bus service between the expanded Wixams Rail Station and the Theme Park. <p>The Primary Phase may consist of non-Theme Park elements such as visitor accommodation, and retail, dining and entertainment venues (and associated vehicle parking) in the</p>

Construction Scenario	Years	Assumptions
		<p>West Gateway Zone and/or Lake Zone so long as the peak hour traffic counts do not exceed what has been assessed in Appendix 5.1: Transport Assessment (Volume 3) and controlled by the Travel Plan (Appendix 5.6: Travel Plan (Volume 3)). For purposes of this ES and assessment of a cautious worst case scenario, it is assumed that the Primary Phase Construction will take approximately five years and is assumed to occur by Primary Opening Year.</p> <p>For purposes of this ES and assessment of a cautious worst case scenario, Full Buildout is assumed to occur over a twenty year period following the Theme Park opening to the public.</p>
Peak Construction Year	2029	<p>This is the existing road network and traffic, plus traffic associated with peak construction. The assessment is made against the 2023 Existing traffic flows as this represents the greatest proportional increase in traffic and because peak construction traffic could occur at any time before 2029. In addition, by 2029 other mitigation/ infrastructure improvements may have come forward which could offset the potential impacts of construction traffic.</p>
Completion of Full Buildout Construction	2031 – 2051	<p>Full Buildout consists of construction of the balance of the ERC, roads, utilities and rail-related development that was not completed during the Primary Phase (assumed to occur over a twenty year period following the Primary Opening Year, completing in 2051) and operation of same thereafter, including the evolution and expansion of the same over time in accordance with the planning permission.</p> <p>For purposes of this ES and assessment of a cautious worst case scenario, Full Buildout is assumed to occur over a twenty year period following the Theme Park opening to the public.</p>

- 3.3.21. **Operational Phase:** The operation of the Proposed Development, entailing the operation of the Primary Phase from Primary Phase Opening Year and the operation of the Full Buildout from completion onwards. The term has been used within the technical assessments to refer to the Proposed Development's operation during the phase years in **Table 3-2** and which has been assessed to identify the likely significant effects of the operation of the Proposed Development.

Table 3-2 – Operational Years for Assessment

Operational years for assessment	Years	Rationale
Theme Park Primary Phase Opening Year	2031	<p>The assessment of operational effects assumes that the Primary Phase is complete and the Theme Park opens to the public upon completion of the Primary Phase Construction, which for purposes of the ES is assumed to be the year 2031. The assessment also assumes delivery of other ERC components in addition to the Theme Park road infrastructure, expanded Wixams Rail Station (see full list of</p>

Operational years for assessment	Years	Rationale
		<p>Proposed Development components delivered by Primary Phase Construction in</p> <p>Table 3-1 above) and other committed developments (and EWR between Oxford and Milton Keynes only with a shuttle bus service operating between Milton Keynes and the Site).</p> <p>The assessment of Traffic and Transport, and those chapters that utilise road traffic data, have also considered a sensitivity test that specifically considers the impacts due to on-going construction during the Full Buildout period (2013 – 2051) alongside the operational impacts of the Theme Park and other Primary Phase development.</p>
Future Operational Year (specific to Landscape and Visual assessment)	2046	The Landscape and Visual assessment assumes that from the fifteenth year after Theme Park Primary Phase Opening Year the original landscaping mitigation measures can be assumed to be substantially effective.
Completion of Full Buildout – Future Operational Year	2051	<p>The ERC in the West Gateway Zone and Lake Zone, and all road and railway infrastructure, is complete and operational.</p> <p>The Proposed Development accommodates the future evolution, growth and expansion of the Theme Park and supporting buildings and infrastructure in the Core Zone over time. The assessment also assumes delivery of other committed developments (and EWR continuing to run between Oxford and Milton Keynes only with a shuttle bus service operating between Milton Keynes and the Site).</p> <p>Based on experience from previous UDX developments, full buildout typically occurs within 20 years following the Theme Park Opening Year. Therefore, for the purposes of the EIA, 2051 (20 years after the assumed Theme Park Opening Year) is selected as the Future Operational Year representing the Proposed Development in full buildout state.</p>

