

APPENDIX 2.1
SCOPING REPORT

Former Nestlé Factory, Hayes, London

Environmental Impact Assessment

Scoping Report

Prepared on behalf of SEGRO PLC and Barratt London

March 2016

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Project Ref:	24552/A5/EIA Scoping Report	24552/A5/EIA Scoping Report
Status:	Draft	Final
Issue/Rev:	01	01
Date:	17 July 2015	11 th March 2016
Prepared by:	Candice Dutton	Elizabeth Davies
Checked by:	Gareth Wilson	Gareth Wilson

Barton Willmore LLP
7 Soho Square
London
W1D 3QB

Tel: 020 7446 6888

Ref: 24552/A5/EIAScoping

Email: elizabeth.davies@bartonwillmore.co.uk

Date: March 2016

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1.0 INTRODUCTION

- 1.1 This report has been prepared to accompany a request for an Environmental Impact Assessment (EIA) Scoping Opinion from London Borough of Hillingdon (LBH) in accordance with Regulation 13 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 as amended by the Town and Country Planning (EIA) (Amendment) Regulations 2015 (the EIA Regulations). It follows receipt of the Screening Opinion from LBH (dated 29th June 2015), which advises the proposed development of the site should be accompanied by an Environmental Statement. The principle issues relate to air quality, traffic, land contamination and cumulative effects with nearby committed developments.
- 1.2 Scoping is a process which determines the extent of the environmental issues (as defined in Schedule 4 of the EIA Regulations), which need to be considered in the EIA. It is not a compulsory stage in the EIA process but is a useful tool in establishing the main, or 'significant', effects, as the local planning authority and relevant statutory bodies may hold useful local, specialised knowledge.
- 1.3 Regulation 13 (2) states that a scoping request must be accompanied by:
- A plan sufficient to identify the land;
 - A brief description of the nature and purpose of the development and of its possible effects on the environment; and
 - Such other information or representations as the person making the request may wish to provide or make.

Site Context

- 1.4 The site is located within the London Borough of Hillingdon, approximately 4km northeast of Heathrow Airport. In 2012, Nestlé announced the planned closure of operations on the site and the transfer of the whole of its UK coffee operation, including manufacturing, filling and packing to Tutbury in Derbyshire.
- 1.5 North Hyde Gardens forms the eastern boundary of the site and Nestles Avenue runs along the southern boundary. The Grand Union Canal and the Great Western Railway Line form the northern boundary. Commercial units accessed from Vivesh Close are situated along the western boundary. Hayes and Harlington train station is situated 600m to the north east of the site.

- 1.6 Beyond the site, the British Airways Component Engineering facility is situated to the northeast beyond the Grand Union Canal. Minet Country Park is located to the northeast of this facility beyond the railway line. A large electricity sub-station is situated adjacent to the site to the east beyond North Hyde Gardens. Residential areas are located to the south of the site along Nestles Avenue.
- 1.7 The A312 Parkway and Bulls Bridge Roundabout is located 150m southeast of the site, north of junction 3 of the M4.

Site Description

- 1.8 The site extends to approximately 12 hectares (ha) and was developed for Nestlé in the 1930s. The site comprises factory buildings and is enclosed by railings with numerous mature trees present along the southern frontage along Nestles Avenue.
- 1.9 The site has been identified for mixed use residential and employment purposes in the LBH Site Allocations and Designations Local Plan Part 2 (Revised Proposed Submission Version, October 2015) (Site Allocation Policy SA5 'Site A').
- 1.10 SEGRO purchased the site from Nestlé in early 2015 following a useful period of technical due diligence. There then followed a period of early masterplanning to deliver a comprehensive site wide masterplan, which included preliminary consultation with LBH and other stakeholders, prior to SEGRO selecting Barratt London towards the end of 2015 as their preferred development partner to acquire and take forward the residential element of the site.
- 1.11 SEGRO and Barratt London have since been working as development partners to progress the masterplan, which seeks to retain employment on the site and deliver new homes in line with the proposed allocation (further information is provided below under the description of the proposed development). It remains the intention to deliver the retained employment part of the site for SEGRO as an early phase and the masterplan proposals are designed to achieve this objective.
- 1.12 In total, 10 buildings sit within the boundary, the majority of which connect via a large central factory building through passageways and infill structures. These buildings occupy the majority of the site (50 to 60%), with loading and parking located in the eastern and south eastern area of the site. These buildings housed roasting and drying plants and chocolate manufacturing facilities for Nestlé as well as a boiler house, coffee grounds combustion plant (CGPP) and an amenities building. The buildings currently on site have a maximum area of

98,624m². BAA Safeguarding has confirmed that the site is situated within a safeguarding area known as the Inner Horizontal Surface (IHS) for Heathrow Airport.

SEGRO Site

- 1.13 The SEGRO Site (see red line plan at Appendix 2) extends to 4.84 ha.
- 1.14 There is one local listed building on the SEGRO site, the Nestlé Works lodge and a section of the locally listed Nestlé Works railings along Nestle Avenue.

Barratt London Site

- 1.15 The Barratt London Site (see red line plan at Appendix 3) extends to 7.16 ha.
- 1.16 There are three locally listed buildings and features on the Barratt London site, as follows:
- Nestlé Works: Main Factory;
 - Nestlé Works: gates and railings; and
 - Nestlé Works: former canteen.

