

13.0 Summary of Effects and Mitigation

13.1 Overview

The Environmental Statement has presented the findings of the Environmental Impact Assessment (EIA) process undertaken for the proposed development.

Each of the technical chapters has presented a number of mitigation measures aimed at avoiding, reducing or compensating for potentially significant environmental effects. As discussed in *Chapter 2*, mitigation measures have been classified based on their deliverability:

- **Embedded mitigation measures** – those ‘designed in’ to the scheme and certain to be delivered, i.e. what is proposed on the application form and consented drawings, e.g. the Parameters Plans.
- **Standard mitigation measures** – mitigation with a high degree of certainty over delivery, e.g., for the construction phase, measures to be included in a Framework Construction Environmental Management Plan (CEMP), or for the occupation phase, on-site measures secured through planning conditions.
- **Additional mitigation measures** – generally off-site measures that require a controlling mechanism or legal undertaking to be implemented, but are under the control of the applicant, Local Authority, Highway Authority or Education Authority and therefore, have a good certainty over delivery, e.g. measures included in a Community Infrastructure Levy (CIL), or S106 and S278 agreements.

Potentially significant effects as a result of the proposed development have been assessed firstly with embedded and standard mitigation measures implemented. The residual effects have then been assessed with embedded, standard and additional mitigation measures implemented.

Table 13.1 presents a summary of the proposed mitigation measures and the residual effects that are predicted to remain once these mitigation measures are in place.

Table 13.2 then presents a summary of potential ‘in-combination’ effects. In-combination effects are where a single receptor could be impacted by several different types of effects, e.g. nearby residents could be impacted by a combination of noise, dust and visual impacts during construction of a proposed development.

Please note that only residual effects of at least minor significance have been included in *Table 13.2*.

Table 13.1 – Summary of Effects and Mitigation			
Environmental Topic	Mitigation Measures	Means by which Mitigation will be Delivered	Residual Effects
Traffic and Transport	Construction and Occupation		
	<p><u>Embedded Mitigation Measures</u></p> <p>Designed with a people first hierarchy to be highly permeable, allowing for movements north to south and east to west through the site and to the wider community.</p> <p>Priority given to active travel movements through the creation of largely traffic-free, comprehensive, connected, and a direct network of routes for safe walking and cycling.</p> <p>Provision of segregated walking and cycle routes alongside primary street corridors to compliment the network of traffic-free routes.</p> <p>The primary street corridor is to facilitate a bus route through the site, with bus stops suitable located throughout the development. All dwellings will be located within 400m of a bus stop as part of the accessible public transport provision.</p> <p>Bus priority provision at the Normandy Way access to promote bus use over general car use. This having the potential to improve bus journey times and the reliability of bus services through Southleigh, avoiding conflict with general vehicle traffic.</p>	Parameter Plans / Planning Conditions	<p><u>Construction Phase</u></p> <p>Negligible effects on all receptors.</p> <p><u>Occupation Phase</u></p> <p>Negligible to moderate adverse effects on severance and driver delay.</p> <p>Moderate beneficial to moderate adverse effects on non-motorised user fear and intimidation.</p> <p>Negligible effects on non-motorised user amenity.</p> <p>No additional significant cumulative effects.</p>

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	<p>Creation of a clear hierarchy of street types from the primary street down to residential lanes.</p> <p>Traffic calming bends and public realm design will be utilised to ensure vehicle movements through the site are maintained below the proposed internal 20mph speed limit. The internal design will manage vehicle speeds and contribute to a people first hierarchy.</p> <p>Safe and controlled pedestrian and cycle crossing facilities will be implemented across Southleigh Road and Eastleigh Road to ensure these existing roads do not sever the accessibility of the Site.</p> <p>All shared footway / cycleway facilities have been designed to be compliant with LTN 1/20 standards.</p>		
	<p><u>Standard Mitigation Measures</u></p> <p>See Framework CEMP in <i>Appendix 4.1</i>.</p>	Planning Condition	
	<p><u>Additional Mitigation Measures</u></p> <p>New off-site active travel improvements.</p> <p>New off-site highway improvements.</p> <p>New / enhanced bus services.</p>	<p>S106 Agreement / S278 Agreement</p> <p>S106 Agreement</p>	