- 3.3.22. The assessment scenarios relating to Air Quality, Greenhouse Gases, Noise and Vibration, Ecology and Traffic and Transport are defined based on traffic modelling that is used as the basis of the Transport Assessment (**Appendix 5.1: Transport Assessment (Volume 3)**). The Transport Assessment has considered a range of different scenarios as set out in **Table 3-3**, which have then been considered as appropriate within **Chapter 5: Traffic and Transport (Volume 1)**, **Chapter 6: Ecology and Nature Conservation (Volume 1)**, **Chapter 8: Air Quality (Volume 1)**, **Chapter 9: Noise and Vibration (Volume 1)** and **Chapter 14: Greenhouse Gases (Volume 1)**.
- 3.3.23. The Transport Assessment (**Appendix 5.1: Transport Assessment (Volume 3)**) is based on a number of assumptions as set out in **Appendix 3.4: Table 1 – Summary of Assumptions – Transport (Volume 3)**. The table includes a number of embedded mitigation measures which the Transport Assessment assumes are in place, these embedded mitigation measures are in the Highway Mitigation Design Assumptions Row 59 - 70; and the provision of shuttle buses between Milton Keynes and the ERC as per Rows 52, and shuttle buses between Wixams Rail Station and the Core Zone as per row 53.

Table 3-3 – Traffic scenarios

Scenario Number	Name for Traffic Assessment/ES	Test	Description
1	2023 Existing	Core Scenario (Transport Assessment and ES)	This is assessing the existing road network and existing traffic.
2	2023 Existing plus Peak Construction	Core Scenario (Transport Assessment and ES)	This is the existing road network and traffic, plus traffic associated with peak construction. The assessment is made against the 2023 Existing traffic flows as this represents the greatest proportional increase in traffic and because peak construction traffic could occur at any time before 2029. In addition, by 2029 other mitigation/infrastructure improvements may have come forward which could offset the potential impacts of construction traffic.
2a	2023 Existing plus Average Construction	Core Scenario (Transport Assessment and ES)	This is the existing road network and traffic plus traffic associated with average construction. This has also been assessed against 2023 Existing traffic flows for the reasons set out above.
3	Reference Case	Core Scenario (Transport Assessment and ES)	This is the existing road network and traffic plus traffic associated with agreed committed developments.
4	Primary Opening Year - Reference Case plus Development	Core Scenario (Transport Assessment and ES)	This is the existing road network and traffic, plus traffic associated with agreed committed developments plus Primary Opening Year related demands from the Site. This is based on the Full Wixams Station being open, EWR running between Oxford and Milton Keynes only with a shuttle bus service operating between Milton Keynes and the Site and the new A421 Junction being complete. For clarity this does not include trip generating development on either the Lake Zone or West Gateway Zone. (There may be some drainage or other infrastructure works required on the Lake Zone and West Gateway Zone to support the delivery of development on the Core Zone). This is a cautious worst case in terms of the Opening Year, as EWR is assessed to Milton Keynes only, and not to Bedford, as is proposed by EWR.
4a	Primary Opening Year -Reference Case plus Development plus Construction	Core Scenario (Transport Assessment and ES)	This is the existing road network and traffic, plus traffic associated with agreed committed developments plus Primary Opening Year related demands from the Site. This is based on the Full Wixams Rail Station being open, EWR running between Oxford and Milton Keynes only and the new A421 Junction being complete. For clarity this assumes construction activities in the Core Zone, Lake Zone and West Gateway Zone. This represents a cautious worst case in relation to the potential impact on the study area, as it includes operational trips associated with Scenario 4, plus construction traffic, and assesses