Proposed Development

- 1.17 SEGRO and Barratt London are working as development partners to deliver a comprehensive site wide masterplan, but two planning applications and two Environmental Statements will be prepared in accordance with the scope agreed as part of this scoping process. Both applicants will work together to ensure a comprehensive scheme is developed.
- 1.18 The proposed development comprises the demolition of the majority of the buildings on site and the development of land. A description of the proposed SEGRO and Barratt London developments are provided below.

SEGRO Proposed Development

- 1.19 The current description of the SEGRO proposals is as follows:

“Part-demolition of existing factory buildings and associated structures, and redevelopment to provide 28,700 sq m (GEA) of commercial floorspace (Use Classes B1(c)/B2/B8 and Data Centre), service yards, associated car parking, landscaping, access and other engineering works”

- 1.20 The retained employment on the site by SEGRO will comprise the development of the eastern side of the Nestle Site to provide a new industrial estate consisting of approximately 28,700m² (GFA) of B1c / B2 and B8 and ancillary office and sui generis for a data centre. Comparatively, this is significantly less (c.17,000 m²) than the current extant floor space within the SEGRO application boundary.
- 1.21 Car parking provision will be provided in line with current London Plan parking standards. The proposed development will provide circa 192 parking spaces.
- 1.22 Comparatively, the proposals will provide significantly less (c.228 spaces) than the current site parking within the application boundary (c.420 spaces).
- 1.23 Commercial uses would operate 24 hours a day. The maximum height of the buildings would not exceed 18m.

Barratt London Proposed Development

- 1.24 The current description of the Barratt London proposals is as follows:

“Part-demolition of existing factory buildings and associated structures, and redevelopment to provide up to 1,400 dwellings within Use Class C3, Management Suite and supporting community facilities (Use Class D2), retail/commercial uses (Use Class A1/A3/A4/A5), amenity and playspace, landscaping, access and other engineering works”.

- 1.25 Initial investigations indicate that a decentralised energy centre may be required for the proposed residential part of the development.
- 1.26 The maximum building height will be up to 12 storeys subject to further consultation with BAA.

2.0 SCOPING

- 2.1 This scoping exercise, based on the topics set out in Schedule 4 of the EIA Regulations, has been informed by the Screening Opinion from LBH, the existing body of information available for the site and the consultant team's knowledge. Table 1 provides a summary of the scoping exercise.
- 2.2 Separate planning applications and Environmental Statements will be prepared by Barratt London and SEGRO to support the comprehensive redevelopment of the site. However, given the cohesive nature of the masterplan proposals and environmental issues it is considered appropriate to undertake a combined scoping exercise to identify the potential for likely significant effects to be considered in both ES documents. Reference to the site in this Scoping Report therefore refers to the entire Nestle factory site unless otherwise stated.

Table 1: EIA Scoping Summary

Topic	Potential Construction Phase Effects	Potential Operational Phase Effects	Likely Significant Effects Prior to Mitigation	Comments
Transport and Access	✓ - T	✓ - P	✓	Chapter to be prepared. However, given the nature of the proposed developments there is potential for different effects to arise relating to the type and amount of traffic generated by each scheme and this will be reflected in the assessments. The respective developments will also be assessed in culmination with nearby committed developments for both the construction and operational phases.
Air Quality	✓ - T	✓ - P	✓	Chapter to be prepared. Necessary due to the existing failings in EU air quality levels and the potential for the developments to impact on air quality. The respective developments will also be assessed in culmination with nearby committed developments during the operational phase.

Topic	Potential Construction Phase Effects	Potential Operational Phase Effects	Likely Significant Effects Prior to Mitigation	Comments
Land Contamination	✓ - T	✓ - P	✓	Chapter to be prepared. Although the site will be fully remediated this currently has the potential for significant environment effects due to potential contamination on the site and nearby sensitive receptors which include the Grand Union Canal and the River Crane.
Socio-Economic Issues	x - T	✓ - P	x	No significant adverse socio-economic effects are anticipated and on this basis an assessment of Socio-Economic effects has been scoped out of the ES.
Noise & Vibration	x	x	x	No significant adverse effects are anticipated. Temporary construction noise and vibration effects are anticipated but not considered significant, and can be managed through the application of good practice and through implementation of a Construction Environmental Management Plan (CEMP). With regard to the operational phase, the proposed development will be designed so that the impacts of noise from the commercial activities are minimised through a combination of building design and orientation. The residential site will also use a combination of building fabric, glazing and internal layouts to ensure that the impact of noise from adjacent sources is minimised.
Agriculture	x	x	x	Topic scoped out of the ES
Townscape and Views	x	x	x	Topic scoped out of the ES
Ecology and Nature Conservation	x	x	x	Topic scoped out of the ES
Water Resources and Flood Risk	x	x	x	Topic scoped out of the ES
Cultural Heritage	x	x	x	Topic scoped out of the ES

Topic	Potential Construction Phase Effects	Potential Operational Phase Effects	Likely Significant Effects Prior to Mitigation	Comments
Wind Microclimate	x	x	x	Topic scoped out of the ES
Daylight, Sunlight and Overshadowing	x	x	x	Topic scoped out of the ES
Lighting Impacts	x	x	x	Topic scoped out of the ES
Waste	x	x	x	Topic scoped out of the ES

Key: ✓ Likely Significant Effect / x No Likely Significant Effect.

T – Temporary Effect / P – Permanent Effect

Environmental Disciplines Scoped Out

- 2.1 Further information on the topics scoped out of the EIAs in Table 1 is set out in the following sections.

Socio-Economics

- 2.2 Together the proposed developments will provide housing and employment opportunities. No significant socio-economic effects are anticipated and on this basis an assessment of Socio-Economic effects has been scoped out of the Environmental Statements.

