11. SUMMARY AND RESIDUAL EFFECTS

Introduction

11.1 This chapter summarises the mitigation measures and residual effects identified in each of the technical assessments included in the ES, which has been prepared to accompany the application for:

> *'Hybrid Planning Application comprising:*
>
> ***(1)*** *Outline Application (with all matters reserved except for access) for the erection of up to 424 residential dwellings including affordable housing, the provision of vehicular, pedestrian and cycle access and separate emergency access from the Uckfield Bypass (A22), pedestrian and cycle access from Snatts Road, open spaces including children's play space, sustainable urban drainage systems, associated landscaping, infrastructure and earthworks.*
>
> ***(2)*** *Full Application comprising creation of a Strategic SANG, associated landscaping and car parking, and demolition of existing residential property and other buildings and provision of pedestrian and cycle access from Rocks Road, associated landscaping, infrastructure and earthworks.'*

11.2 The Development has been subject to an iterative design process. As this process progressed measures have been incorporated into the Development in order to avoid, reduce or offset significant environmental effects. Where this has not been possible, further mitigation measures have been proposed and are set out in Table 11.1 below along with the residual effects of the Development following mitigation.

Table 11.1: Significance Table

Stage	Effect	Mitigation	Residual Significance
Landscape and Visual			
Construction	Landscape Character of the Site Itself:	Retention of the majority of trees, shrubs and hedgerows. Construction Environmental Management Plan (CEMP)	
	Residential development area: Landscape character		Major Adverse
	Residential development area: Key Landscape fabric		Moderate/minor Adverse
	SANG: Landscape character		Moderate/minor Adverse
	SANG: Key Landscape fabric		Minor Adverse
	Fir Tree Grove: Landscape Character		Minor Adverse and not significant
	Fir Tree Grove: Key landscape fabric		Minor Adverse
	Chicory Cottage and grounds: Landscape Character		Major Adverse

Stage	Effect	Mitigation	Residual Significance
	Chicory Cottage and grounds: Key landscape fabric		Major Adverse
	Host LCA: LCA 3: Upper Ouse Valley (East Sussex County Landscape Assessment, 2016)		Minor Adverse
	Non-host LCA: Urban Character Area (UCA) 36: Uckfield (East Sussex County Landscape Assessment 2016)		Negligible Adverse
	Non-host LCA: LCA 2 Ashdown Forest (East Sussex County Landscape Assessment 2016)		Moderate/ minor Adverse
	Non-host LLCT: LLCT A: Ridges and Valleys LLCA A1: Fletching Maresfield (Wealden Landscape and Settlement Character Assessment, 2014)		Minor Adverse
	Host LLCA: LLCT A: Ridges and Valleys LLCA A2: Budlett's Common and Five Ash Down (Wealden Landscape and Settlement Character Assessment, 2014)		Minor Adverse
	Host LSA: Uckfield Landscape Setting Area (LSA) 8 (Wealden Landscape and Settlement Character Assessment (Chris Blandford Associates, 2014)		Minor Adverse
	PVP1		Omitted from assessment
	PVP2 - PRoW users		Minor Adverse
	PVP2 - Nightime		Minor Adverse
	PVP3 - Local road: vehicle and pedestrian users		Minor/negligible Adverse
	PVP3 - Residents		Minor Adverse
	PVP4 - Local road: vehicle and pedestrian users		Minor/negligible Adverse
	PVP4 - Residents		Minor Adverse
	PVP4 - Nightime		Minor Adverse
	PVP5 - Local road users		Minor/negligible Adverse
	PVP5 - Nightime		Negligible Adverse
	PVP6 - A road users		Moderate/minor Adverse
	PVP6 - Nightime		Moderate/minor Adverse
	PVP7 - A road users		Negligible Adverse
	PVP8		Omitted from assessment
	PVP9		Omitted from assessment
	PVP10		Omitted from assessment
	PVP11 – PRoW users		Minor Adverse
	PVP11 - Residents		Negligible Adverse
	PVP11 - Nightime		Minor Adverse
	PVP12 - Recreation Ground users		Minor/negligible Adverse
	PVP12 - PRoW users		Moderate/minor

