

IDI Gazeley UK Ltd

Magna Park Extension: Hybrid Application

ES Chapter 13: Summary & Impact Interactions

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List of Technical Appendices in Environmental Statement: Volume 3

N/A

13 SUMMARY & IMPACT INTERACTIONS

Summary of Residual Impacts

- 13.1 The residual impacts are those effects that remain post-mitigation. Each of the technical chapters contains a detailed assessment of the residual impacts in respect of both the construction and operational phases of development. A range of measures have been incorporated in the scheme to mitigate potential negative effects.
- 13.2 The residual impacts are summarised in Table 13.1 and a degree of change is inevitable for a proposal of this scale. Some adverse impacts are identified, however they need to be considered in the temporal and geographical context of the proposed development. To this end, none of the impacts is considered to be of more than local significance and is therefore considered to be acceptable. For example, an adverse effect during the construction phase would be short lived and the overall significance would be low. Similarly, an effect that is predicted to be adverse during the operational phase may relate to a limited area and would also be considered to be insignificant.
- 13.3 A number of beneficial residual impacts are identified in respect of socio-economic effects and traffic. Chapters 5 – 12 address predicted effects, and their significance, in detail and should be the starting point for any analysis of effects.

Table 13.1: Summary of Residual Effects

Topic	Description of Effects	Significance of Residual Effects
Socio-economics	<p>Construction:</p> <ul style="list-style-type: none"> ▪ Direct employment generated at the site ▪ Indirect employment generated at the site ▪ Training opportunities for construction operatives 	<ul style="list-style-type: none"> ▪ Moderate Beneficial ▪ Moderate Beneficial ▪ Moderate Beneficial
	<p>Operational:</p> <ul style="list-style-type: none"> ▪ Direct employment in logistics industries ▪ Indirect employment in the in the MPL supply chain ▪ Additional housing and social infrastructure requirements as a result of increased employment at the site ▪ Logistics Institute of Technology ▪ Labour market impacts opportunities at each skill level; a new permanent workforce created; lower levels of out-commuting ▪ Increased health and well-being as result of take-up of employment opportunities. 	<ul style="list-style-type: none"> ▪ Major Beneficial ▪ Major Beneficial ▪ Not significant ▪ Major Beneficial ▪ Major Beneficial ▪ Minor Beneficial

Topic	Description of Effects	Significance of Residual Effects
Traffic & Transport	<p>Construction:</p> <ul style="list-style-type: none"> ▪ Local highway network ▪ Pedestrian & cyclist amenity – Mere Lane ▪ Pedestrian & cyclist amenity – all other sections of the local highway network ▪ Public Transport 	<ul style="list-style-type: none"> ▪ Negligible ▪ Major Adverse ▪ Negligible ▪ Negligible
	<p>Operational:</p> <ul style="list-style-type: none"> ▪ Local highway network ▪ Pedestrian & cyclist amenity – Mere Lane ▪ Pedestrian & cyclist amenity – A5, A4303 & A426 ▪ Pedestrian & cyclist amenity – all other sections of the local highway network ▪ Public Transport 	<ul style="list-style-type: none"> ▪ Negligible ▪ Major Beneficial ▪ Negligible ▪ Negligible ▪ Major Adverse
Noise & Vibration	<p>Construction:</p> <ul style="list-style-type: none"> ▪ Construction noise and vibration. 	<ul style="list-style-type: none"> ▪ Negligible
	<p>Operational:</p> <ul style="list-style-type: none"> ▪ Operational Noise (Zone 1) ▪ Operational Noise (Zone 2) ▪ Road traffic noise. 	<ul style="list-style-type: none"> ▪ Negligible ▪ Minor/Moderate ▪ Negligible
Hydrology & Flood Risk	<p>Construction:</p> <ul style="list-style-type: none"> ▪ Water quality. ▪ Biodiversity ▪ Conveyance of flow and materials (surface water) ▪ Active Floodplain ▪ Recreation, amenity and heritage. 	<ul style="list-style-type: none"> ▪ Moderate Adverse ▪ Moderate Adverse ▪ Moderate Adverse ▪ Moderate Adverse ▪ Minor Adverse
	<p>Operation:</p> <ul style="list-style-type: none"> ▪ Water quality. ▪ Conveyance of flow and materials (surface water) ▪ Recreation, amenity and heritage. 	<ul style="list-style-type: none"> ▪ Moderate Adverse ▪ Negligible ▪ Minor