Noise and Vibration

- 2.3 A previous desk study exercise and assessment of potential issues during construction identified the potential for temporary but insignificant noise and vibration effects from the proposed construction works.
- 2.4 The impact of noise during the operational phase of the SEGRO scheme will be minimised through the design of the site generally and individual buildings within it. For example, those buildings closest to sensitive premises around the site perimeter (in particular residential locations) will be orientated so that loading bays are facing away from sensitive properties, thus maximising the self-screening effect of the buildings themselves. To avoid break out of noise from operations within the buildings, the facades will feature an enhanced specification of acoustic insulation where such mitigation is necessary.
- 2.5 Building services plant will be located away from sensitive locations and will be specified to comply with the requirements of BS4142:2014 in respect of noise levels at adjacent premises,

to protect the occupants of those premises from excessive noise levels.

- 2.6 The internal layout of residential buildings within the Barratt London scheme will be configured to avoid, where possible, sensitive rooms (such as bedrooms and living rooms) overlooking noise sources. Glazing, façade and ventilation treatments will be used to ensure that the internal building envelope of residential premises is protected from external noise sources.
- 2.7 It is considered that given the residential nature of the Barratt London scheme, significant noise and vibration effects would not arise from the operation of the development. However, it is acknowledged that it is necessary to undertake an assessment of noise effects to future residents of the proposed Barratt London development and this assessment will be included in the appendices to the Barratt London ES. This assessment will include effects on future residents of noise from the existing noise climate, and also future noise from the adjacent proposed industrial development.

Agriculture

- 2.8 The site is currently developed and there will be no loss of agricultural land. This topic has therefore been scoped out of the ES.

Townscape and Visual

- 2.9 Due to obstacle limitation constraints identified in consultation with BAA Safeguarding, the proposed development is not expected to exceed 12 storeys. The scale of the residential development, with the taller residential elements proposed for the north western area of the site, is considered to reflect the context and proportion of its urban setting, being within the 'Hayes Cluster' of tall buildings adjacent to the Grand Union Canal. The visual context of the proposed developments is also considered to reflect the existing nature of views of built form within the site (Appendix 4).
- 2.10 The sensitivity of the site is considered to be reduced as the site is not covered by any national, regional, or local landscape/townscape designations; the nearest Registered Park and Garden is over 3km to the south-east and the site is not crossed by any Public Rights of Way. The site is not located within a sensitive or protected viewing corridor identified in the London Plan London View Management Framework in respect of strategic views; nor is the site identified within the Hillingdon Townscape Character Study (2013).
- 2.11 In conclusion, it is considered unlikely that any significant effects will result to the surrounding

townscape and visual amenity and that this topic can be scoped out of the Environmental Statements. A Townscape and Visual Impact Assessment is considered appropriate to demonstrate the effects of the proposed development and will be submitted as part of the planning applications.

Ecology and Nature Conservation

- 2.12 A Preliminary Ecology Appraisal (Appendix 5) has confirmed that the site has a low ecological value, with 75% of the site comprising buildings and hard standing. It does not form part of any statutory or non-statutory designated nature conservation site.
- 2.13 The site borders the Grand Union Canal, a Site of Metropolitan Grade Importance for Nature Conservation, and therefore has a residual borough level value.
- 2.14 To fully assess the presence or likely absence of bat roosts within the buildings and mature trees, a Phase 2 bat survey will be undertaken with the results included in the ecology report submitted with the planning applications.
- 2.15 The proposals will retain the large group of trees of high and moderate amenity value at the gated entrance off Nestles Avenue (Appendix 6). A Tree Report will be submitted as part of the planning applications.
- 2.16 Any habitat lost due to the proposed development will be recreated as part of the landscaping proposals. This will be developed during the design process and will seek to enhance the ecological value of the site. On this basis significant effects on ecology and nature conversation are not considered likely.

Water Resources and Flood Risk

- 2.17 According to the Environment Agency website, the site is located in Flood Zone 1 and is at a low risk of flooding from rivers and seas. The nearest area of Flood Zones 2 and 3 are located to the east of the site, and contain areas of medium to high risk of flooding associated with the River Crane.
- 2.18 Likely significant effects are not anticipated in respect of flood risk or water resources. A Flood Risk Assessment and a Foul Sewerage and Utilities Assessment will be submitted with the planning applications. Effects relating to existing contamination would be considered as part of the EIA, as set out later in this report.

Cultural Heritage

- 2.19 There are no designated or non-designated archaeological assets on or in the vicinity of the site. An Archaeological Desk Based Assessment has been prepared and is included at Appendix 7. It concludes that the potential for undiscovered assets is limited due to an episode of Brickearth extractions in the 1900s and subsequent developments. The report suggests that should a programme of targeted archaeological investigation be required, it could be secured by appropriately worded planning condition.
- 2.20 In terms of built heritage, as set out above, there are four locally listed buildings / features on the site. The nearest statutory listed building to the site is Benlow Works (Grade II), located approximately 165m to the north of the site. The nearest Grade II* listed building to the site is the Church of St Dunstan which is located approximately 820m to the south of the site. The nearest Grade I listed building to the site is the Church of St Peter and St Paul which is located approximately 1.4km to the south-east of the site. All of these buildings are considered to be situated at a distance from the site sufficient to conclude that significant effects on their setting from the proposed redevelopment of the site are not considered likely.
- 2.21 The whole site has been designated as a Conservation Area and consideration will be given to this as part of the design of the proposed development. Significant effects are not considered likely. Therefore, this topic will be scoped out of the ES. A Heritage Statement will be submitted as part of the planning application which will include mitigation measures.