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Environmental Topic	Mitigation Measures	Means by which Mitigation will be Delivered	Residual Effects
	Potential financial contribution to a new rail crossing at Southleigh Road Level Crossing.		
Noise	Construction and Occupation		
	<u>Embedded Mitigation Measures</u> Built development located away from the A27 and Horndean Road.	Parameter Plans	<u>Construction Phase</u> Negligible effects on existing residents.
	<u>Standard Mitigation Measures</u> See Framework CEMP in <i>Appendix 4.1</i> . Details of building orientation, glazing, ventilation and boundary treatments to be agreed at reserved matters stage.	Planning Condition Planning Condition / S106 Agreement	<u>Occupation Phase</u> Negligible effects on new residents (internal and external noise) from ambient noise. Negligible effects on existing residents from road traffic noise.
	<u>Additional Mitigation Measures</u> None.		Negligible cumulative effects.
Air Quality	Construction and Occupation		
	<u>Embedded Mitigation Measures</u> Retention of vegetation at site boundary. New active travel and public transport routes to reduce reliance on private vehicles. Inclusion of a primary school, early years provision and services within the Local Centre as part of the proposed development will reduce the need to travel by car.	Parameters Plan Parameters Plan Parameters Plan	<u>Construction Phase</u> Negligible effects on human receptors through construction dust and vehicle emissions. <u>Occupation Phase</u> Negligible effects on human receptors through vehicle emissions.

Table 13.1 – Summary of Effects and Mitigation			
Environmental Topic	Mitigation Measures	Means by which Mitigation will be Delivered	Residual Effects
	<u>Standard Mitigation Measures</u>		
	See Framework CEMP in <i>Appendix 4.1</i> .	Planning Condition	
	<u>Additional Mitigation Measures</u>		
	None		
Landscape and Visual	Construction and Occupation		
	<u>Embedded Mitigation Measures</u>		<u>Construction Phase</u>
	Buildings limited to up to 3-storeys across the majority of the site (as set out on the Land Use Parameter Plan).	Parameter Plans	Negligible effects on all receptors not listed below.
	Buildings limited to up to 4-storeys in the areas shown on the Land Use Parameter Plan.	Parameter Plans	<u>Landscape Feature Effects</u>
	The extent of open space and retained vegetation as set out in the Green and Blue Infrastructure Parameters Plan, including the retention of the majority of existing parkland in the north-eastern area of the site, belts of open space along the eastern and southern edges of the site, as well as a corridor extending north-south through the north-western part of the site.	Parameter Plans	Substantial adverse effects on open agricultural fields.
			Moderate adverse effects on open parkland.
			Moderate-minor adverse effects on structural vegetation.
			Minor adverse effects on landform and hydrology.
			<u>Visual Effects</u>
	<u>Standard Mitigation Measures</u>		Moderate-substantial adverse visual effects on residents, road users and pedestrians, views illustrated in Site Context Photographs 1, 2, 6 (residential only), 8, & 9.
	See Framework CEMP in <i>Appendix 4.1</i> .	Planning Condition	

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	<p><u>Additional Mitigation Measures</u></p> <p>None</p>		<p>Moderate to moderate-substantial adverse visual effects on residents, road users and pedestrians, views illustrated in Site Context Photographs 5, 6 (road users only) & 7.</p> <p>Minor to minor-moderate adverse visual effects on road users, recreation users and pedestrians, views illustrated in Site Context Photographs 3 & 4.</p> <p><u>Landscape Character Effects</u></p> <p>Substantial adverse effects on Havant Borough LCA 22.</p> <p>Moderate adverse effects on Havant Borough LCA 21.</p> <p>Moderate-minor adverse effects on Hampshire LCA 9G.</p> <p>Minor adverse effects on Hampshire LCA 2F.</p> <p><u>Occupation Phase (Year 15 Post-completion)</u></p> <p>Negligible effects on all receptors not listed below.</p> <p><u>Landscape Feature Effects</u></p> <p>Moderate-substantial adverse effects on open agricultural fields.</p>