Topic	Description of Effects	Significance of Residual Effects
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Landscape & Visual</p>	<p>Construction:</p> <p>Visual Receptors</p> <ul style="list-style-type: none"> ▪ V1a-b.High Cross ▪ V2a and 2b.Claybrooke Grange/Frolesworth Road ▪ V3. Woodway Lane ▪ V3-(Night) Woodway Lane Residents ▪ V4ai Visitors to St Peter’s Church Claybrooke Parva ▪ V4aii-4aiv. South of Claybrooke Parva village ▪ V4aii-(Night) Claybrooke Parva Community ▪ V4bi-4bii Footpath W92 and the White House ▪ V4ci-4cvi Bridleway W86 ▪ V5ai-5aii Visitors to the Ullesthorpe Moat SM ▪ V5aiii Visitors to Ullesthorpe open access land ▪ V6ai-6aiv Footpath W89 South west of Ullesthorpe ▪ V6b.South of Ullesthorpe ▪ V7.Bittesby Scheduled Monument ▪ V8ai South –east edge of Ullesthorpe/Lutterworth Rd ▪ V8ai-(Night). The Community of Ullesthorpe ▪ V8aii -8aiii Ullesthorpe Windmill ▪ V8b Lutterworth Road ▪ V9a-c.BridlewayW88 WilleyChuckey Hall (Sequential) ▪ V10a-b.south of Ashby Parva ▪ V11.Argosy Way Magna Park ▪ V12a-f. Mere Lane (Sequential) ▪ V13. Footpath West of Norwood Farm ▪ V14a. Public Footpath to the west of Willey ▪ V14b. Public Footpath to the east of Willey ▪ V14c&14d Main Road in Willey 	<ul style="list-style-type: none"> ▪ Minor to Moderate Adverse ▪ Minor Adverse ▪ Moderate to Major Adverse ▪ Minor to Moderate Adverse ▪ Minor to moderate Adverse ▪ V4aii &4aiv– Moderate to Major Adverse, 4aiii-Moderate Adverse ▪ Negligible to Minor (Adverse) ▪ Walkers 4bi Moderate Adverse, 4bii- Major Adverse, Resident East Major to Moderate, Resident to south –Minor to Moderate Adverse. ▪ 4ci- Moderate Adverse,4cii4cvi-Major Adverse ▪ 5ai – Neutral 5aii- Moderate to Major Adverse ▪ Moderate Adverse ▪ 6ai - Moderate to Major Adverse, 6aii&6aiii Moderate Adverse, 6aiv-Major Adverse ▪ Major to Moderate Adverse ▪ Major to Moderate Adverse ▪ Moderate Adverse) ▪ Minor Adverse to Neutral ▪ 8aii &8aiii- Moderate Adverse ▪ Resident– Moderate Adverse, Road users – Minor to Moderate Adverse ▪ 9a&9bi – Major Adverse, 9bii- Major to Moderate Adverse, 9c- Moderate Adverse ▪ Minor to Moderate Adverse ▪ Minor Adverse ▪ Road users Moderate Adverse, Horse riders Moderate Adverse ▪ Moderate Adverse ▪ Moderate Adverse ▪ Moderate Adverse ▪ Residents-Minor to Moderate Adverse, Road users Moderate Adverse

Topic	Description of Effects	Significance of Residual Effects
	<ul style="list-style-type: none"> ▪ V14c & 14d- (Night) Main Road in Willey ▪ V14e. St Leonard’s Churchyard, Willey ▪ V15. Public Footpath east of Willey Fields Farm ▪ V16a-16eii. A5 corridor. & land adjacent/incl. FPW89 (Sequential) ▪ V16b&16d-(Night) The A5, the Community of Willey ▪ V17. From the Lutterworth Road Zone 2 ▪ V18. From the Lutterworth Road ▪ V19. From the edge of the A5 ▪ V.19 From the edge of the A5- (Night) ▪ V20 Public bridleway X32 from alongside Moorbarns ▪ V21 Public bridleway X32 at end of Moorbarns Lane ▪ V22 A4303 looking south <u>Landscape Receptor</u> Lutterworth Lowlands (Zones 1 & 2) ▪ Zone 1 – Part to the south east of Mere Lane ▪ Zone 2 – Part to the south of Magna Park Upper Soar (Zone 1 only) ▪ Low lying clay vale farmland with gentle ridges Landscape Type ▪ Soar tributary flat floodplains and terrace Landscape Type High Cross Plateau- Open Plateau (Zones 1 & 2) ▪ Part- offsite to the west of the A5 potentially effected by Zone 1. ▪ Part- offsite to the west of the A5 potentially effected by Zone 2 Trees 378 trees on the site and surveyed; substantial number of those to be retained need treatment and better future 	<ul style="list-style-type: none"> ▪ Road users - Minor Adverse, Community of Willey Minor Adverse ▪ Minor to Moderate Adverse ▪ Moderate to Major Adverse ▪ View 16a Major Adverse, View 16b-Major Adverse, View 16c Major Adverse, View 16 Moderate to Major Adverse View 16ei and View 16eii Moderate Adverse ▪ Residents-16b Neutral, 16d-Minor Adverse, Road users 16b Moderate Adverse, 16d –Minor Adverse ▪ Minor to Moderate Adverse Zone 2 ▪ Minor Adverse ▪ Moderate Adverse ▪ Minor Adverse ▪ Moderate Adverse ▪ Minor Adverse ▪ Moderate Adverse ▪ Minor Adverse to negligible overall ▪ Minor to Moderate Adverse ▪ Moderate Adverse effects overall Moderate to Minor reducing Minor in Mid-Term overall ▪ Moderate to minor Adverse effects overall ▪ Moderate Adverse ▪ Minor Adverse