Wind Microclimate

- 2.22 Throughout the demolition and construction phase, the removal of the existing buildings, cranes and the erection of new buildings may affect the local wind microclimate. However, these effects are considered to be temporary and not anticipated to be significant. The Development could lead to changes in the microclimate for pedestrians in the immediate surroundings of the proposed development. Measures will be employed to ensure that any areas that experience adverse effects can be appropriately mitigated e.g. landscaping or screens.
- 2.23 Likely significant wind effects are not anticipated and this topic has been scoped out of the Environmental Statements.

Daylight, Sunlight and Overshadowing

- 2.24 An initial appraisal of the proposed development was undertaken which confirmed there would not be a reduction of light on the residential properties of Nestles Avenue, that would give rise to likely significant effects on the environment.
- 2.25 Consideration will be given to effects on daylight and overshadowing as part of the design of the proposed development, in particular the Barratt London proposals where taller buildings are planned. A Daylight / Sunlight and Rights of Light report will be prepared and submitted with the Barratt London planning application. Significant effects are not anticipate and it is therefore proposed to scope daylight, sunlight and overshadowing out of the EIA.
- 2.26 Consideration will be given to the materials used in the design of the developments to ensure no significant effects in relation to solar glare occur. Consultation with Network Rail would be undertaken as necessary given the proximity to the railway line.

Lighting

- 2.27 The proposals are not anticipated to produce a significant lighting impact in the context of the surrounding development. This topic has therefore been scoped out of the Environmental Statements. A standalone Lighting Report will be submitted with the planning applications.

Waste

- 2.28 The development will generate waste from the demolition of the existing buildings. The effect of waste generation during the demolition, construction, and operational phases is not considered to be significant. Existing buildings on site would be removed with much of the materials recycled for use on site or off site. Disposal to landfill would be minimized and any effects relating to additional HGV movements would be considered by the Transport Assessment. A Site Waste Management Plan would be prepared and submitted in support of the planning application. This will outline the waste strategy for the proposed development, describing the strategy for each land use and an assessment of waste generation, storage, handling and collection requirements. Waste generation and treatment will also be considered within the construction methodology and phasing element of the Environmental Statements.

Environmental Disciplines Scoped In

- 2.29 For each of the topics scoped into the assessment, further information on the details to be

included in the assessment and the methodology to be employed are set out below.

3.0 TRANSPORT AND ACCESS

3.1 With regard to potential transport effects, the nature of the effects are likely to differ between the commercial SEGRO proposals and the residential led Barratt London proposals, therefore the scope of works for each assessment is set out separately below, albeit they are based on the same baseline positions and key assumptions.

SEGRO Site

Approach

3.2 The traffic and transport impact of the proposed development will be assessed in line with guidance contained in the Department for Transport (DfT) publication 'Guidance on Transport Assessment' (March 2007) and The Institute of Environmental Assessment (now IEMA) Guidelines for the Environmental Assessment of Road Traffic. Consultation will be undertaken where required with Highways England, Transport for London (TfL) and LBH Highways Department.

3.3 Scoping discussions will be undertaken with LBH to determine which committed developments require consideration within baseline conditions, although where proposed development traffic reflects a reduction, this is to be presented for information purposes and consistency with other sites coming forward. A list of identified committed schemes is included in Chapter 6.

3.4 The extent of transport impact, where they arise, will be determined using pre-defined significance criteria for each mode of travel. Those criteria will be based on the net change in journeys as a result of the development of the site and any infrastructure improvements delivered as part of the proposals. The significance criteria will establish the magnitude of any beneficial or adverse effects that the proposed development will have on the transport network.

3.5 The following topics will be appraised for the construction and operational phases:

- Driver severance and delay;
- Pedestrian severance and delay;
- Pedestrian amenity;
- Accidents and safety;
- Hazardous and dangerous loads; and

- Dust and dirt.
- 3.6 The reinvigorated employment on the site will comprise the redevelopment of the eastern side of the Nestle Site to provide a new industrial estate consisting of approximately 28,700m² (GFA) of B1c / B2 and B8 and ancillary office and sui generis for a data centre to replace the 45,539m² existing factory.
- 3.7 This net change is significantly less (c.17,000m²) than the existing floor space within the SEGRO application boundary and therefore will be reflected within the associated impacts for the SEGRO element.
- 3.8 The SEGRO proposal will utilise the existing site access to the Nestle Site to provide access for all modes and therefore reflect a like for like provision. This is an important point when also considering the traffic patterns from the site which will also carry similar transport characteristics to the former industrial employment use on the site.
- 3.9 The LBH Highway Officer will be consulted concerning detailed aspects of the assessment methodology.

Summary

- 3.10 Table 3 summarises the transport and access effects identified for inclusion in the assessment.

