

10.0 SUMMARY AND RESIDUAL EFFECTS

Introduction

- 10.1 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 a full planning permission for redevelopment to provide 1,381 dwellings, community facilities, retail/commercial uses, commercial floorspace, a data centre, amenity and playspace and car parking on the former Nestlé Factory site, Hayes.
- 10.2 The Development has been subject to an iterative design process. As this process progressed, measures have been incorporated into the 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 10.1 below along with the residual effects of the Development following mitigation.

Table 10.1: Significance Table

Stage	Effect	Mitigation	Residual Significance
Transport & Access			
Construction	Severance, pedestrian and driver delay, pedestrian amenity and road safety	A number of measures will be implemented to ensure that the general effect of construction traffic flows is as predicted. These will be set out within a Construction Management Plan (CMP) which will include: <ul style="list-style-type: none"> • Planning and management of both vehicle and pedestrian routes; • The elimination of reversing wherever possible; • Safe driving and working practices; • Protection to the public; • Adequate visibility splays and sight lines; • Provision of signs and barriers; and • Adequate parking for off-loading storage areas 	Negligible
Operation	Pedestrian amenity and severance – North Hyde Gardens	Implementation of a Travel Plan.	Moderate Beneficial
	Pedestrian amenity and severance – Harold Avenue and Nestles Avenue	Implementation of a Travel Plan.	Moderate Adverse
	Road Safety & pedestrian delay	No mitigation necessary.	Negligible
	Driver delay	Introduction of right turn lane on North Hyde Road at Harold Avenue.	Negligible
Sensitivity Test¹			
Construction	Severance, pedestrian and driver delay, pedestrian amenity and road safety	A number of measures will be implemented to ensure that the general effect of construction traffic flows is as predicted. These will be set out within a Construction Management Plan (CMP) which will include: <ul style="list-style-type: none"> • Planning and management of both vehicle and pedestrian routes; • The elimination of reversing wherever possible; • Safe driving and working practices; • Protection to the public; • Adequate visibility splays and sight lines; • Provision of signs and barriers; and • Adequate parking for off-loading storage areas 	Negligible
Operation	Pedestrian amenity and severance – North Hyde Gardens	Implementation of a Travel Plan	Moderate Adverse

¹ Further details of the 'Sensitivity Test' undertaken are provided in Chapter 6 Transport & Access

Stage	Effect	Mitigation	Residual Significance
	Pedestrian amenity and severance – Harold Avenue and Nestles Avenue	Implementation of a Travel Plan	Moderate Adverse
	Road Safety, pedestrian delay and driver delay	Introduction of right turn lane on North Hyde Road at Harold Avenue	Negligible
Air Quality			
Construction	Construction Dust and PM10	Mitigation within agreed Air Quality Development Management Plan (AQDMP)	Negligible
Operation	Emissions from Road Traffic	No mitigation required, but Travel Plan will seek to encourage sustainable travel and may indirectly reduce emissions from road traffic.	Negligible
	Emissions from Energy Centre		Negligible
Land Contamination			
Construction	Dermal contact / dust and vapour inhalation / direct ingestion of contaminated soil by site workers	Implementation of remediation strategy to remove any contaminated hot spots. Use of personal protective equipment.	Minor Adverse
	Dust and/or inhalation by neighbouring land users	Dust suppression during demolition and construction works	Negligible
	Adverse impact to Controlled water – leaching of soil contaminants into the gravel aquifer	Implementation of remediation strategy to remove any contaminated hot spots. Installation of temporary drainage arrangements to control run-off if required.	Minor Adverse
	Existing drainage networks – leaching of contaminants from soils to surface water drains	Implementation of remediation strategy to remove contaminated hot spots.	Negligible
	Spillages from on site storage of fuels or chemicals	Implementation of Construction Environmental Management Plan (CEMP)	Negligible
	Adverse impacts to construction workers from dewatering activities	Implementation of remediation strategy to remove contaminated hotspots. Use of personal protective equipment.	Negligible
	Ecological receptors – plant uptake of contaminants in soil or groundwater	Dust suppression and removal of contaminated hotspots.	Negligible
Operation	Site occupants – dermal contact / dust and vapour inhalation / direct ingestion of contaminated soil, in areas of soft landscaping	Use of a cover layer to break contaminant linkages.	Negligible
	Ecological receptors – plant	Use of a cover layer and/or tree boxes to break contaminant linkages.	Negligible

Stage	Effect	Mitigation	Residual Significance
	uptake of contaminants in soil or groundwater		
	Permeation of contaminants into drinking water supply pipes	Use of sterile trenches / upgraded plastics (e.g. 'Protectline').	Negligible
	Chemically impacted surface water run-off from parked cars or from plant maintenance areas reaching the aquifer or drainage networks	Use of petrol interceptors within drainage networks.	Negligible
Built Heritage			
Construction	Botwell: Nestlé, Hayes Conservation Area	Use of hoarding, management of construction traffic and appropriate housekeeping on-site in accordance with CEMP.	Moderate Adverse
	Nestlé Works (Main Factory Building) (Locally Listed Building)		Minor Adverse
	Nestlé Works (Former Canteen) (Locally Listed Building)		
	Nestlé Works (Gates and Railings) (Locally Listed Building)		
	Nestlé Works (Lodge) (Locally Listed Building)	Preparation of a proportionate building record in advance of the demolition.	Moderate-Minor Adverse
Operation	Botwell: Nestlé, Hayes Conservation Area	No additional mitigation proposed (mitigation is included in the design of the development).	Moderate Beneficial
	Nestlé Works (Main Factory Building) (Locally Listed Building)		Moderate-Minor Beneficial
	Nestlé Works (Former Canteen) (Locally Listed Building)		Minor Beneficial
	Nestlé Works (Gates and Railings) (Locally Listed Building)		Negligible

Interactive Effects

- 10.3 Paragraph 3 in Schedule 4 Part 1 of the EIA Regulations 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 10.2 below.

Table 10.2 Interactive Effects

Effect	Local population	Users of the local road network	Built Heritage
Construction Phase			
Disruption to users of the local road network		*	
Construction activities (plant and machinery)	*		*
Operational Phase			
Improvements to landscaping public footpaths & cycling	*	*	
Pedestrian amenity	*	*	
Provision of employment opportunities	*		

*indicates where an effect may occur.