Topic	Description of Effects	Significance of Residual Effects
	<p>management which the Arboricultural Report itemises and describes 174 will need to be felled. Of these:</p> <ul style="list-style-type: none"> • 2 are Cat A trees (one A1, one A2), both rated as having high visual amenity • 31 are Cat B trees, of which only 3 are B1 trees and are rated as having moderate visual amenity, and 9 are category B2 trees all of which are rated as having high amenity value • 3 are Cat U trees, 1 each rated as having high, moderate or low amenity value • The remaining re : <ul style="list-style-type: none"> - category C (133), of which: 11 are C1 of which 9 are rated as having high amenity value; 1 is C1 with moderate amenity value; 96 are C2 with moderate amenity value and the remainder are C2 with low amenity value - category U or C1/U, CS/U (5) rated low or moderate <p>Only 1 is surveyed as having bat roost potential, and the impact of felling will be mitigated by the provision of bat houses.</p> <p>The landscape proposals will plant more trees than will be lost – and all will aim to be native Cat A trees. Conditions for construction phase to prevent harm to retained trees, the provision of delivery phasing plan for the protection of retained trees and incorporation of the maintenance of the remainder in the landscape management plan under the S106.</p>	
	<p>Operation:</p> <p><u>Landscape Receptor</u> Lutterworth Lowlands (Zones 1 & 2)</p> <ul style="list-style-type: none"> ▪ Zone 1 – Part to the south east of Mere Lane ▪ Zone 2 – Part to the south of Magna Park <p>Upper Soar (Zone 1 only)</p> <ul style="list-style-type: none"> ▪ Low lying clay vale farmland with gentle ridges Landscape Type ▪ Soar tributary flat floodplains and terrace Landscape Type <p>High Cross Plateau- Open Plateau (Zones 1 & 2)</p> <ul style="list-style-type: none"> ▪ Part- offsite to the west of the A5 potentially effected by Zone 1. ▪ Part- offsite to the west of the A5 potentially effected by Zone 2 	<ul style="list-style-type: none"> ▪ Minor Adverse to negligible overall ▪ Minor Adverse reducing to Minor Adverse to Negligible in the Mid-Term ▪ Moderate reducing to Moderate to Minor adverse effect, in Mid-Term overall. ▪ Moderate to Minor reducing Minor in Mid-Term overall ▪ Moderate Adverse reducing to Minor to moderate (Adverse) in the mid-term ▪ Minor Adverse reducing to Negligible in the mid-term

Topic	Description of Effects	Significance of Residual Effects
	<p>Visual Receptors</p> <ul style="list-style-type: none"> ▪ V1a-b.High Cross ▪ V2a and 2b.Claybrooke Grange/Frolesworth Road ▪ V3. Woodway Lane ▪ V3-(Night) Woodway Lane Residents ▪ V4ai Visitors to St Peter’s Church Claybrooke Parva ▪ V4aii-4aiv. South of Claybrooke Parva village ▪ V4aii-(Night) Claybrooke Parva Community ▪ V4bi-4bii Footpath W92 and the White House ▪ V4ci-4cvi Bridleway W86 ▪ V5ai-5aai Visitors to the Ullesthorpe Moat SM ▪ V5aiii Visitors to Ullesthorpe open access land ▪ V6ai-6aiv Footpath W89 South west of Ullesthorpe ▪ V6b.South of Ullesthorpe ▪ V7.Bittesby Scheduled Monument 	<ul style="list-style-type: none"> ▪ Minor Adverse ▪ Minor Adverse ▪ Major to moderate in Shorter Term then Moderate in the Mid-Term Adverse Minor to Moderate Adverse ▪ Minor Adverse ▪ Minor to Moderate Adverse ▪ View 4aii – Moderate Adverse, View 4aiii &4aiv Minor to Moderate Adverse, 4aiii-Moderate Adverse ▪ Neutral ▪ Walkers- 4bi- Minor to Moderate Adverse, 4bii Major Adverse reducing to Major to Moderate in Mid-Term, Resident to east-Major to Moderate Adverse in shorter term, becoming Moderate Adverse in Mid-Term, Resident to south- Minor Adverse ▪ 4ci-Minor to Moderate (Adverse),4cii-4civ- Moderate to Minor to Minor Adverse,4cv&4cvi – Major to Moderate reducing to Moderate Adverse in Mid-Term 5ai Negligible, 5aii-Moderate to Minor reducing to Minor Adverse ▪ Moderate Adverse ▪ 6ai, -Moderate to Major Adverse becoming Moderate, 6aii and 6aiii- Moderate 6aiv- Major Adverse reducing to Moderate Adverse, Mid-Term ▪ Moderate Adverse reducing to Minor to Moderate Adverse, Minor in Long Term ▪ Major to moderate Adverse in shorter term, reducing to Moderate from one locality, reducing to Minor to Moderate Adverse overall for the complete SM site in the Mid-Term