Table 3: Transport and Access Effects

Receptor	Effects	Scoped In
Local Roads	Net change in traffic patterns and effect on personal injury accidents.	✓
Public Transport	Public Transport impact will be considered within the Transport Statement and cross referenced within the ES Transport Chapter.	✓
Pedestrians and Cyclists	Walking and cycling impact will be considered within the Transport Statement and cross referenced within the ES Transport Chapter.	✓

Barratt London Site

Approach

- 3.11 The traffic and transport impact of the proposed development will be assessed in line with guidance contained in the Transport for London's Transport Assessment Guidance (October 2014) and The Institute of Environmental Assessment (now IEMA) Guidelines for the Environmental Assessment of Road Traffic. Consultation will be undertaken where required

- with Highways England, Transport for London (TfL) and LBH Highways Department.
- 3.12 Scoping discussions will be undertaken with LBH to determine which committed developments require consideration. A list of identified committed schemes is included in Chapter 6.
- 3.13 The extent of transport impact, where they arise, will be determined using pre-defined significance criteria for each mode of travel. Those criteria will be based on the net change in journeys as a result of the development of the site and any infrastructure improvements delivered as part of the proposals. The significance criteria will establish the magnitude of any beneficial or adverse effects that the proposed development will have on the transport network. The assessment will cover traffic associated with both the construction and operational phases of the development.
- 3.14 The following topics will be appraised for the construction and operational phases:
- Driver severance and delay;
 - Pedestrian severance and delay;
 - Pedestrian amenity;
 - Accidents and safety;
 - Hazardous and dangerous loads; and
 - Dust and dirt.
- 3.15 The Barratt London proposals see the replacement of approximately 45,000 sqm of industrial floorspace with up to 1,400 residential units and 2000 sqm of local community facilities (potentially including a health centre).
- 3.16 Car parking is to be provided at a level that is appropriate for the site, taking account of the aspirations to reduce reliance on the private car but also ensuring that there is sufficient space to not adversely impact on residential amenity.
- 3.17 Initial predictions indicate that the proposals would result in a net increase in traffic generation in the order of 160 vehicle movements in the AM peak period and 80 vehicle movements in the PM peak period.
- 3.18 The Barratt proposal will be accessed from Nestles Avenue, whereas the existing industrial use is accessed from North Hyde Gardens. An increase in traffic is therefore expected on Nestles Avenue and immediately adjacent local roads. However, as traffic disbursts beyond the immediate road network it is likely that the change in traffic flows will be below the

threshold that would be considered to have a significant impact.

Summary

3.19 Table 4 summarises the transport and access effects identified for inclusion in the assessment.

Table 4: Transport and Access Effects

Receptor	Effects	Scoped In
Local Roads	Net change in traffic patterns; peak hour driver delay; effect on personal injury accidents.	✓
Public Transport	Net change in public transport patronage; duration and frequency of bus services.	✓
Pedestrians and Cyclists	Net change in pedestrian and cycle journeys; effect on pedestrian delay and amenity; on-street cycle facilities; effect on personal injury accidents.	✓

4.0 AIR QUALITY

- 4.1 As detailed within Section 1 of this Scoping Report, SEGRO and Barratt London are working as development partners to deliver a comprehensive site wide masterplan. However, separate planning applications, Environmental Statements and assessments covering air quality will be undertaken. This will enable the specifics of each of the sites to be captured and appropriately assessed. Notwithstanding this, the methodology for the assessments are broadly the same, and consequently the approach described herein applies to both the SEGRO and Barratt London sites, with distinctions made between the assessments where necessary.
- 4.2 The assessments will cover two potential air quality issues:
- The impact of the development on the surrounding area, during both the construction and operational phases; and
 - The impact of existing local pollution sources, in particular local road traffic emission, on the development site itself.
- 4.3 Existing local air quality, the likely future air quality in the absence of the new development, and the likely future air quality if the development goes ahead, will all be defined. The assessment of construction impacts will focus on the anticipated duration of works. The assessment of operational impacts will focus on the earliest year that the development is likely to be operational to provide a worst case assessment.
- 4.4 The site is within an Air Quality Management Area (AQMA) due to current high levels of nitrogen dioxide (NO₂).
- 4.5 The principal air pollutants of concern with respect to the development will be:
- NO₂;
 - fine airborne particles (PM₁₀ and PM_{2.5}); and
 - dust.
- 4.6 The main local sources of these pollutants are likely to be road vehicles (NO₂, PM₁₀ and PM_{2.5}); and construction activities (dust and PM₁₀). Professional experience indicates that any impacts associated with other air pollutants will be negligible.

Approach

- 4.7 Existing local air quality will be defined within the study area drawing upon monitoring carried out by the Local Authority with the information provided within the Council's Air Quality Review and Assessment reports.
- 4.8 Air quality will be assessed at a range of worst-case receptors. For construction activities these will be existing properties and sensitive ecological sites closest to the proposed development. For traffic-related impacts these will be the existing and proposed residential properties and sensitive ecological sites that are closest to roads, in particular those close to junctions, where traffic emissions are greatest. Residential properties will be present in Barratt London's portion of the site only.
- 4.9 The potential impacts of dust during construction will be assessed with reference to the Mayor of London's SPG on the control of dust during construction and demolition. There are no statutory objectives for dust; it is therefore common practice to provide a qualitative assessment based on the size of the site, regional meteorological conditions and experience of the distances over which impacts may occur. The assessment will provide an assessment of the level of risk from the construction of the developments, alone and in combination, and provide recommended mitigation measures to be employed during the construction phase.
- 4.10 The assessment of operational road traffic impacts will be undertaken using the ADMS Roads detailed dispersion model. The model will be used to predict concentrations within Barratt London's development site to assess the suitability of the site for residential development, and also at off-site receptors to assess the impacts of additional traffic associated with the development. Model outputs will be verified against local air quality monitoring data. This modelling will make use of mapped background concentration data provided by Defra and of traffic flow projections. Air quality will be assessed in relation to the national air quality objectives, established by the Government to protect human health. Air quality impacts arising from road traffic will be assessed with reference to guidance issued by the IAQM and Environment Protection UK (EPUK) in their document: Land-use Planning & Development Control: Planning for Air Quality.
- 4.11 The following modelling scenarios will be undertaken:
- Baseline year for model verification (2015);
 - Future opening year without the development in place; and
 - Future opening year with the development in place.