Stage	Effect	Mitigation	Residual Significance
			Adverse
	PVP12 - Residents		Minor Adverse
	PVP12 - Nightime		Minor Adverse
	PVP13 - A road: vehicle users		Negligible Adverse
	PVP13 - Nightime		Negligible Adverse
	PVP14 - PRoW users		Minor Adverse
	PVP14 - Nightime		Minor Adverse
	PVP15 - Open access land users within the AONB		Moderate/minor Adverse
	PVP15 - Nightime		Moderate/minor Adverse
	PVP16 - Local road users		Major/ moderate Adverse
	PVP16 - Nightime		Minor Adverse
	PRoW footpath (ref. Fletching 36) East of Downstreet Farmhouse.		Negligible Adverse
	PRoW footpath (ref. Maresfield 72 and 80) south-east of Maresfield		Negligible Adverse
	PRoW footpath (ref. Maresfield 61a) near Reeding's Wood.		Negligible Adverse
	PRoW footpath (ref. Uckfield 1) east of Site		Negligible Adverse
	Open access land within the AONB		Negligible Adverse
	A22 Uckfield Bypass		Negligible Adverse
	A272		Negligible Adverse
	Snatts Road		Negligible Adverse
	Rocks Road		Moderate/ minor Adverse
	Ten properties south-east of Snatts Road		Minor Adverse
	Approximatly nine properties north-west of Snatts Road:		
	Bramling Cottage		Minor Adverse
	Swallow Barn (Barn at Downlands Farm - Grade II listed)		Moderate Adverse
	Downlands Cottages 2 and 3		Substantial Adverse
	Five remaining properties to the north-west of Snatts Road		Moderate Adverse
	Lake Wood		Moderate Adverse
	High Weald AONB designation and setting		Moderate/ minor Adverse
Completed Development	Landscape Character of the Site Itself:		
	Residential development area: Landscape character	Retention of majority of trees, shrubs and hedgerows. Integration of development with landscape context. Lighting in accordance with Lighting Impact Assessment.	Major Adverse
	Residential development area: Key Landscape fabric		Moderate/minor Beneficial
	SANG: Landscape character		Minor Adverse
	SANG: Key Landscape fabric		Moderate/ minor Beneficial
	Fir Tree Grove: Landscape		Minor Adverse

Stage	Effect	Mitigation	Residual Significance
	Character		
	Fir Tree Grove: Key landscape fabric		Moderate/ minor Beneficial
	Chicory Cottage and grounds: Landscape Character		Moderate/minor Low Beneficial
	Chicory Cottage and grounds: Key landscape fabric		Moderate/minor Low Beneficial
	Host LCA: LCA 3: Upper Ouse Valley (East Sussex County Landscape Assessment, 2016)		Minor Adverse
	Non-host LCA: Urban Character Area (UCA) 36: Uckfield (East Sussex County Landscape Assessment 2016)		Negligible Adverse
	Non-host LCA: LCA 2 Ashdown Forest (East Sussex County Landscape Assessment 2016)		Moderate/minor Adverse
	Non-host LLCT: LLCT A: Ridges and Valleys LLCA A1: Fletching Maresfield (Wealden Landscape and Settlement Character Assessment, 2014)		Minor Adverse
	Host LLCA: LLCT A: Ridges and Valleys LLCA A2: Budlett's Common and Five Ash Down (Wealden Landscape and Settlement Character Assessment, 2014)		Minor Adverse
	Host LSA: Uckfield Landscape Setting Area (LSA) 8 (Wealden Landscape and Settlement Character Assessment (Chris Blandford Associates, 2014)		Minor Adverse
	PVP1		Omitted from the assessment
	PVP2 - PRoW users		Minor Neutral
	PVP2 - Nightime		Negligible Adverse
	PVP3 - Local road: vehicle and pedestrian users		Minor/negligible Adverse
	PVP3 - Residents		Minor Adverse
	PVP3 - Nightime		Negligible Adverse
	PVP4 - Local road: vehicle and pedestrian users		Minor/negligible Adverse
	PVP4 - Residents		Minor Adverse
	PVP4 - Nightime		Negligible Adverse
	PVP5 - Local road users		Negligible Adverse
	PVP5 - Nightime		Negligible Adverse
	PVP6 - A road users		Minor Adverse
	PVP6 - Nightime		Minor Adverse
	PVP7 - A road users		Negligible Adverse
	PVP8		Omitted from the assessment
	PVP9		Omitted from the assessment
	PVP10		Omitted from the assessment