Topic	Description of Effects	Significance of Residual Effects
	<ul style="list-style-type: none"> ▪ V8ai South –east edge of Ullesthorpe/Lutterworth Rd ▪ V8ai-(Night). The Community of Ullesthorpe ▪ V8aii -8aiii Ullesthorpe Windmill ▪ V8b Lutterworth Road ▪ V9a-c.BridlewayW88 WilleyChuckey Hall (Sequential) ▪ V10a-b.south of Ashby Parva ▪ V11.Argosy Way Magna Park ▪ V12a-f. Mere Lane (Sequential) ▪ V13. Footpath West of Norwood Farm ▪ V14a. Public Footpath to the west of Willey ▪ V14b. Public Footpath to the east of Willey ▪ V14c&14d Main Road in Willey ▪ V14c & 14d- (Night) Main Road in Willey ▪ V14e. St Leonard’s Churchyard,Willey ▪ V15. Public Footpath east of Willey Fields Farm 	<ul style="list-style-type: none"> ▪ Moderate Adverse reducing to Minor Adverse reducing to Minor Mid-Term ▪ Minor Adverse reducing to Neutral ▪ Minor to Moderate reducing to Minor Adverse Mid-Term ▪ Resident Moderate Adverse, Road users Moderate to Minor Adverse ▪ 9a&9bi – Major to moderate Adverse,9bii- Moderate to Minor Adverse 9c-Moderate to Minor Adverse, in Mid-Term ▪ Minor Adverse ▪ Minor Adverse ▪ Road users- Minor to Moderate Adverse),Horse riders Moderate Adverse ▪ Minor to Moderate Adverse Mid-Term, then Minor Adverse in Long Term ▪ Minor to Moderate Adverse reducing to Minor Adverse in the Mid-Term ▪ Moderate reducing to Moderate to Minor in Mid-Term ▪ Residents-Minor Adverse, Road users Moderate Adverse in Mid-Term ▪ Community of Willey Moderate Reducing to Minor to Moderate Adverse, Road users – Moderate reducing to Minor to Moderate Adverse, all in the Mid-Term ▪ Moderate to Minor Adverse reducing to Minor Adverse in the Mid-Term ▪ Moderate reducing to Moderate to Minor Adverse in the Medium Term

Topic	Description of Effects	Significance of Residual Effects
	<ul style="list-style-type: none"> ▪ V16a-16eii.A5 corridor. & land adjacent/incl. FPW89 (Sequential) ▪ V16b&16d-(Night) The A5, the Community of Willey ▪ V17. From the Lutterworth Road Zone 2 ▪ V18. From the Lutterworth Road ▪ V19. From the edge of the A5 ▪ V.19 From the edge of the A5- (Night) ▪ V20 Public bridleway X32 from alongside Moorbarns ▪ V21 Public bridleway X32 at end of Moorbarns Lane ▪ V22 A4303 looking south 	<ul style="list-style-type: none"> ▪ View 16a –Major to Moderate Adverse, View 16b and 16c-Major –Moderate in shorter term, then Moderate Adverse, View 16d-Major to Moderate reducing to Moderate Adverse, View 16ei and View 16 eii – Moderate reducing to Moderate to Minor Adverse, all in the Mid-Term. ▪ Residents/Community of Willey – 16bNeutral*,16d-Minor to Moderate, Minor Adverse in Mid-Term, Road users – 16b-Moderate to Minor reducing to Minor, 16d- Moderate Adverse reducing to Moderate to Minor in the Mid-Term ▪ Moderate to Minor reducing to Minor Adverse , in the Mid-Term Zone 2 ▪ Minor Adverse reducing to Minor to Negligible in the Mid-Term ▪ Moderate reducing to Minor to Moderate Adverse in the Mid-Term ▪ Moderate reducing to Moderate to Minor Adverse in the Mid Term ▪ Minor Adverse in the Mid-Term ▪ Minor Adverse to Negligible in the Mid-Term) ▪ Moderate to Minor Adverse in the Mid-Term
Air Quality	<p>Construction:</p> <ul style="list-style-type: none"> ▪ Construction air quality and dust 	<p>Not significant</p>
	<p>Operational:</p> <ul style="list-style-type: none"> ▪ Operational air quality in 2016 ▪ Operational air quality in 2021 ▪ Operational air quality in 2031 	<ul style="list-style-type: none"> ▪ Minor Adverse ▪ Slight to Moderate ▪ Negligible