- 4.12 The future year modelling will consider each part of the development site separately and in combination with the other part of the site, together with other committed developments in the area.
- 4.13 An assessment of emissions from the proposed energy centre within the Barratt London site will be undertaken using the ADMS 5 atmospheric dispersion modelling programme. This will demonstrate that the proposed stack height and location is adequate to disperse emissions from the energy centre.
- 4.14 An air quality neutral assessment will be made for the SEGRO and Barratt London sites in accordance with the Mayor of London's SPG on Sustainable Design and Construction.
- 4.15 The London Borough of Hillingdon's Environmental Health officer will be consulted concerning detailed aspects of the proposed methodology.

Summary

- 4.16 Table 5 summarises the air quality receptors identified for inclusion in the assessment.

Table 5: Air Quality Effects

Receptor	Effects	Scoped In
Existing residents	Potential exposure to increased pollution levels during both construction and operation.	✓
Future residents (of the Barratt London site) and users of the proposed developments	Potential exposure to increased pollution levels during both construction and operation.	✓

5.0 LAND CONTAMINATION

Introduction

- 5.1 As detailed within Section 1 of this Scoping Report, SEGRO and Barratt London are working as development partners to deliver a comprehensive site wide masterplan. However, separate planning applications, Environmental Statements and assessments covering land contamination will be undertaken. This will enable the specifics of each of the sites to be captured and appropriately assessed. Notwithstanding this, the methodology for the assessments are broadly the same, and consequently the approach described herein applies to both the SEGRO and Barratt London sites, with distinctions made between the assessments where necessary.
- 5.2 The potential for significant environmental effects in relation to contamination is a precautionary approach. There is the potential for contamination to be present at the site which require characterisation and potentially an approved remediation strategy. The presence of a sensitive aquifer and the location of the Grand Union Canal combined with the scale and nature of the proposed development are acknowledged.
- 5.3 A Phase 2 programme of intrusive investigation has identified that the underlying sand and gravel principal aquifer is located in close proximity to the ground surface and is thus vulnerable to contamination. Furthermore, preliminary investigations identified that there may be an area of Made Ground and shallow sub-soil that has contamination linked to historic releases of petroleum hydrocarbons (TPH) in and around areas of old boiler plant and fuel tanks. Further contaminants of potential concern include mercury, arsenic, chromium 6+ and lead. There was also evidence of sporadic occurrences of asbestos containing materials within shallow soils, in particular one relatively localised area (boiler house area). In addition to this, a large section of the northern boundary is defined by the Grand Union Canal which is a sensitive receptor.

Approach

- 5.4 The assessment would comprise the following stages:
- Identification and evaluation of potential impacts with respect to land contamination on the proposed development;
 - Qualitative and if necessary quantitative assessment of significance and magnitude of land contamination;

- Assessment of construction phase in terms of impact on land contamination and the impact of land contamination on the construction phase;
- Assessment of likely significant effects during the operational phase;
- Recommendations for potential mitigation measures including remedial activities that would reduce risks and effects to acceptable levels.

5.5 The risk assessment would identify any significant pollutant linkages (source-pathway-receptor linkages) and the likely significant effects would be defined using a set of significance criteria.

Summary

5.6 Table 6 summarises the ground conditions effects identified for inclusion in the assessment.

Table 6: Land Contamination

Receptor	Effects	Scoped In
Human	Impact from sources of contamination i.e. chemicals, gases, waste, fuels	✓
Groundwater	Impact from sources of contamination i.e. chemicals, waste, fuels	✓
Surface Water (to include Grand Union Canal and River Crane)	Impact from sources of contamination i.e. chemicals, waste, fuels	✓
Buildings and Construction Materials	Impact from sources of contamination i.e. chemicals, gases, waste, fuels	✓

6.0 CUMULATIVE EFFECTS

- 6.1 Both Environmental Statements will consider the potential for likely significant effects on the environment resulting from committed developments in the area. Planning Practice Guidanceⁱ (PPG) identifies that:

“...There are occasions where other existing or approved development may be relevant in determining whether significant effects are likely as a consequence of a proposed development...”

Consideration of SEGRO & Barratt London Proposals

- 6.2 The site has been identified for mixed use residential and employment purposes in the LBH Site Allocations and Designations Local Plan Part 2. SEGRO and Barratt London are working as development partners to deliver a comprehensive site wide masterplan, but two planning applications and two Environmental Statements (ES) will be submitted.
- 6.3 Each ES will give consideration to the potential for cumulative effects with the proposals on the other half of the site. The programme for the preparation and submission of the SEGRO planning application is ahead of the Barratt London programme and on this basis the ES for the SEGRO scheme will assess the information available from Barratt London at the time the assessment is undertaken. The Barratt London ES will also include an assessment of the SEGRO proposals. This will ensure a comprehensive assessment of effects is undertaken between the two ESs and mitigation is identified where appropriate.

