

9. Summary

Introduction

- 9.1 The purpose of this Chapter is to provide a summary of the outcome of the assessments reported within **Technical Chapters 6 – 7** for the Proposed Development, focusing on the following key objectives:
- Provide a summary of residual effects and conclude if these are significant or not; and
 - Provide a summary of the assessment of cumulative effects, including how they differ from previously identified effects at the Project level and again conclude if these are significant or not.
- 9.2 Through delivering these objectives, Wiltshire Council should have sufficient information on environmental impacts to inform their decision-making process.
- 9.3 The residual effects defined within this Chapter rely upon the implementation of the mitigation set out within **Volume 3: Environmental Management Plan (EMP)**. This is critical as the project team have developed detailed mitigation in order to avoid, resolve or off-set impacts. Without the implementation of **Volume 3: EMP**, the conclusions of the ES may change.

Summary of Residual and Significant Effects

- 9.4 A consolidated summary of the outputs of the assessment (i.e. residual effects and the judgement on significance) for both the construction and operation stages are set out within **Table 9.1** and **Table 9.2**, respectively.
- 9.5 Where effects were identified to be significant, this is indicated by the text being in **bold** and is highlighted in **red** (adverse), **green** (beneficial) or in automatic / normal text (negligible).
- 9.6 Where Technical Chapters have identified individual level of effects for specific sensitive receptors for an assessed effect, each level of effect has been concluded in **Table 9.1** and **Table 9.2** and the greatest level of effect has been considered when considering the effects as a whole (i.e. to all receptors).

Table 9.1: Summary of Residual Effects and Significant Effects During Construction

Technical Chapter	Potential Effect	Receptor	Residual Effect
Chapter 6: Landscape and Visual	Changes to Landscape Character	Site landscape character	Major Adverse
		Host LCA C1 Melksham Open Clay Vales (West Wiltshire LCA 2006 CBA),	Moderate Adverse
		Area 3: Open Clay Vales (JMNP1 2020)	Moderate Adverse
		Non-Host LCA F2 Sandridge Park (West Wiltshire LCA 2006 CBA),	Moderate Adverse
		Non-Host Area 4: Wooded Greensand Hills (JMNP1 2020)	Moderate Adverse
	Changes to Visual Amenity of Visual Receptors within 1km of the Site	Users of Bridleway Reference MELW40 (10m east of Site Boundary)	Major Adverse
		Users of Footpath Reference MELW26 (within the Site)	Major Adverse
		Users of Bridleway Reference MELW41 (15m to south-west of the Site)	Major/ Moderate Adverse
		Users of Footpath Reference MELW27 (150m to west of the Site)	Major /Moderate Adverse
		Users of Footpath Reference MELW22 (280m to the south of the Site)	Moderate Adverse
		Users of A3102/Sandridge Common Road within SLA	Moderate Adverse
		Users of A3102/Sandridge Common Road outside SLA	Major/ Moderate Adverse
		Residential Group 1: Property Numbers 288, 289, 289A, 290, 290A, 291, 292, 293, 294, 295 Sandridge Common	Major Adverse

Technical Chapter	Potential Effect	Receptor	Residual Effect
Chapter 7: Biodiversity	Direct loss and fragmentation of existing habitats and creation of new habitats on the Site	Residential Group 2: Blackmore Farm and Blackmore House	Major Adverse ^a
		Residential Group 3: 1-12 Lopes Close	Major Adverse
		Residential Group 4: Property numbers 254 and 256	Major Adverse
		Manor Farm	Major/ Moderate Adverse
		Snarlton Farm and Little Snarlton Farm	Major/ Moderate Adverse
		Habitats onsite (trees/woodland, hedgerows, watercourses, other habitats and plants)	Moderate / Minor Adverse (medium-term) Moderate / Minor Beneficial (medium-term)
		Invertebrates	Negligible Adverse (medium term) Negligible Beneficial (long term)
		Amphibians	Minor Adverse (medium term) Negligible Beneficial (long term)
		Reptiles	Negligible Adverse (medium term) Negligible Beneficial (long term)
		Birds	Minor Adverse (medium term) Minor Beneficial (long term)
		Hazel dormouse	Minor Adverse (medium term) Minor Beneficial (long term)