Topic	Description of Effects	Significance of Residual Effects
Heritage & Archaeology	<p>Construction:</p> <p>Designated Assets</p> <ul style="list-style-type: none"> ▪ D1: Bittesby Deserted Medieval Village ▪ D2: Church of St Leonard, Willey ▪ D3: Cottage Nurseries, Willey ▪ D4: Ullesthorpe Windmill, Ullesthorpe ▪ D5: Claybrook Mill ▪ D6: Ullesthorpe Conservation Area ▪ D7: Moat, fishponds and village earthworks Ullesthorpe ▪ D8: Church of St Peter, Claybrooke Parva ▪ D9: Home Farm House, Ullesthorpe ▪ D10: Claybrook Parva Conservation Area <p>Non Designated Assets</p> <ul style="list-style-type: none"> ▪ Heritage Asset A1 ▪ Heritage Asset A2 ▪ Heritage Asset A3 ▪ Heritage Asset A4 ▪ Heritage Asset A5 ▪ Heritage Asset A6 ▪ Heritage Asset A7 ▪ Heritage Asset A8 ▪ Heritage Asset A9 ▪ Heritage Asset A10 ▪ Heritage Asset A11 ▪ Heritage Asset A12 ▪ Heritage Asset A13 ▪ Heritage Asset A14 ▪ Heritage Asset A15 ▪ Heritage Asset A16 ▪ Heritage Asset A17 ▪ Heritage Asset A18 ▪ Heritage Asset A19 ▪ Heritage Asset A20 ▪ Heritage Asset A21 ▪ Heritage Asset A22 ▪ Heritage Asset A23 ▪ Heritage Asset HB1 ▪ Heritage Asset HB2 ▪ Heritage Asset HB3 	<ul style="list-style-type: none"> ▪ Moderate Adverse ▪ Negligible ▪ Negligible ▪ Negligible ▪ Negligible ▪ Negligible ▪ Moderate/Minor Adverse ▪ Negligible ▪ Negligible ▪ Negligible ▪ Moderate Adverse ▪ Moderate Adverse ▪ Moderate Adverse ▪ Moderate Adverse ▪ Moderate/Minor ▪ Moderate Adverse ▪ Moderate/Minor ▪ Moderate/Minor ▪ Moderate/Minor ▪ Moderate Adverse ▪ Moderate Adverse ▪ Moderate Adverse ▪ Moderate Adverse ▪ Moderate Adverse ▪ Moderate Adverse ▪ Moderate Adverse ▪ Moderate Adverse ▪ Moderate Adverse ▪ Moderate Adverse ▪ Moderate Adverse ▪ Moderate Adverse ▪ Moderate Adverse ▪ Moderate Adverse ▪ Moderate Adverse ▪ Moderate Adverse ▪ Moderate Adverse ▪ Moderate Adverse ▪ Moderate Adverse ▪ Moderate Adverse ▪ Moderate Adverse
	<p>Operational:</p> <p>Designated Assets</p> <ul style="list-style-type: none"> ▪ D1: Bittesby Deserted Medieval Village ▪ D2: Church of St Leonard, Willey ▪ D3: Cottage Nurseries, Willey ▪ D4: Ullesthorpe Windmill, Ullesthorpe ▪ D5: Claybrook Mill ▪ D6: Ullesthorpe Conservation Area ▪ D7: Moat, fishponds and village earthworks Ullesthorpe ▪ D8: Church of St Peter, Claybrooke Parva 	<ul style="list-style-type: none"> ▪ Moderate Adverse ▪ Negligible ▪ Negligible ▪ Minor Adverse ▪ Negligible ▪ Negligible ▪ Negligible ▪ Negligible

Topic	Description of Effects	Significance of Residual Effects
	<ul style="list-style-type: none"> ▪ D9: Home Farm House, Ullesthorpe ▪ D10: Claybrook Parva Conservation Area <p>Non Designated Assets</p> <ul style="list-style-type: none"> ▪ Heritage Asset A1 ▪ Heritage Asset A2 ▪ Heritage Asset A3 ▪ Heritage Asset A4 ▪ Heritage Asset A5 ▪ Heritage Asset A6 ▪ Heritage Asset A7 ▪ Heritage Asset A8 ▪ Heritage Asset A9 ▪ Heritage Asset A10 ▪ Heritage Asset A11 ▪ Heritage Asset A12 ▪ Heritage Asset A13 ▪ Heritage Asset A14 ▪ Heritage Asset A15 ▪ Heritage Asset A16 ▪ Heritage Asset A17 ▪ Heritage Asset A18 ▪ Heritage Asset A19 ▪ Heritage Asset A20 ▪ Heritage Asset A21 ▪ Heritage Asset A22 ▪ Heritage Asset A23 ▪ Heritage Asset HB1 ▪ Heritage Asset HB2 ▪ Heritage Asset HB3 	<ul style="list-style-type: none"> ▪ Negligible ▪ Negligible <ul style="list-style-type: none"> ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Large Beneficial ▪ Minor ▪ Large Beneficial ▪ Large Beneficial ▪ Large Beneficial ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse
Ecology & Nature Conservation	<p>Construction:</p> <ul style="list-style-type: none"> ▪ Non-statutory designated sites ▪ Habitats ▪ Birds ▪ Great Crested Newt ▪ Bats ▪ Badgers ▪ Otter ▪ Brown Hare ▪ Common Toad 	<ul style="list-style-type: none"> ▪ Negligible ▪ Negligible ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Minor Adverse ▪ Negligible ▪ Negligible ▪ Negligible ▪ Minor adverse
	<p>Operational:</p> <ul style="list-style-type: none"> ▪ Non-statutory designated sites ▪ Habitats ▪ Birds ▪ Great Crested Newts 	<ul style="list-style-type: none"> ▪ Negligible ▪ Minor Adverse ▪ Negligible ▪ Minor Adverse