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Environmental Topic	Mitigation Measures	Means by which Mitigation will be Delivered	Residual Effects
			<p>Minor beneficial effects on structural vegetation and open parkland.</p> <p><u>Visual Effects</u></p> <p>Moderate to moderate-substantial adverse visual effects on residents, road users and pedestrians, views illustrated in Site Context Photographs 1, 2, 6 (residential only), 8, & 9.</p> <p>Minor to moderate adverse visual effects on residents, road users and pedestrians, views illustrated in Site Context Photographs 5, 6 (road users only) & 7.</p> <p>Minor to negligible / neutral visual effects on pedestrians, view illustrated in Site Context Photograph 3.</p> <p><u>Landscape Character Effects</u></p> <p>Moderate-substantial adverse effects on Havant Borough LCA 22.</p>
Biodiversity	Construction and Occupation		
	<p><u>Embedded Mitigation Measures</u></p> <p>Siting residential-led development within areas of low ecological sensitivity, such as arable land and modified or otherwise herb-poor grassland.</p>	Parameter Plans	<p><u>Construction Phase</u></p> <p>Minor adverse effects on birds due to loss of skylark breeding habitat, and reptiles through potential killing or injury.</p> <p>Minor beneficial effects on parkland, grassland and foraging habitats for bats.</p>

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Environmental Topic	Mitigation Measures	Means by which Mitigation will be Delivered	Residual Effects
	Retention and buffering of valuable ecological features, principally including the parkland, which is proposed to be retained and enhanced as a community park, and other wooded habitat resources throughout the site.		<p>Negligible effects on all other receptors.</p> <p><u>Occupation Phase</u></p> <p>Negligible effects on all receptors.</p>
	<p>The provision of approximately 52.5ha of green infrastructure, including continuous expanses thereof along the eastern and southern edges of the proposed development.</p>		
	<p><u>Standard Mitigation Measures</u></p> <p><u>Construction Phase</u></p> <p>See Framework CEMP in <i>Appendix 4.1</i>.</p> <p><u>Occupation Phase</u></p> <p>Preparation and implementation of a Landscape Ecological Management Plan.</p>	<p>Planning Condition</p> <p>Planning Condition</p>	
	<p><u>Additional Mitigation Measures</u></p> <p>Payment of a proportionate financial contribution toward offsite conservation measures such as the maintenance of skylark plots.</p> <p>Implementation of a reptile mitigation strategy.</p>	<p>S106 Agreement</p> <p>Planning Condition</p>	

Environmental Topic	Mitigation Measures	Means by which Mitigation will be Delivered	Residual Effects
	Recreational pressure effects upon the Chichester and Langstone Harbours SPA and Ramsar site, the broader suite of Solent SPAs and Ramsar sites, and by extension the underlying SSSI designations will be mitigated in accordance with the Solent Recreational Mitigation Strategy.	S106 Agreement / Planning Condition	
	Water quality effects upon the Chichester and Langstone Harbours SPA and Ramsar site, the broader suite of Solent SPAs and Ramsar sites, and by extension the underlying SSSI designations will be avoided by the achievement of nutrient neutrality through a combination of on-site measures and proportionate offsetting.	S106 Agreement / Planning Condition	
	In accordance with national and local policy and Havant Borough Council's Biodiversity Strategy, the proposed development will deliver biodiversity enhancements that exceed the measures required to avoid, mitigate, and/or compensate for the potential effects described above, thereby delivering net gains for biodiversity.	Planning Condition	
Cultural Heritage	Construction and Occupation		
	<u>Embedded Mitigation Measures</u>		<u>Construction Phase</u>
	Retention of historic Southleigh Park to the south of Southleigh Park House, Lodge and Clock Tower.	Parameter Plans	Substantial beneficial effects on the archaeological resource (below ground receptors).

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	<p>Height parameters of the built form will be predominantly no greater than 3-storeys. 4-storey elements will only be present at key centres of activity within the Proposed Development.</p> <p>The relative visual enclosure of the local landscape will reduce the visual prominence of the proposed built form.</p> <p>The retention of the majority of existing hedgerow boundaries, woodland belts and small woodlands within the Site, will help to contain the proposed built form and assist its assimilation into the landscape as well as softening views of the Proposed Development (particularly in near views from adjacent roadways).</p> <p>The retained open space will provide open relief within the context of the development and a positive visual foreground to the proposed built form.</p>		<p>Moderate adverse effects on Nos. 1 and 2 Eastleigh Road (Grade II Listed).</p> <p>Minor adverse effects on Woodbine Cottage East Leigh Road (Locally Listed).</p> <p>Negligible effects on Southleigh Park House, Lodge and Clock Tower (Grade II Listed), Home Farm Barn (HER Evidence), and Southleigh Farmstead.</p> <p><u>Occupation Phase</u></p> <p>Substantial beneficial effects on Southleigh Park House, Lodge and Clock Tower (Grade II Listed).</p> <p>Moderate adverse effects on Nos. 1 and 2 Eastleigh Road (Grade II Listed).</p> <p>Moderate beneficial effects on Southleigh Farmstead.</p> <p>Minor adverse effects on Woodbine Cottage East Leigh Road (Locally Listed) and Home Farm Barn (HER Evidence).</p> <p>Neutral effects on the archaeological resource (below ground receptors).</p>
	<p><u>Standard Mitigation Measures</u></p> <p>None</p>		
	<p><u>Additional Mitigation Measures</u></p> <p>Further archaeological investigation.</p>	Planning Condition	