^a Blackmore House only

Technical Chapter	Potential Effect	Receptor	Residual Effect
		Badger	Negligible Adverse
		Bats	Minor Adverse (medium term) Minor Beneficial (long term)
		Other mammals	Minor Adverse (medium term) Negligible Adverse (long term)
	Damage and degradation of habitats	Trees/woodland, hedgerows, watercourses, other habitats and plants) on the Site	Negligible Adverse
	Killing/injury	Amphibians	Negligible Adverse
		Reptiles	Negligible Adverse
		Hazel dormouse	Negligible Adverse
		Badger	Negligible Adverse
		Otter	Negligible Adverse
		Other mammals	Negligible Adverse
	Disturbance associated with noise, lighting and other visual stimuli	Birds	Minor Adverse
		Bats	Negligible Adverse
		Otter	Negligible Adverse

Table 9.2: Summary of Residual Effects and their Significance During Operation

Technical Chapter	Potential Effect	Receptor	Residual Effect
Chapter 6: Landscape and Visual	Changes to Landscape Character	Site landscape character	Major/ Moderate Adverse
		Host LCA C1 Melksham Open Clay Vales (West Wiltshire LCA 2006 CBA),	Moderate/ Minor Adverse
		Area 3: Open Clay Vales (JMNP1 2020)	Moderate/ Minor Adverse
		Non-Host LCA F2 Sandridge Park (West Wiltshire LCA 2006 CBA),	Moderate/ Minor Adverse
		Non-Host Area 4: Wooded Greensand Hills (JMNP1 2020)	Moderate/ Minor adverse
	Changes to Visual Amenity of Visual Receptors within 1km of the Site	Users of Bridleway Reference MELW40 (10m east of Site Boundary)	Major / Moderate^b
		Users of Footpath Reference MELW26 (within the Site)	Major/ Moderate Adverse
		Users of Bridleway Reference MELW41 (15m to south-west of the Site)	Moderate Adverse
		Users of Footpath Reference MELW27 (150m to west of the Site)	Moderate Adverse
		Users of Footpath Reference MELW22 (280m to the south of the Site)	Moderate/ Minor Adverse
		Users of A3102/Sandridge Common Road within SLA	Moderate/ Minor Adverse
		Users of A3102/Sandridge Common Road outside SLA	Moderate/ Minor Adverse

^b Major/ Moderate Adverse and Significant for northern 450m section adjacent to Site, Moderate Adverse and Significant southern 230m section adjacent to Site. The effect on MELW40 as a whole is considered to be Not Significant.

Technical Chapter	Potential Effect	Receptor	Residual Effect
		Residential Group 1: Property Numbers 288, 289, 289A, 290, 290A, 291, 292, 293, 294, 295 Sandridge Common	Moderate Adverse
		Residential Group 2: Blackmore Farm and Blackmore House	Major/ Moderate Adverse
		Residential Group 3: 1-12 Lopes Close	Major Adverse
		Residential Group 4: Property numbers 254 and 256	Minor Adverse
		Manor Farm	Moderate/ Minor Adverse
		Snarlton Farm and Little Snarlton Farm	Moderate/ Minor Adverse
Chapter 7: Biodiversity	Disturbance associated with fragmentation of habitats, noise, lighting and other visual stimuli	Badger	Negligible adverse
		Bats	Minor adverse
		Otter	Negligible adverse
		Other mammals	Negligible adverse
	Recreation effects	LWS within 2km	Negligible adverse
		Habitats onsite	Minor adverse
		Adjacent habitats	Minor adverse
		Invertebrates	Negligible adverse
		Hazel dormouse	Negligible adverse
	Killing/injury associated with the Proposed Development, vehicle collisions and cat	Amphibians	Negligible adverse
		Reptiles	Negligible adverse
		Birds	Negligible adverse

Technical Chapter	Potential Effect	Receptor	Residual Effect
	predation and habitat fragmentation	Hazel dormouse	Minor adverse
		Badger	Negligible adverse
		Otter	Negligible adverse
		Other mammals	Negligible adverse

9.7 A summary of the technical topics is provided in **Table 9.3** below where:

- No Significant effects were identified – denoted by ✕;
- Significant adverse effects were identified – denoted by ✓;
- Significant beneficial effects were identified – denoted by ✓; and
- A mixture of Significant adverse and beneficial effects were identified – denoted by ✓.