Stage	Effect	Mitigation	Residual Significance
	PVP11 – PRoW users		Minor Adverse
	PVP11 - Residents		Negligible Adverse
	PVP11 - Nightime		Minor Adverse
	PVP12 - Recreation Ground users		Minor Adverse
	PVP12 - PRoW users		Moderate/minor Adverse
	PVP12 - Residents		Moderate/minor Adverse
	PVP12 - Nightime		Minor Adverse
	PVP13 - A road: vehicle users		Minor/negligible Adverse
	PVP13 - Nightime		Negligible Adverse
	PVP14 - PRoW users		Minor Adverse
	PVP14 - Nightime		Minor Adverse
	PVP15 - Open access land users within the AONB		Moderate/minor Adverse
	PVP15 - Nightime		Moderate/minor Adverse
	PVP16 - Local road users		Minor Adverse
	PVP16 - Nightime		Minor Adverse
	PRoW footpath (ref. Fletching 36) East of Downstreet Farmhouse.		Negligible Adverse
	PRoW footpath (ref. Maresfield 72 and 80) south-east of Maresfield		Negligible Adverse
	PRoW footpath (ref. Maresfield 61a) near Reeding's Wood.		Negligible Adverse
	PRoW footpath (ref. Uckfield 1) east of Site		Negligible Adverse
	Open access land within the AONB		Negligible Adverse
	A22 Uckfield Bypass		Negligible Adverse
	A272		Negligible Adverse
	Snatts Road		Negligible Adverse
	Rocks Road		Minor Adverse
	Ten properties south-east of Snatts Road		Negligible Adverse
	Approximatly nine properties north-west of Snatts Road:		
	Bramling Cottage		Negligible Adverse
	Swallow Barn (Barn at Downlands Farm - Grade II listed)		Moderate/minor Adverse
	Downlands Cottages 2 and 3		Major Adverse
	Five remaining properties to the north-west of Snatts Road		Moderate/minor Adverse
	Lake Wood		Moderate/minor Adverse
	High Weald AONB designation and setting		Moderate/minor Adverse
Biodiversity			
Construction	West Park (Uckfield) LNR	None required	Negligible
	Lake Wood LWS	Construction Safeguards (provided under CEMP)	Negligible
	Butchers Wood LWS	None required	Negligible
	Other Ecological Designations		Negligible

Stage	Effect	Mitigation	Residual Significance
	Ancient Woodland	Construction Safeguards (provided under CEMP)	Negligible
	Veteran Trees		Negligible
	Habitats		Negligible
	Faunal Species (Foraging and Commuting Bats, Dormouse, Birds, Great Crested Newt, reptiles.	Construction Safeguards (provided under CEMP). Specific method statements for Great Crested Newt and Dormouse	Negligible
Completed Development	Ashdown Forest SPA/SAC – Recreational Disturbance	Provision of SANG as strategic mitigation	Negligible
	Ashdown Forest SPA/SAC – Air Quality Effects	None required	Negligible
	West Park (Uckfield) LNR		Negligible
	Lake Wood LWS	Embedded mitigation, in the form of buffer zones and proposed boundary fencing.	Negligible
	Other Non-statutory Designations	None required	Negligible
	Ancient Woodland – Direct Deterioration (loss of woodland flora at boardwalk location)	Translocation of ancient woodland ground flora from the route of the boardwalk	Negligible
	Ancient Woodland – Other Effects	None required (embedded mitigation in the form of 15m+ buffer zones)	Negligible
	Veteran Trees	None required	Negligible
	Other Woodland	Woodland management. Provision of additional woodland within SANG and public open space within residential areas.	Moderate Beneficial
	Moderately Species-rich Grassland (off Snatts Road)	Implementation of favourable management	Moderate Beneficial
	Sandstone Outcrops – Lower Plants	None required	Negligible
	Native Hedgerows and Tree Lines	Planting of additional linear features as part of Development	Minor Beneficial
	Ponds	Restoration of Ponds	Minor Beneficial
	Watercourses	None required	Negligible
	Foraging and Commuting Bats	Lighting Strategy. Wildlife-friendly lighting plan	Negligible
	Dormouse	Mitigation strategy. Additional woodland planting.	Minor Beneficial
	Great Crested Newt	Mitigation strategy. Pond restoration and new ponds	Minor Beneficial
	Reptiles	Habitat creation and enhancement	Minor Beneficial
Water Resources and Flood Risk			
Construction	Flood Risk (Tidal/Fluvial, pluvial, artificial sources)	None required	Negligible
	Flood Risk (groundwater)	Dewatering and disposal, using standard techniques such as sumps and pumps may be required.	Negligible

