

## 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 for a mixed use development, including demolition of existing buildings and erection of up to 2,170 residential units (Use Class C3), 290sqm of flexible office floorspace (Use Class E), 1,395sqm of flexible retail/commercial floorspace (Use Class E/Sui Generis), 1,250sqm community floorspace (Use Class F2), new publicly accessible open space and associated access, servicing, landscaping and works*

*Detailed permission is sought for Phase 1 for erection of 452 residential units (Use Class C3), 1,250sqm community floorspace (Use Class F2), 290sqm of flexible office floorspace (Use Class E), 395sqm of flexible retail/commercial floorspace (Use Class E/Sui Generis), new publicly accessible open space and associated access, servicing, parking, landscaping works including tree removal, refuse/recycling and bicycle storage, energy centre and works*

*Outline permission (with appearance and landscaping reserved) is sought for the remainder of the development ("the Proposed Development")."*

- 11.2 The Development has been subject to an iterative design process. As this process progressed measures have been incorporated into the development design 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
<b>Population and Human Health</b>			
Construction	Effects on Employment	None Required.	Minor - Moderate Beneficial
	Effects on Wider Human Health	Effects would be localised and temporary and controlled using measures set out in the Construction Environmental Management Plan (CEMP) to be secured by planning condition.	Negligible
Completed Development	Effects on Population and Housing	None required.	Moderate Beneficial

Stage	Effect	Mitigation	Residual Significance
	Effects on Employment		Negligible
	Effects on Primary Healthcare		Negligible
	Effects on Primary Education		Negligible
	Effects on Secondary Education	Financial contributions required.	Negligible
	Effects on Wider Human Health	No mitigation required as all measures designed into the Development.	Minor Beneficial
	Effects on Public Open Space	None required.	Minor Beneficial
<b>Townscape and Visual Effects</b>			
Construction	Effects on Townscape Character	Protection of existing vegetation and establishment of the landscape proposals at an early stage. Locating Site compounds and material stockpiles away from sensitive receptors and limiting the movement of stockpiles. Control of lighting and working hours at the Site. Providing hoardings to limit the visibility and conspicuousness of ground level activities and minimising the duration of tall plant and machinery on the Site.	Neutral to Moderate Adverse
	Effects on Visual Receptors		Neutral to Major Adverse
Completed Development	Effects on Townscape Character	The adoption of the design codes as set out in the accompanying planning application material, which includes utilising a material and tonality palette that reflects or complements the built vernacular of the surrounding townscape, reinforced with a consistent building typology and elevation/fenestration strategy within particular zones of the Site, along with the enhancement of vegetation within the Site, through the provision of	Neutral to Minor Beneficial
	Effects on Visual Receptors		Minor Adverse to Moderate Beneficial

Stage	Effect	Mitigation	Residual Significance
		advanced planting where practicable.  Ongoing management and maintenance of hard and soft landscaping measures.	
<b>Air Quality</b>			
Construction	Effects from Dust Soiling	Recommended dust controls (see Table 7.21) comprising standard mitigation measures, including but not limited to: <ul style="list-style-type: none"> <li>• Development of a Dust Management Plan (DMP);</li> <li>• Daily on-site and off-site inspection where receptors are nearby to monitor dust;</li> <li>• Cover any stockpiles to prevent wind whipping;</li> <li>• Plan Site layout so that machinery and dust causing activities are located away from receptors;</li> <li>• Avoid Idling Vehicles;</li> <li>• Water suppression equipment; and</li> <li>• Hard surface haul routes and wheel wash facilities.</li> </ul>	Negligible
	Impacts on Human Health		Negligible
	Effects from Trackout		Negligible
Completed Development	Effects from On-site Human Exposure	None required.	Negligible
	Effects on Existing Human Receptors	<ul style="list-style-type: none"> <li>• Provision of Electric Vehicle Charging Points or instruction provision for all parking bays;</li> <li>• Provision of secure cycle storage infrastructure;</li> <li>• Implementation of Travel Plans; and</li> <li>• Provision of measures to support sustainable transport modes</li> </ul>	

Stage	Effect	Mitigation	Residual Significance
		including features to encourage sustainable travel methods e.g. cycle path links, pedestrian links, bus stops, etc.	
<b>Biodiversity</b>			
Construction	Effects on Statutory designated sites	Implementation of a CEMP to be secured by planning condition.	Negligible
	Effects on non-statutory designated sites		Negligible
	Effects on Scattered Trees	Implementation of Ecological Management Plan (EMP).	Positive
	Effects on Introduced shrub		Positive
	Effects on Bats - Foraging and Commuting bats		Positive
	Effects on Bats - Roosting bats (Phase 1)	None required.	Positive
	Effects on Bats – Roosting (Phase 2 - 5)	Update Preliminary Ecological Appraisal (PEA) and Bat Scoping Surveys for outline element of the Development (phases 2-5), as part of Reserved Matters (RM) planning submissions.	Negligible
	Effects on Birds - Killing and Injuring	Timing of works or ecologist supervision.	Negligible
	Effects on Birds - Loss of Nesting and Foraging Habitat	Provision of bird boxes including house sparrow terraces.	Positive
	Effects on Invertebrates	Provision of log piles and stag beetle loggeries.	Positive
	Effects on Hedgehog – Killing and Injury	Supervision of clearance work.	Negligible
	Effects on Hedgehog- loss of sheltering and foraging	None Required.	Positive