Table 9.3: Summary of Technical Topics

Technical topic	Significant effects? (During the construction stage)	Significant effects? (During the operational stage)
Landscape and Visual	✓	✓
Biodiversity	✓	✕

Summary of Assessment of Cumulative Effects

9.8 An assessment of cumulative effects has been completed within **Chapter 8: Assessment of Cumulative Effects**. The assessment considered the two most common types of cumulative effect; effect interactions and in-combination cumulative effects. A summary of the outputs of the assessment for each type of cumulative effect is set out below.

Assessment of Effect Interactions

9.9 Effect interactions consider multiple effects generated by the Proposed Development impacting the same receptor / receptor category. These are assessed under ‘factors’, which is essentially broad environmental topics in accordance with the EIA Regulations.

9.10 During construction, there is one effect interaction which is considered to be Not Significant.

- **Biodiversity (birds)** – associated with the interaction of permanent minor beneficial effects from long term changes to habitats and temporary minor adverse effects associated with noise, lighting and visual stimuli from construction activities. However, the effect interaction is not considered to change the level of effect as that reported (**Table 9.1** and **9.2**).

9.11 During operation, there is a single effect interaction which is considered to be Not Significant.

- **Biodiversity (habitats, bats and hazel dormouse)** – adverse effects associated with habitats (on Site and adjacent to the Site), bats and hazel dormouse. Whilst all effects are related to biodiversity and there is considered to be an effect interaction, the specific receptors are different and therefore the level of effect would remain as that reported (**Table 9.1** and **9.2**).

Assessment of In-Combination Effects

9.12 The assessment of in-combination effects considered 13 Cumulative Projects on a technical topic-by-topic basis.

- 9.13 The purpose of the in-combination assessment is to understand whether there are in-combination effects (in which case there needs to be a common receptor); how the in-combination effect differs from that considered at the project level and whether there are any in-combination effects that are significant (particularly if they were not considered significant at the project level).
- 9.14 From the in-combination assessment, it has been concluded that there are in-combination effects for landscape and visual; biodiversity; and transport and access. For the majority of effects the in-combination effects are the same as that identified for the Proposed Development.
- 9.15 With regards to transport and access the effects of the Proposed Development in isolation are considered to be Not Significant. The in-combination effects of the Proposed Development and Cumulative Project 1 would be greater than that for the Proposed Development. In-combination effects which are considered **Significant** include effects of severance on Eastern Way only and non-motorised user amenity on Sandridge Common west of proposed site access and Eastern Way.
- 9.16 The assessment of in-combination effects in relation to landscape during construction remain largely as assessed, albeit only because conclusions at the project level were already moderate to major adverse and Significant. Assessment of in-combination effects concluded that operational effects were greater than (more adverse). The magnitude of change on two landscape receptors (LCA 1 Melksham Open Clay Vale and Host Area 3 Open Clay Vales) is considered to increase from low (small) at the Project level to medium and the effect would increase from moderate to minor to moderate adverse. The effect at the Project level is considered to be Not Significant but Significant in combination with of Cumulative Projects. In-combination visual effects for 3 receptors (Footpath MELW30, Eastern Way and Users of the PRow network on elevated ridges to the south including Bridleway/- Footpaths on ridge to the south including SEEN6) assessed as Not Significant in relation to the Proposed Development were considered to be Significant in-combination with one or more Cumulative Project during the construction stage.
- 9.17 The assessment of in-combination effects on biodiversity during construction were found to be greater (more adverse) than at the Project level with regards to temporary, medium term habitat loss with the effect level increasing from minor to moderate adverse and Not Significant, to moderate adverse and Significant. In the long-term, the permanent minor to moderate beneficial effect at the Project Level would become a moderate beneficial effect and remain **Significant**. Similarly, there would be medium-term in-combination effects on reptiles and amphibians, birds, hazel dormouse, bats and other mammals. However, these effects would still be negligible to minor adverse and **Not Significant**. In the long-term, the in-combination effects would be greater than those identified at the Project Level (change from negligible to minor to minor beneficial); but remain **Not Significant**.