Topic	Description of Effects	Significance of Residual Effects
	<ul style="list-style-type: none"> ▪ Bats ▪ Badgers ▪ Otter ▪ Common Toad 	<ul style="list-style-type: none"> ▪ Minor Adverse ▪ Minor Adverse ▪ Negligible ▪ Minor adverse

Impact Interactions

13.4 As set out in Chapter 4, cumulative effects are categorised as follows:

Type 1 Effects: The amalgamation of individual effects resulting from the proposed development.

Type 2 Effects: The combined effects of a number of developments, which might be insignificant when considered in isolation, but when considered together could give rise to a significant impact

13.5 The neighbouring developments that could potentially give rise to Type 2 Effects were considered and agreed with HDC as part of the scoping exercise. They comprise projects that are at various phases in the development process: allocated, consented and commenced. It must be acknowledged that there is a degree of uncertainty as to the potential scope of cumulative effects given the outline nature of some of the neighbouring developments and the stage they have reached in the development process. Some effects may occur over an extended period and could be influenced by processes and activities that occur outside the site boundary and the applicant's control.

Type 1 Effects

13.6 The potential Type 1 Effects for the sensitive receptors in and around the site, identified in Chapter 4, have been considered. Type 1 effects have been considered for both the construction and operational phases of the development.

13.7 Effect interaction is considered most likely to occur during the demolition and construction phases and, for the type of development proposed, is usually more adverse, albeit temporary in nature, than the effects of the completed and operational development. Details of the construction process is contained within Chapter 2, and the various environmental effects are addressed in Chapters 5 to 12.

Construction Phase

13.8 The potential for cumulative effects is most pronounced during the construction phase. Construction works have the potential to give rise to cumulative effects for those living in close proximity to the site, or visiting it on a regular basis. The ecological interests of the site may also be affected. By their nature, such impacts

are generally short-term, intermittent and reversible. They are also well understood and appropriate mitigation has been designed into the construction process to minimise and manage the potential for adverse effects. The number of existing residential properties in close proximity to proposed areas of new development is also limited.

- 13.9 The interaction of effects is considered post-mitigation and therefore concentrates on the anticipated residual effects. The construction and demolition works are not anticipated to engage any non-standard techniques or methodology. As a consequence of this, the only potential effects are considered to be negligible and not significant and relate to Transport (Chapter 6); Noise and Vibration (Chapter 7); Hydrology (Chapter 8); and Landscape and Visual Effects (Chapter 9).
- 13.10 Good site management and best practice will minimise such combined effects, but they are not unusual for a development of this type and this scale. The significance of these effects is mitigated by its localised nature and short term nature and, overall, considered to be acceptable.
- 13.11 The impact on the site's ecological interests has the potential to be significant during the construction period, but a comprehensive and detailed mitigation strategy has been designed to minimise the potential for adverse effects. The programme of ecological mitigation has been designed into the construction programme to ensure that, where necessary, the appropriate mitigation works precede site clearance and construction

Operational Phase

- 13.12 Once development is complete and operational, it is very unlikely that any Type 1 effects will be experienced, with the potential for such effects identified as part of the application/ EIA process and designed out or suitable mitigation provided. As a result, the residual effects identified in the technical chapters are negligible and/or beneficial and no additional consideration is necessary.

Type 2 Effects

- 13.13 As part of the scoping process, the development schemes listed in Table 13.2 were suggested by the Applicant as those that should be considered in combination with the proposed development. All have been considered as part of the cumulative impact assessment in the preceding technical chapters insofar as it has been possible to do so.

Table 13.2: Assessment of Cumulative Effects – Other Developments

App. Number	Location	Description	Distance from Site	Status
15/00865/OUT	Land Adj Glebe Farm Coventry Road Lutterworth	Outline application for the erection of up to 278,709sqm of Storage, Distribution buildings (B8) with ancillary B1(a) offices, creation of access onto A4303 and emergency services only	1.9km	Application registered 5 th June 2015