Stage	Effect	Mitigation	Residual Significance
	habitat		
Completed Development	Effects on Statutory designated sites	None required.	Negligible
	Effects on Non-statutory designated sites		Negligible
	Effects on Scattered Trees		Negligible
	Effects on Introduced Shrub		No impact
	Effects on Bats – Foraging and Commuting	Bat sensitive lighting design.	Positive
	Effects on Bats - Roosting	None required.	No impact
	Effects on Birds		No impact
	Effects on Invertebrates		No impact
	Effects on Hedgehog		No impact
	<b>Daylight, Sunlight and Overshadowing</b>		
Construction	Effects on Daylight, Sunlight and Overshadowing during demolition.	None required.	Negligible
	Effects on Daylight, Sunlight and Overshadowing to surrounding receptors during construction.	Those measures proposed for the completed Development.	Negligible to Major Adverse
Completed Development	Effects on Daylight to surrounding residential properties.	Mitigation through design, including articulation of blocks and inclusion of gaps to minimise daylight effects.	Negligible to Major Adverse  (33 buildings experience a Negligible effect, 23 buildings experience a Negligible to Minor Adverse effect, 16 buildings experience Minor Adverse effect, 22 buildings experience Moderate Adverse effect, 22 buildings experience Moderate to Major Adverse effect and 35 buildings experience Major Adverse effect).
	Effects on	Mitigation through design,	Negligible to Major Adverse

Stage	Effect	Mitigation	Residual Significance
	Sunlight to surrounding residential properties.	including articulation of blocks and inclusion of gaps to minimise sunlight effects.	(1 building experiences a Negligible effect, 21 buildings experience a Negligible to Minor Adverse effect, 4 buildings experience Minor Adverse effect and 5 buildings experience Moderate Adverse effect).
	Effects on Overshadowing to surrounding areas of amenity.	Mitigation through design, including articulation of blocks and inclusion of gaps to minimise overshadowing effects.	Negligible to Major Adverse  (131 rear gardens and communal amenity areas experience a Negligible effect, 1 rear garden would experience a Moderate Adverse effect and 6 would experience a Major Adverse effect).
Wind Microclimate			
Construction	Wind Impacts during Construction	None required.	Negligible
Completed Development	Effects on Thoroughfares	Retained and new trees and planting within the landscaping along with the overall building layouts throughout the Site.	Negligible
	Effects on Entrance – Building M2	Implementing landscaping within the vicinity of Building M2 such as trees (>5m in height) and shrubs (min 1.5m in height).	Negligible
	Effects on Entrances – other	None required.	Negligible
	Effects on Entrances – off site		Negligible
	Effects on Pedestrian Crossing		Negligible
	Effects on Ground Level Amenity – Sitting	Implementing additional landscaping such as specific new trees (>7.5m in height) and shrubs (min 1.5m in height).	Negligible
Effects on Podium Level Amenity – Sitting	Centre and west area of Podium level amenity on Building plot E to be used for access only. All fixed seating/amenity has been removed from this location in building plot E. Utilise permanent semi-porous (50%) screen	Negligible	

Stage	Effect	Mitigation	Residual Significance
		between the columns on the north elevation on building plot C. Implementing landscaping elements such as trees (>3m in height), shrubs in planters (min 1.5m in height).	
	Effects on Balconies (Phase 1)	37 no. balconies across Phase 1 have balustrades set to min 1.5m in height. Porosity of these balustrades increased (23%, 50% & 73%).	Negligible
	Effects on Strong Winds	Implementing additional landscaping such as trees (>5m in height) and shrubs (min 1.5m in height) in localised areas. Implementing balustrades set to min 1.5m high (Phase 1).	Not Significant

### 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. This has been informed by the residual effects of the Development (as identified above in Table 11.1) and are those effects where greater than negligible effects have been identified, where they relate 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	Ecology	Townscape and Visual
	<b>Construction Phase</b>		
Views of vehicles and machinery being used during the construction period	*		*
Demolition and construction dust	*	*	
Creation of construction employment	*		

Effect	Local Population	Ecology	Townscape and Visual
<b>Completed Development</b>			
Views of the Development	*		*
New housing and employment opportunities	*		
New Public Realm Creation	*		
Wider human health, local open space and deprivation	*		
New Habitat Creation		*	

\*indicates where an effect may occur.

11.4 In summary, the Development will result in the following beneficial residual effects:

- Benefits to the local economy, from employment generation during the construction period of the Development;
- Increase in housing provision in the area;
- Improvement in terms of Wider Human Health;
- Benefits from increased public open space; and
- Ecological benefits on habitat (scattered trees and introduced shrub) as well as bats, birds, invertebrates and hedgehog during construction and on foraging and commuting bats during operation.

11.5 In summary, the Development will result in the following adverse residual effects:

- Effects on townscape character and visual receptors during construction of the Development; and
- Some daylight and sunlight effects to surrounding residential properties during construction and operation and overshadowing effects to surrounding areas of amenity during operation.