Scenario Number	Name for Traffic Assessment/ES	Test	Description
			the potential impacts of this against the Opening Year Reference Case, which does not include any of the Proposed Development. There would not be any construction occurring on the Core Zone, Lake Zone and West Gateway Zone, without the Theme Park operating in the Core Zone, and therefore the traffic associated with Scenario 4 would be a reasonable baseline to compare Scenario 4a traffic against. However, as stated, Scenario 4a traffic will be assessed against the Opening Year (Scenario 3) only in the ES only. Within the Transport Assessment, Scenario 4a has been considered against Scenario 4 and Scenario 5 as it is important to confirm that the infrastructure in place at Scenario 4 and Scenario 5 is sufficient to accommodate Scenario 4a conditions.
5	Future Year - Reference Case plus Development	Core Scenario (Transport Assessment and ES)	This is the existing road network and traffic, plus traffic associated with agreed committed developments plus Future Year related demands from the Site. This is based on the Full Wixams Station being open, EWR running between Oxford and Milton Keynes only with a shuttle bus service operating between Milton Keynes and the Site and the new A421 junction slips being complete. For clarity this considers full development of the Lake Zone and West Gateway Zone.
5a	Future Year - Reference Case plus Development plus full EWR	Transport Assessment Sensitivity Test	This is the existing road network and traffic, plus traffic associated with agreed committed developments plus Future Year related demands from the Site. This is based on the Full Wixams Station being open, EWR running between Oxford and Cambridge with a new station within the Site and the new A421 Junction being complete. For clarity this considers full development of the Lake Zone and West Gateway Zone. This has been undertaken as a sensitivity test, rather than a core scenario as there is no certainty regarding the completion of EWR.
5b	Future Year - Reference Case plus Development plus removal of Rail Discount Test	Transport Assessment Sensitivity Test	This is the existing road network and traffic plus traffic associated with agreed committed developments plus Future Year related demands from the Site. This is based on the Full Wixams Station being open, EWR running between Oxford and Milton Keynes only with a shuttle bus service operating between Milton Keynes and the Site and the A421 Junction being complete. For clarity this considers full development of the Lake Zone or West Gateway Zone. This assumes that there is no rail discount applied for visitors. This has been undertaken as a sensitivity test rather than a core scenario as the high volume of new rail passengers to the network serving the Proposed Development, means that assuming a form of rail discount for visitors is a reasonable cautious worst case assessment. Assessing the removal of this discount has simply been undertaken to examine the potential impacts of any resultant mode shift.

Scenario Number	Name for Traffic Assessment/ES	Test	Description
5c	Future Year - Reference Case plus Development - J13 as a constraint	Transport Assessment Sensitivity Test only	This is the existing road network and traffic plus traffic associated with agreed committed developments plus Future Year related demands from the Site. This is based on the Full Wixams Station being open, EWR running between Oxford and Milton Keynes only with a shuttle bus service operating between Milton Keynes and the Site and the new A421 Junction being complete. For clarity this considers full development of the Lake Zone or West Gateway Zone. This assumes that there is no improvement to Junction 13 of the M1.