App. Number	Location	Description	Distance from Site	Status
		access onto A5, formation of a Lorry Park, creation of SuDS facilities and other associated infrastructure and the demolition of Glebe Farmhouse (Means of access only to be considered).		
12/00851/FUL	Land South Of And Adjacent To Asda George Headquarters A4303 Magna Park Lutterworth	Change of use of land to provide HGV and car parking; formation of hardstanding; erection of vehicle maintenance unit building, administration building, fuel island and vehicle washing facility, associated landscaping (revised scheme of 11/01757/FUL)	1.7km	Unimplemented
14/01090/OUT	Land North Of Lutterworth Road Lutterworth	Business use development (Class B1a), with associated infrastructure, including means of access, open space, landscaping and sustainable drainage features	5.5km	Awaiting completion of S106
11/00117/OUT	Land North Of Bill Crane Way Lutterworth	Residential development with associated infrastructure, public open space and provision of vehicular and pedestrian access (Outline application with all matters reserved for subsequent approval)	5.8km	Under construction
13/01282/REM	Land North Of Bill Crane Way Lutterworth	Erection of 147 dwellings and associated garages, hardstanding, footpaths, means of access and other roads, and open space (reserved matters of 11/00117/OUT)	5.8km	Under construction
14/00739/OUT	Land East Of Leicester Road Lutterworth	Outline planning permission for 84 dwellings (means of access to be considered)	6.1km	Unimplemented
Daventry International Rail Freight Terminal DCO	Daventry International Rail Freight Terminal	The Order grants development consent for the expansion of the existing Daventry International Rail Freight Terminal ("DIRFT") which currently comprises two rail connected warehouse developments known as "DIRFT I" and "DIRFT II". The project involves the	12km	Unimplemented

App. Number	Location	Description	Distance from Site	Status
		<p>construction and operation of a new rail link from the existing DIRFT to a replacement interchange, together with new transshipment sidings, container storage, a Heavy Goods Vehicle (“HGV”) reception area, up to 731,000 square metres of rail served storage, operational facilities, a lorry park and a strategic open space to provide a buffer between the development and the settlement of Lilbourne. The Order would also, among other things, authorise the compulsory acquisition of rights over land and alterations to the highway network. The project is referred to in this letter as “DIRFT III”.</p>		
R11/0699	Rugby Radio Station, A5 Watling Street, Clifton upon Dunsmore, Rugby, Warwickshire, CV23 0AQ	<p>Outline application for an urban extension to Rugby for up to 6,200 dwellings together with up to 12,000sq.m retail (A1), up to 3,500sq.m financial services (A2) and restaurants (A3 - A5), up to 3,500sq.m for a hotel (C1), up to 2,900sq.m of community uses (D1), up to 3,100sq.m assembly and leisure uses (D2), 31 hectares (up to 106,000sq.m) of commercial and employment space (B1, B2 and B8), and ancillary facilities; a mixed use district centre and 3 subsidiary local centres including retention and re-use of the existing buildings known as 'C' Station (Grade II listed), 'A' Station and some existing agricultural buildings; a secondary school and 3 primary schools; public art; green infrastructure including formal and informal open space and amenity space; retention of existing hedgerows, areas of ridge and furrow and grassland; new woodland areas, allotments</p>	8km	

App. Number	Location	Description	Distance from Site	Status
		and areas for food production, wildlife corridors; supporting infrastructure (comprising utilities including gas, electricity, water, sewerage, telecommunications, and diversions as necessary); sustainable drainage systems including ponds, lakes and water courses; a link road connecting the development to Butlers Leap, estate roads and connections to the surrounding highway, cycleway and pedestrian network; ground remodelling; any necessary demolition and any ground works associated with the removal of any residual copper matting, with all matters reserved for future determination except the three highway junctions on the A428, the two junctions on the A5 and the link road junctions at Butlers Leap and Hillmorton Lane		
R10/1272 And R13/2311 etc	Rugby Gateway, Leicester Road, Rugby	Outline application for residential development (up to 1300 units); employment development (up to 36ha in total, B2 – General Industrial & B8 – Storage & Distribution); community facilities (D1 – Non-residential Institutions) including primary school, nursery and health facility, retail premises (A1 – Retail, A3 – Food & Drink, A4 – Drinking Establishments & A5 - Hot Food Takeaway); open space; associated infrastructure and works including details of access into site (including alterations to highway and existing roundabouts). Demolition of existing buildings		
15/00378/FUL & 12/00698/REM	Land Bounded By The Ashby Canal, Railway Line And Bridge Road,	Mixed used development comprising up to 376 dwellings, employment (use classe B1a, B1c, B2 and B8), local centre (Use classes A1-5 and D1), live-	10km	