Other Committed Schemes

- 6.4 In addition, the following projects have been identified for the assessment of likely significant cumulative effects on the environment and will be considered in both ES documents:
- On 22nd April 2013 outline planning permission was granted for a mixed use development at The Old Vinyl Factory, Blyth Road, Hayes (LPA ref: 59872/APP/2012/1838). This development includes the demolition of up to 12,643sqm of buildings and construction of up to 112,953sqm of new floorspace. This development is expected to comprise up to 510 residential units, up to 7,886sqm of new business floorspace, up to 4,000sqm of A class uses, 4,700sqm of D1 and D2 uses, an energy centre, car parking and landscaping;

- On 15th April 2013, outline planning permission was granted for a comprehensive redevelopment of the site at 20 Blyth Road, Hayes (LPA ref: 1425/APP/2011/3040). The proposed development comprises a part 11, part 9, part 5 and part 4 storey building comprising 120 residential units, office floorspace, 97 car parking spaces and hard and soft landscaping;
 - An outline planning application¹ to redevelop the site to deliver a large residential-led mixed-use development was granted on 18th February 2016 (Ref: PP/2015/4682) situated north east of the site. The application seeks outline planning permission for the remediation of the existing contamination and comprehensive redevelopment of the site to provide a mix of commercial, community and residential uses (3,750 units) along with areas of public realm and public open space and an internal network of roads within the site. Full consent is sought for the proposed site accesses. All the built development would be located within Ealing with the exception of three proposed access ways from the west as well as a flood water storage area that are located in Hillingdon;
 - Western International Park (Planning ref. P/2012/4185), Hayes Road, Southall, Middlesex, UB2 5XJ. Erection of warehouse club (13,006 sqm) to include provision for tyre installation, sales and other associated facilities as well as associated landscaping and car parking provision. Approved with a Legal Agreement; and
 - Planning permission was granted in January 2015 (Planning ref. 31592/APP/2015/186) to upgrade the existing rail station for Crossrail through the construction of a new footbridge with stairs and lift shafts, a new station extension, covered walkway and footbridge, new entrance canopy, extensions to platforms 2/3 and 4/5, new station lighting and associated minor works.
- 6.5 Additional committed developments were identified in the Screening Opinion, which include a larger scale hotel on Station Approach northwest of the site, a new aggregate and tarmac facility northeast of the site and an Asda superstore west of the site. However, following further investigation it can be confirmed that these developments have already been built out and are operational. They will therefore be included as part of the existing baseline.
- 6.6 In addition, the Applicants are aware of a potential development by Buccluech for approximately 600 units to the west of the Barratt London site. However, no planning application has come forward and no further details of the proposed development are available. On this basis, the scheme is not considered to be 'committed' at this time, but the planning status will be monitored.

¹ The planning application submitted in August 2015 (PP/2015/4682) was a Section 73 application under the Town & Country Planning Act 1990, as amended, for minor amendment to planning permission P/2008/3981-S.

- 6.7 Each technical chapter submitted with the planning applications will assess the potential for likely significant effects on the environment as a result of the above committed developments. Separate scoping discussions will be undertaken with LBH to determine which committed developments require consideration as part of the assessment of transport effects.

7.0 ENVIRONMENTAL STATEMENT STRUCTURE

7.1 It is anticipated that both ES documents will contain three main volumes as set out in Table 7 below.

Table 7: Structure for Each Environmental Statement

Volume 1: ES Main Text and Figures		
Chapter No.	Chapter Title	Description
1	Introduction	Introduction to the ES, EIA requirements, details of project team, ES organisation and availability.
2	EIA Methodology	Methods used to prepare each chapter, description of ES structure and content, generic significance criteria, scoping and consultation.
3	Site and Development Description	Site description and details of the proposed development. A full explanation of the site masterplan proposals will be provided and each application will be described in this context.
4	Alternatives	Outline of the main alternatives considered by the Applicant.
5	Construction Methodology and Phasing	Details of anticipated programme for development and construction methodology.
6	Transport and Access	Transport and access effects relating to driver severance and delay, pedestrian severance and delay, pedestrian amenity, accidents and safety, hazardous and dangerous loads, dust and dirt.
7	Air Quality	Assessment of effects relating to air quality.
8	Land Contamination	Assessment of effects relating to land contamination.
9	Summary of mitigation and residual effects	Summary of proposed mitigation and residual effects.
Volume 2		
Technical Appendices		Technical data and reports to support the chapters in Volume 1.
Volume 3		
Transport Assessment and Travel Plan		
Standalone Document		
Non-Technical Summary		Summary of the ES in non-technical language.

7.2 The first five chapters of the ES would be introductory and provide essential information for the subsequent technical chapters. Further information on these chapters is set out below.

Introduction

- 7.3 This chapter will provide background to the EIA, describe the structure of the ES and identify the project team.

EIA Methodology

- 7.4 This chapter will set out the methodology used in the EIA, state the assumptions applicable to all disciplines, summarise the EIA Scoping process undertaken and summarise the public consultation process. Bespoke methodologies, limitations and assumptions will be contained in the technical chapters of the ES where required.
- 7.5 The significance of an environmental effect is determined by the interaction of magnitude and sensitivity, whereby the effects can be positive or negative. Generic criteria to be used in carrying out this process are detailed below. Some technical chapters will use discipline-specific criteria with their own terms for magnitude, sensitivity and significance. This will be explained in the relevant chapter.

Prediction of Impact Magnitude

- 7.6 The methodology for determining the scale or magnitude of impact is set out below.

Table 8: Methodology for Assessing Magnitude

Magnitude of Impact	Criteria for assessing impact
Major	Total loss or major/substantial alteration to key elements/features of the baseline (pre-development) conditions such that the post development character/composition/attributes will be fundamentally changed.
Moderate	Loss or alteration to one or more key elements/features of the baseline conditions such that post development character/composition/attributes of the baseline will be materially changed.
Minor	A minor shift away from baseline conditions. Change arising from the loss/alteration will be discernible/detectable but not material. The underlying character/composition/attributes of the baseline condition will be similar to the pre-development circumstances/situation.
Negligible	Very little change from baseline conditions. Change barely distinguishable, approximating to a 'no change' situation.