CAUTIOUS WORST CASE SCENARIO FOR ASSESSMENT

- 3.3.24. As set out in **Chapter 2: Description of the Proposed Development (Volume 1)**, there is a requirement for flexibility in the consent for the Proposed Development to allow for future evolution of elements of the development in the East and West Gateway Zones, Lake Zone and Core Zone (e.g. to allow for new rides in the Theme Park in the future, as well as the upgrading of existing rides). Therefore, the ES takes a parameters-based approach, assessing a maximum physical envelope of the Proposed Development, informed by the drivers for flexibility, and defined by the maximum height parameters and the preliminary design of the proposed public road infrastructure.
- 3.3.25. The ES is based on an assessment of the cautious worst case scenario that provides a robust assessment of the likely significant effects ("*cautious worst case scenario*") arising from the Proposed Development parameters described in **Chapter 2: Description of the Proposed Development (Volume 1)** and **Appendix 2.1: Environmental Statement Basis of Assessment (Volume 3)**, recognising that the cautious worst case may vary by technical topic. By assessing parameters that describe the maximum extent of the Proposed Development and cautious worst case scenarios, a precautionary approach is taken in the ES with regards to identification of likely environmental effects and the corresponding mitigation measures.
- 3.3.26. Taking the above into consideration, the Primary Phase Opening Year cautious worst case scenario for each of the technical topic areas assumes that the road and rail infrastructure and elements of the ERC described in **Table 3-1** are operational.
- 3.3.27. All technical topic assessments assume that Manor Road Option A, which accommodates Network Rail's plan to replace the level road crossing with a road bridge, is the road configuration in the East Gateway Zone built and operational from Primary Phase Opening Year. This is the cautious worst case scenario. The implications of closing the level crossing without the delivery of a road bridge in its place, and the potential impact on the assignment of traffic locally, have been tested and presented in **Annex 6: Illustrative Highways Arrangement** of **Appendix 5.1: Transport Assessment (Volume 3)**. The conclusions of the test are that there is no substantial, and in most cases even noticeable, difference in the character of movement or performance of the road network as a result of closing the level crossing connection to vehicular traffic.

- 3.3.28. An area of land is safeguarded for EWR Station (as shown in the **Parameter Plan – East West Rail Safeguarded Land (Document Reference 1.15.0)**). If constructed, the EWR Station could occur in either the Primary Phase or the Full Buildout. The cautious worst case scenario for construction assumes that the EWR Station is constructed during the Primary Construction Phase. However, due to the current uncertainty about the timing for future phases of EWR between Bletchley/Milton Keynes and Cambridge, the cautious worst case for the Operational Phase, including the traffic modelled scenarios, does not include the operation of the new EWR Station in the West Gateway Zone. Details of the different traffic modelled scenarios are presented in **Table 3-3**.
- 3.3.29. In addition to the construction of the Primary Phase of the Proposed Development, there may be future shorter and smaller scale phases of construction to deliver ERC development in the Lake Zone and West Gateway Zone, segment 2 of Public Road B in the Lake Zone, or future developments of the Theme Park in the Core Zone. The cautious worst case scenario regarding construction is considered to be the five year Primary Phase Construction. This period includes the simultaneous construction of significant strategic transport infrastructure, such as the new A421 Junction, new roads, road bridge over a railway line, and the expanded Wixams Rail Station. Additionally, it involves the installation of essential utilities infrastructure, the Utility Compound, Site preparation works on the Core Zone and establishing the Ecological Enhancement Areas, all activities which will not need to be repeated at that scale again. Once this infrastructure is in place, future evolution of the Theme Park, or development of the ERC in the West Gateway Zone or Lake Zone will benefit from these elements. Therefore, it is anticipated that the environmental effects of future Construction Phases would be no greater than those during the Primary Phase Construction. Of the Primary Phase Construction, the Peak Construction Year is reflected in the traffic flow data presented in **Chapter 5: Traffic and Transport (Volume 1)**.
- 3.3.30. The cautious worst case scenario for Completion of Full Buildout assumes that the ERC is fully open, the expanded Wixams Rail Station is open, EWR is running between Oxford and Milton Keynes only with a shuttle bus service operating between Milton Keynes and the Site, as set out in **Chapter 2: Description of the Proposed Development (Volume 1)**.
- 3.3.31. Where further detail or nuance is required to define the cautious worst case scenario for a technical assessment, for example with regards to the position of particular noisy or tall elements of the Proposed Development, that is given in each topic chapter for clarity and transparency.
- 3.3.32. The Proposed Development contemplates utility works being undertaken by statutory Undertakers within the Site. It is assumed that relevant statutory Undertakers¹ will comply with their own standard construction management procedures when carrying out the works, as well as the management measures set out under this ES to manage the environmental effects of their works.
- 3.3.33. The Proposed Development also contemplates track laying with regards to expanded Wixams Rail Station. It is assumed that Network Rail, as the statutory Undertaker, will comply with its standard construction management procedures when carrying out these works.