App. Number	Location	Description	Distance from Site	Status
	Incorporating The Former Johnsons Apparelmaster Ltd Rugby Road Burbage Hinckley Leicestershire LE10 2ND	work units, works to Sketchly Brook corridor, remodelling of lake and associated open space, parking and accesses (outline – access only) And Approval of Reserved matters application for the erection of 133 dwellings with associated roads and landscaping		
13/01223/REM	Leaders Farm Coventry Road Lutterworth Leicestershire LE17 4JF	Erection of 130 dwellings, creation of a cemetery and provision of associated infrastructure including public open space (reserved matters of 12/00900/OUT)	2.2km	Under construction
R11/0114	Cawston Extension Site, Coventry Road, Cawston, Rugby	Outline application for residential development (up to 600 dwellings, use class C3), new accesses to Coventry Road and Trussell Way, open space, associated infrastructure and ancillary works (access not reserved).	11km	
13/01539/FUL	Land off Dunton Road, Broughton Astley, Leicestershire	full planning permission for the erection of 24 dwellings with associated vehicular access, pedestrian links, garages, hardstanding, parking, landscaping and drainage (revised scheme of 13/00688/FUL), in accordance with application ref: 13/01539/FUL, dated 11 October 2013	7km	
12/04597/OUT	Site at land south of Hallbrook Primary School, Crowfoot Way, Broughton Astley	outline planning permission for the erection of 111 dwellings, a sports hall, a neighbourhood centre, sports pitches and associated parking, open space, access and landscaping	7km	
2009/1488/03	Sutton Lodge Farm, Broughton Astley	Application for the erection of an anaerobic digestion facility with associated infrastructure and landscaping	7km	

- 13.14 Although the EIA Regulations require only approved projects to be considered, IDI Gazeley agreed with HDC (15th July 2015) to consider the symmetry park proposal (application reference 15/00865/OUT) in “sensitivity” terms (i.e., an assessment of the cumulative impact should symmetry park as well as the application proposals be granted planning permission.
- 13.15 Each of the technical chapters sets out a consideration of the potential environmental effects when considered in combination with these other developments. Cumulative residual effects, those that remain after mitigation, are dealt with in each of the technical chapters and summarised below. Where applicable, specific Chapters have also presented the conclusions of the db symmetry sensitivity test.

Construction Phase

- 13.16 No significant adverse effects are envisaged during the construction phase. Any potential effects in associated with the proposed development in combination with the other projects identified are considered to be negligible and not significant.

Operational Phase

- 13.17 The cumulative effects are not considered to be adverse in respect of any of the assessment parameters save for Transport, LVIA and Heritage, and in all cases are not considered to be Significant.

db symmetry Sensitivity Test

Traffic and Transport

- 13.18 The maximum average delay at any individual junction due to the symmetry park traffic is approximately 30 seconds (M69 J1), and the maximum increase in journey time on the selected routes is 34 seconds (M6(W) to M1(N)). Therefore, the impact of the symmetry park development on users of the highway network is considered to be Negligible.
- 13.19 The symmetry park development will result in an increase in HGV traffic of 32% on the A4303 between Hunter Boulevard and the A5. Therefore the impact on pedestrians and cyclists on this section of the road is considered to be Minor Adverse. Elsewhere on the network impacts are below 30% and are therefore considered Negligible.
- 13.20 The symmetry park development is predicted to generate 23 trips additional trips by bus in the AM peak, and 21 trips in the PM peak. This is considered likely to increase crowding on the existing bus service, and therefore there will be a Minor Adverse impact on public transport, which is Not Significant.

Noise and Vibration

- 13.21 This assessment has shown that the impact in both short and long term of road traffic associated with the proposed development would be limited to one of Negligible Magnitude in all cases.

Hydrology and Flood Risk

- 13.22 The land at Glebe Farm drains to the River Swift, which is a tributary of the River Avon. As such, if this development were to take place in addition to the application proposals, the cumulative effects are considered to be Negligible as only Zone 2 is part of the same catchment. As such cumulative impacts to the water environment and increases to flood risk are considered to be Negligible.

Landscape and Visual

- 13.23 Effects on the landscape of the Lutterworth Lowlands District LCA are elevated to become significant, during construction, and up until the Mid to Long Term.
- 13.24 Significant sequential visual effects, in the day time, on road users passing along the A5, during construction and in the early years of operation, however, the combined effects are Not Significant from the Mid-Term. Night time sequential visual effects, as experienced from the A5, are Not Significant during construction or in operation.
- 13.25 An increase in artificial lighting effects is anticipated, arising from sky glow, on communities to the south of Magna Park over and above the levels arising from this application and other considered development. However, the potential scale of this is not possible to accurately estimate at present.

Air Quality

- 13.26 All predicted air quality impacts are Negligible, and the operational effects are unchanged from those described in section 10.6 of Chapter 10.

Conclusions

- 13.27 The proposed development would inevitably change aspects of the local environment, however the design of the scheme and its incorporated and proposed mitigation, would ensure that there would be no significant long term residual adverse effects for the purposes of the Regulations.
- 13.28 None of the adverse effects identified would be more than 'Moderate' and from an EIA perspective would not therefore be of more than local significance and would not be considered key decision making issues.
- 13.29 Moderate beneficial effects are predicted to result from the extensive highway and junction improvements that are proposed as part of the development. Major beneficial effects are predicted with regard to the socio-economic effects of the proposed development, in particular associated with the creation of both construction and operational phase employment. The proposed development will create 5,800 operational jobs and a further 1,634 construction jobs. 1,088 of the operational jobs and 287 of the construction jobs are likely to go to Harborough residents, with 3,360 operational and 924 construction jobs to residents of Leicestershire.

List of Technical Appendices in ES Volume 3

n/a