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Environmental Topic	Mitigation Measures	Means by which Mitigation will be Delivered	Residual Effects
Water Environment	Construction and Occupation		
	<u>Embedded Mitigation Measures</u> All built development, excluding the ordinary watercourse primary street network crossings, will be located outside of the post-development maximum floodplain extent of the 1 in 1,000 annual probability events. Sustainable Drainage Systems (SuDS) to be incorporated into the site layout. Access and egress via the primary street/vehicular access into the development (from Southleigh Road - to the west) will be located wholly within Flood Zone 1 at levels above the 1 in 1,000 AP event and thus have access to land entirely outside of the floodplain. There would be no requirement for occupants to enter flooded areas and so they would be entirely safe with dry access maintained.	Parameter Plans Parameter Plans / Planning Condition Parameter Plans	<u>Construction Phase</u> Minor adverse effects on fluvial flooding - ordinary watercourses, surface water flooding, surface water quality and groundwater quality. Minor beneficial effects on fluvial flooding - ordinary watercourses. <u>Occupation Phase</u> Moderate beneficial effects on fluvial flooding - ordinary watercourses. Minor adverse effects on fluvial flooding - ordinary watercourses, surface water flooding, surface water quality and groundwater quality.
	<u>Standard Mitigation Measures</u> <u>Construction Phase</u> See Framework CEMP in <i>Appendix 4.1</i> .	Planning Condition	

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	The ordinary watercourse crossings will involve works along the watercourses in Flood Zone 3. Appropriate site management (CEMP) and flood evacuation (Flood Warning Plan) will be provided, as required.	Planning Condition	
	<u>Occupation Phase</u>		
	Site-wide drainage strategy implemented, including appropriate Finished Floor Levels.	Planning Condition	
	<u>Additional Mitigation Measures</u>		
	None.		
Agricultural Land	Construction and Occupation		
	<u>Embedded Mitigation Measures</u>		<u>Construction Phase</u>
	None.		Substantial adverse effects on Best and Most Versatile (BMV) agricultural land.
	<u>Standard Mitigation Measures</u>		Minor adverse effects on soil resources.
	See Framework CEMP in <i>Appendix 4.1</i> .	Planning Condition	<u>Occupation Phase</u>
	<u>Additional Mitigation Measures</u>		No effects.
	None.		

Table 13.2 – In-combination Effects							
Nature of Effect	Existing Residents / Community	Future Residents	Flora and Fauna	Landscape	Agricultural Land and Soil Resource	Cultural Heritage	Water
Construction Phase							
Change of land use	Moderate-substantial to minor adverse	-	Minor adverse to minor beneficial	Substantial to minor adverse	Substantial adverse	Moderate adverse to substantial beneficial	Minor adverse to minor beneficial
Noise	-	-	-	-		-	-
Dust	-	-	-	-		-	-
Construction Traffic	-	-	-	-		-	-

Nature of Effect	Existing Residents / Community	Future Residents	Flora and Fauna	Landscape	Agricultural Land and Soil Resource	Cultural Heritage	Water
Occupation Phase							
Change of Land Use	-	-	-	Substantial adverse to minor adverse	-	Moderate adverse to substantial beneficial	-
Green Infrastructure	-	-	-	-	-	-	-
Traffic	Moderate adverse to moderate beneficial	Moderate adverse to moderate beneficial	-	-	-	-	-
Noise	-	-	-	-	-	-	-
Drainage Strategy	-	-	-	-	-	-	Minor adverse to moderate beneficial