¹ The persons (corporate or otherwise) who are permitted to carry out the Proposed Development (including their contractors and other persons appointed by them in connection with the carrying out of the Proposed Development).

- 3.3.34. As indicated in **Chapter 2: Description of the Proposed Development (Volume 1)**, any utilities infrastructure, rail or road works which are proposed to be constructed within the Site boundary are included within the Proposed Development. Although statutory Undertakers would normally have Permitted Development rights available to undertake such works, the grant of the planning permission will prevent the exercise of any such rights other than in certain circumstances set out below, such that these Undertakers will instead be bound by the terms and conditions of the planning approval and those works will instead form part of the Proposed Development. These works will therefore have been assessed for EIA purposes and any likely significant effects set out in this ES in the usual way.
- 3.3.35. The only circumstances where Permitted Development rights for statutory Undertakers and utility providers are intended to be available within the Site boundary are for works which are undertaken in the future but which fall outside of the definition of the Proposed Development, as those would be separate projects. Some non-exhaustive examples of these types of works within the Site include requirements by Network Rail to undertake track maintenance following construction of the relevant rail-related infrastructure; requirements of the local or national highways authorities to maintain or undertake works within adopted highways; and requirements of gas or electricity Undertakers to lay cables or pipes. Maintaining the rights for such Undertakers to do works in the future is necessary for their operational flexibility and statutory requirements.
- 3.3.36. The detail of these future works is not capable of definition at this stage and does not form part of the Proposed Development. They will also not fall within the definitions of Schedule 1 or Schedule 2 Development set out in the EIA Regulations (**Ref. 3.1**) (as such EIA development would not be permitted to proceed under The Town and Country Planning (General Permitted Development) Order 2015 (**Ref. 3.2**) meaning that full planning consent would be required and, in that scenario, the Undertakers would be required to prepare an EIA at the appropriate time in any event). As a result, there is no risk of the requirements of the EIA Regulations being avoided in future. It is proposed that a mechanism for maintaining such Permitted Development rights is dealt with in the planning permission.
- 3.3.37. As indicated in **Chapter 2: Description of the Proposed Development (Volume 1)**, utility and rail works proposed to be constructed outside of the Site boundary are inchoate and do not form part of the Proposed Development, with the assessment of the cumulative effects of these works in combination with the Proposed Development instead being undertaken (and further detail on the approach to that assessment is included at **Chapter 18: Cumulative Effects (Volume 1)**).

ASSESSMENT CRITERIA

- 3.3.38. The assessment of effects considers effects during the Construction (including demolition) and Operational Phases.
- 3.3.39. Several criteria are used to determine if the potential effects of the Proposed Development are 'significant'. The effects are assessed quantitatively wherever possible. The significance rating takes account of the following criteria as appropriate:
- Likelihood of occurrence;
 - Geographical extent;
 - Adherence of the Proposed Development to international, national and local standards;
 - Sensitivity/value of the receiving environment or affected receptors;

- Whether the effect is temporary or permanent;
- Whether the effect is short, medium, or long-term in duration;
- Whether the effect is reversible or irreversible;
- Inter-relationship between effects (both cumulatively and in terms of potential effect interactions); and
- The engagement responses.

3.3.40. Residual effects, following the implementation of mitigation measures, are identified in each environmental topic chapter. The classification of effects reflects judgements as to the importance or sensitivity of the affected receptor(s) and the nature and magnitude of the predicted changes. For example, a large adverse impact on a feature or site of low importance/sensitivity will comprise a lower classification of effect than the same impact on a feature or site of high importance/sensitivity.