- 7.7 The sensitivity of a receptor is based on the relative importance of the receptor using the scale set out below.

Table 9: Methodology for Determining Sensitivity

Sensitivity	Examples of Receptor
High	The receptor/resource has little ability to absorb change without fundamentally altering its present character, or is of international or national importance.
Moderate	The receptor/resource has moderate capacity to absorb change without significantly altering its present character, or is of high importance.
Low	The receptor/resource is tolerant of change without detriment to its character, is of low or local importance.

Assessment of Effect Significance

- 7.8 Effect significance will be calculated using the matrix in Table 9. This illustrates the interaction between impact magnitude and receptor sensitivity.

Table 10: Effect Significance Matrix

Magnitude	Sensitivity		
	High	Moderate	Low
Major	Major Adverse/Beneficial	Major - Moderate Adverse/Beneficial	Moderate - Minor Adverse/Beneficial
Moderate	Major - Moderate Adverse/Beneficial	Moderate - Minor Adverse/Beneficial	Minor Adverse/Beneficial
Minor	Moderate - Minor Adverse/Beneficial	Minor Adverse/Beneficial	Minor - Negligible
Negligible	Negligible	Negligible	Negligible

Site and Development Description

- 7.9 This chapter will describe the setting of the site and the existing conditions on the site, as well as explaining the proposed development and setting out the development parameters. The parameter plans will be included as figures to the chapter.

Alternatives

- 7.10 This chapter would describe the evolution of the proposed development based on environmental constraints.

Construction Methodology and Phasing

- 7.11 This chapter will outline the anticipated construction programme, phasing and methodology

and explain the assumptions made. This chapter will form the basis of the construction phase assumptions documented in each of the technical chapters of the ES.

Technical Assessments

7.12 Each ES chapter will follow the headings set out below to ensure the final document is transparent, consistent and accessible.

- Introduction;
- Planning Policy Context;
- Assessment Methodology;
- Baseline Conditions;
- Likely Significant Effects;
- Mitigation Measures;
- Residual Effects;
- Cumulative Effects; and
- Summary

7.13 Each chapter sub-heading is explained in further detail below.

Table 11: Technical Chapter Format and Content

Sub-Heading	Content
Introduction	<ul style="list-style-type: none"> • This section will introduce the assessment discipline and the purpose for which it is being undertaken.
Planning Policy Context	<ul style="list-style-type: none"> • This section will include a summary of national, regional and local policies of relevance to the environmental discipline and assessment. Where applicable, relevant legislation will also be summarised.
Assessment Methodology	<ul style="list-style-type: none"> • This section will provide an explanation of methods used in undertaking the technical study with reference to published standards, guidelines and best practice. The application of significance criteria will also be discussed. • It will also outline any difficulties encountered in compiling the required information.
Baseline Conditions	<ul style="list-style-type: none"> • This will include a description of the environment as it is currently (2016) and as it is expected to change given the project were not to proceed (i.e. 'do-nothing' scenario). The method used to obtain baseline information will be clearly identified. Baseline data will be collected in such a way that the importance of the particular subject area to be affected can be placed in its context and surroundings so that the effects of the proposed changes can be predicted.
Likely Significant Effects	<ul style="list-style-type: none"> • This section will identify the likely significant effects on the environment resulting from the construction and operational phases of development.
Mitigation Measures	<ul style="list-style-type: none"> • Adverse effects will be considered for mitigation and specific mitigation measures put forward, where practicable. Mitigation measures considered may include modification of the project, compensation and the provision of alternative solutions (including alternative technology) as well as pollution control, where appropriate. • The extent of the mitigation measures and how these will be effective will be discussed. Where the effectiveness is uncertain or depends upon assumptions about operating procedures, data will be introduced to

Sub-Heading	Content
	justify the acceptance of these assumptions. <ul style="list-style-type: none"> • Clear details of when and how the mitigation measures will be carried out will be given. When certainty of impact magnitude and/or effectiveness of mitigation over time exists, monitoring programmes will be proposed to enable subsequent adjustment of mitigation measures, as necessary. • The opportunity for enhancement measures will also be considered, where appropriate. • Information will be included on the mechanism by which the mitigation will be secured (e.g. by planning condition) with outline arrangements for monitoring and responsibilities for doing so, where necessary.
Residual Effects	<ul style="list-style-type: none"> • The residual effects, i.e. the effects of the proposed development assuming implementation of proposed mitigation, will be determined. The residual effects represent the overall likely significant effect of the development on the environment having taken account of practicable/available mitigation measures.
Cumulative Effects	<ul style="list-style-type: none"> • The cumulative effects of the proposed development and the identified committed developments will be assessed.
Summary	<ul style="list-style-type: none"> • A summary of the assessment and conclusions will be provided at the end of each technical chapter.

Summary and Residual Effects

- 7.14 The residual effects of the development will be summarised in one table at the end of the ES setting out the overall beneficial and adverse effects of the proposed development.

Consultation

- 7.15 The following statutory and other consultees will be consulted through the EIA process:

- Highways England;
- Transport for London;
- Environment Agency;
- Natural England;
- Historic England;
- London Borough Hillingdon (various departments);
- Greater London Authority; and
- Any other stakeholder that the Local Planning Authority nominates.

- 7.16 The feedback received through the public consultation will be summarised in the ES and written up in full in the Statement of Community Involvement submitted in support of the planning application.