Stage	Effect	Mitigation	Residual Significance
	Surface Water Drainage/Hydrology: surface water discharge off-site	Implementation of CEMP	Negligible
	Surface Water Drainage/Hydrology: drainage outfalls	Utilising natural overland flow routes	Negligible
	Foul Water Capacity	Implementation of CEMP (foul water from construction dealt with separately).	Negligible
Completed Development	Flood Risk (tidal/fluvial, pluvial, groundwater, artificial sources)	None required	Negligible
	Surface Water Drainage / Hydrology	Surface Water Drainage Strategy	Negligible
	Foul Water Capacity	None required	Negligible
Cultural Heritage			
Construction	All Designated Heritage Assets Beyond the Site	None	Neutral
	Non-designated Archaeological Assets within the Site	A phased programme of archaeological investigation	Neutral
	Historic Landscape	None	Negligible Adverse
Completed Development	Grade II listed Barn at Downlands Farm and Grade II listed Oast Cottage	None	Neutral
	Maresfield Conservation Area		Negligible Adverse
	All Remaining Designated Heritage Assets Beyond the Site		Neutral
	Non-designated Archaeological Assets within the Site		Neutral
	Historic Landscape		Neutral
Land Contamination			
Construction	Site Investigation personnel – exposure to localised contaminants	Health and safety risk assessments in place to prevent exposure to contaminants.	Negligible
	Potential for construction workers, to come into direct contact with possible localised contamination.	Presence of contaminated soils to be considered within health and safety plans. Measures to protect the health and safety of workers on the Site will be implemented including use of appropriate personal protective equipment, education and good hygiene procedures.	Negligible
	Potential for contaminated dusts to impact upon nearby residents.	Implementation of CEMP which will outline the measures to prevent dust generation during the Development. This will also outline mitigation measures to prevent spills of fuels / other chemicals from the construction process.	Negligible
	Potential for small scale leaks and spillages associated with localised storage and use of small quantities of fuels, paints	Implementation of CEMP which will outline mitigation measures to prevent spills of fuels / other chemicals from	Negligible

Stage	Effect	Mitigation	Residual Significance
	and other proprietary chemicals, and for contaminated land run-off from vehicle washing.	the construction process.	
Completed Development	Future residents or Site users to be exposed to contaminated soils in localised areas of the Site from direct contact.	Any localised contamination hotspots to be removed from the Site.	Minor Beneficial
	Subsurface building materials and services – potential degradation due to contaminated soils and permeation of plastic water supply pipes.	Specialist protective water supply pipework will be utilised where and if required.	Negligible
	Groundwater and surface water environment – ongoing pollution of via leaching from contamination hotspots within the soils at the Site.	Any localised contamination hotspots to be removed from Site.	Negligible

Interactive Effects

11.3 Regulation 4 (2) states that an ES must include a description of the aspects of the environment likely to be significantly affected by the Development and the interrelationship between these effects. There is no published methodology for determining the significance of interactive or synergistic effects. Combining effects with respect to one environmental discipline with another has to be qualitative and is necessarily based on judgment. Therefore, a matrix system has been used to indicate where such effects would likely occur for the construction and operational phases, highlighting where effects occur to a common receptor. The findings of this exercise are set out in Table 11.2 below.

Table 11.2 Interactive Effects

Effect	Local Population	Landscape & Visual	Built Heritage Environment	Ecology
Construction Phase				
Views of vehicles and machinery being used during the demolition and construction period	*	*	*	
Disruption to users of the local road network	*			
Operational Phase				
Views of the Development	*	*	*	
New Public Realm Creation	*		*	
New Habitat Creation	*			*

*indicates where an effect may occur.

11.4 Appropriate mitigation during the construction phase has been identified in the ES as necessary, such as best practice measures to reduce or eliminate potential adverse environmental effects of construction as far as possible. Furthermore, the Construction Methodology and Phasing Chapter (Chapter 5) proposes a programme and approach to works which will ensure that the Development would be implemented in the most efficient and least intrusive manner. This includes measures set out and secured through the implementation of the CEMP for the Development (see Chapter 5 for further details). Relevant legislative requirements would also be adhered to.

11.5 During the construction and operational phases of the Development, it is considered that interactions could potentially occur as set out in Table 11.2. It is considered that interactive effects during construction on the surrounding area will be minor and not significant. Any significant adverse effects would be temporary in duration and are likely to be associated only with the peak periods of construction activity. It is considered that the interactive effects during operation of the Development on the surrounding area will be minor and not significant.

Conclusions

11.6 The Development will result in the following significant beneficial residual effects:

- Biodiversity effects during operation:
  - Moderately Species-rich Grassland (off Snatts Road), Moderate Beneficial; and
  - Other Woodland, Moderate Beneficial.

11.7 The technical assessments identified that the Development will result in the following significant adverse residual effects:

- Landscape and Visual effects during construction:
  - Landscape Character of the Site itself – residential area – landscape character and Chicory Cottage and grounds – landscape character and key landscape fabric, Major Adverse;
  - Visual Receptors (Residents) - The Barn at Downlands Farm (Grade II listed), Moderate Adverse, Gormanstone and adjacent property, Substantial Adverse, and Five properties north and south of Gormanstone, Moderate Adverse;
- Landscape and Visual effects during operation:
  - The Site itself – residential area – landscape character, Major Adverse; and
  - Gormanstone and adjacent property, Major Adverse.