3.3.41. The following terms have been used to classify effects within each of the environmental topic chapters unless otherwise stated:

- Major positive or adverse effect – where the Proposed Development would cause a large improvement (positive) or deterioration (adverse) to the existing environment;
- Moderate positive or adverse effect – where the Proposed Development would cause a noticeable improvement (positive) or deterioration (adverse) to the existing environment;
- Minor positive or adverse effect – where the Proposed Development would cause a small improvement (positive) or deterioration (adverse) to the existing environment; and
- Negligible – no discernible improvement or deterioration to the existing environment as a result of the development.

3.3.42. Effects described as moderate or major (positive or adverse) are deemed to be significant for this assessment. Effects that are minor (positive or adverse), or negligible, are considered not significant. **Chapter 19: Summary of Residual Likely Significant Effects (Volume 1)** sets out all of the significant effects identified prior to mitigation, proposed mitigation measures and the residual effects of the Proposed Development.

3.3.43. A distinction is made between direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and adverse effects of the Proposed Development. The matrix provided in **Table 3-4** is used as a basis in the EIA to determine the significance of any given effect.

3.3.44. A matrix setting out the general approach to classifying the significance of effects is set out below in **Table 3-4**. This general approach has been adapted by certain technical disciplines to the requirements of their assessments, including where they are required to follow topic-specific guidance or criteria for determining significance. Where this is the case, the criteria used is presented in **Appendix 3.2: Significance Criteria for All ES Technical Topics (Volume 3)** or in the relevant ES chapters and supporting appendices where appropriate.

Table 3-4 – Matrix for Classifying Effects

		Sensitivity of Receptor/Receiving environment to change			
		High	Medium	Low	Negligible
Magnitude of Change	High	Major	Major	Moderate	Negligible
	Medium	Major	Moderate	Minor to Moderate	Negligible
	Low	Moderate	Minor to Moderate	Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

APPROACH TO MITIGATION

- 3.3.45. Where likely significant adverse effects (effects identified as moderate or major adverse) have been identified in the EIA, measures to avoid, prevent or reduce and, if possible, offset these likely significant adverse effects on the environment are described.
- 3.3.46. Schedule 4, paragraph 7 of the EIA Regulations (**Ref. 3.1**) states that an ES should include:
"A description of the measures envisaged to avoid, present, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description should explain the extent, to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and should cover both the construction and operational phases".
- 3.3.47. Mitigation measures are also described for minor adverse effects.
- 3.3.48. Monitoring and mitigation measures are reported in technical chapters (**Chapters 5 to 17**). The monitoring and mitigation measures reported in this ES are secured by the controlling documents as detailed in the **Proposed Operative and Controlling Documents (Document Reference 1.16.0)** and the **Proposed Conditions (Document Reference 1.5.0)**.
- 3.3.49. In accordance with Institute of Environmental Management and Assessment guidance documents (**Ref. 3.3**), three types of mitigation have been identified and used within the ES: primary; secondary; and tertiary. Primary mitigation (also referred to as embedded mitigation) is that inherent within the design, for example reducing the height of a development to reduce visual impact; Secondary mitigation (also referred to as additional mitigation) is that which is foreseeable to achieve an anticipated outcome such as reducing/minimising effects through implementation of an environmental management plan; and tertiary mitigation are actions taken that would occur with or without input from the EIA feeding into the design process for example, considerate contractor's practices that manage activities which have potential nuisance effects.
- 3.3.50. As part of the design evolution process, the Proposed Development has evolved to respond to Site sensitivities and project requirements, presented in **Chapter 4: Consideration of Reasonable Alternatives (Volume 1)**.

APPROACH TO CUMULATIVE ASSESSMENT

- 3.3.51. The EIA Regulations (**Ref. 3.1**) require that the likely significant cumulative environmental effects of a development be considered. Consideration has been given to the potential cumulative effects of the Proposed Development in combination with other Committed Developments, which are reported in **Appendix 18.1: Long List of Committed Developments (Volume 3)** and which form the assessment in **Chapter 18: Cumulative Effects (Volume 1)**. The chapter sets out the interaction and combination of environmental effects of the Proposed Development in combination with other Committed Developments affecting the same receptor “Inter-Project Effects”.
- 3.3.52. The interaction and combination of environmental effects from a number of environmental topics affecting the same receptor, either within the Site or in the local surrounding area “Intra-Project Effects” are considered within the relevant topic chapters.
- 3.3.53. Further reference to the approach to the cumulative assessment is set out in **Chapter 18: Cumulative Effects (Volume 1)**.
- 3.3.54. A cumulative assessment of the impact of the utilities and/or rail-related works which will be needed outside of the Site boundary combined with the Proposed Development has (to the extent possible based on the initial indicative information currently available and reasonable assumptions as to those works) been undertaken. In this way whilst the off-site connections are insufficiently choate to be considered as part of the same project, the combined cumulative effects can be assessed at a commensurably high level.
- 3.3.55. With regards to traffic and transport, as explained in **Chapter 5: Traffic and Transport (Volume 1)**, the traffic and transport assessments are cumulative assessments as these include growth from specific committed schemes. The growth generated by committed schemes and the derivation of the traffic flows for Primary Phase Opening Year and Completion of Full Build Out are described in detail in the Transport Assessment (see **Appendix 5.1: Transport Assessment (Volume 3)**), and its associated appendices, including **Annex 10: Paramics Reports (Volume 3)**.

WASTE MANAGEMENT

- 3.3.56. Section 3.15 of **Appendix 2.3: Outline Construction Environmental Management Plan (Volume 3)** sets out the approach to dealing with waste during the Construction Phase.
- 3.3.57. The approach to dealing with waste during the Operational Phase is governed by legislation regulated by the Environment Agency and Department for Environment Food and Rural Affairs .
- 3.3.58. **The Separation of Waste (England) Regulations 2024 (Ref. 3.4)** - Known as ‘Simpler Recycling’, the Regulations describe the recyclable household waste and the recyclable relevant waste that is similar in composition to household waste that must be collected separately from households, non-domestic premises and businesses. The regulation aims to streamline the waste management processes and make recycling more efficient by requiring the separation of waste at source.
- 3.3.59. **Waste Management, The Duty of Care Code of Practice (2018 update) (Ref. 3.5)** - This code of practice replaces the 1996 Code and is pursuant to Section 34(9) of the Environmental Protection Act 1990 (**Ref. 3.6**). It sets out practical guidance on how to meet waste duty of care.

- 3.3.60. **The Waste (England and Wales) Regulations 2011 (as amended) (Ref. 3.7)** - From 1 January 2015, waste collection authorities must collect waste paper, metal, plastic and glass separately. It also imposes a duty on waste collection authorities, from that date, when planning for the collection of such waste, to ensure that those arrangements are by way of separate collection.
- 3.3.61. As such no assessment is undertaken of waste during the Operational Phase.

REPORT TO INFORM HABITAT REGULATIONS SCREENING ASSESSMENT

- 3.3.62. Having due regard to Regulation 27 of the EIA Regulations (**Ref. 3.1**), a Habitat Regulations Assessment (HRA) Screening exercise has been carried out in parallel with production of the EIA for the Proposed Development and is presented in the **Report to Inform Habitats Regulations Screening Assessment (Document Reference 6.13.0)**. In particular, the ES assessment work relating to ecology and nature conservation (in **Chapter 6: Ecology and Nature Conservation (Volume 1)**), hydrology (in **Chapter 12: Water Resources (Volume 1)**), and air quality (in **Chapter 8: Air Quality (Volume 1)**) has informed and was informed by the HRA screening.

3.4. GENERAL ASSUMPTIONS AND LIMITATIONS

- 3.4.1. Assumptions and limitations relating to the EIA process include the following:
- All construction works relating to the expansion of Wixams Rail Station such as platforms, rail lines etc will be undertaken by Network Rail in line with relevant governance, design and health and safety (H&S) requirements;
 - National Highways will construct the new A421 Junction and access road into the Core Zone in line with relevant governance, design and H&S requirements;
 - As shown on **Parameter Plans - Active Travel (Document Reference 1.12.0)**, Public Rights of Way (PRoWs) 1 and 2 will be permanently stopped up prior to construction commencing. Following construction, there will be a new Public Road A together with an active travel network as shown on **Parameter Plans - Active Travel (Document Reference 1.12.0)**, which denotes which routes will be adopted as PRoWs and which will remain within the control of UDX (private control). PRoWs A1/8 will be temporarily closed before construction commences. Following construction, it is assumed that PRoW A1/8 will revert to existing conditions (as at 2025);
 - Any kennel services provided would be for the use of ERC visitors and staff only and not open to the general public. Such facilities would be subject to licensing requirements that regulate the environmental and welfare needs of the animals and as such they are scoped out of assessment within the EIA;
 - Other than Vine Cottages 1 and 2, which are due to be demolished, the EIA has assumed, as a cautious worst case scenario, that dwellings within the Site boundary will remain in residential use. **Appendix 3.3: Assessment of Residential Properties in the Site boundary (Volume 3)** considers whether there would be new or different likely significant effects, and changes to mitigation, should these dwellings not continue in residential use;

- It is understood that the planning permission for the Proposed Development would extinguish permitted development rights in relation to the dwellings within the Site (to construction a small extension for example). Should permitted development rights be retained in relation to these dwellings then it is considered unlikely that that there would be likely significant cumulative effects with the Proposed Development or that the findings of this ES would be materially affected; and
- The assessment process is based on a range of design parameters and will reflect a cautious worst case scenario to account for design flexibility.

3.4.2. Further assumptions and limitations are set out in each technical ES chapter.

3.5. REFERENCES

- **Ref. 3.1:** HM Government (2017) *The Town and Country Planning (Environmental Impact Assessment) Regulations 2017*. Available at: <https://www.legislation.gov.uk/uksi/2017/571/contents> [Accessed: 06 June 2025].
- **Ref. 3.2:** HM Government (2015) *The Town and Country Planning (General Permitted Development) (England) Order 2015*. Available at: <https://www.legislation.gov.uk/uksi/2015/596/contents> [Accessed: 06 June 2025].
- **Ref. 3.3:** Institute of Environmental Management and Assessment (2015) *Environmental Impact Assessment Guide to Shaping Quality Development*. Available at: <https://www.iaia.org/pdf/wab/IEMA%20Guidance%20Documents%20EIA%20Guide%20to%20Shaping%20Quality%20Development%20V6.pdf> [Accessed: 06 June 2025].
- **Ref. 3.4:** HM Government (2024) *The Separation of Waste (England) Regulations 2024*. Available at: <https://www.legislation.gov.uk/uksi/2024/666/contents/made> [Accessed: 06 June 2025].
- **Ref. 3.5:** Department for Environment, Food and Rural Affairs and Environment Agency (2018) *Waste duty of care code of practice*. Available at: https://assets.publishing.service.gov.uk/media/6274d74bd3bf7f5e3ade6090/Waste_duty_of_care_code_of_practice.pdf [Accessed: 06 June 2025].
- **Ref. 3.6:** HM Government (1990) *Environmental Protection Act 1990*. Available at: <https://www.legislation.gov.uk/ukpga/1990/43/contents> [Accessed: 06 June 2025].
- **Ref. 3.7:** HM Government (2011) *The Waste (England and Wales) Regulations 2011*. Available at: <https://www.legislation.gov.uk/uksi/2011/988/contents> [Accessed: 06 June 2025].



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