

## **Chapter 2: EIA Methodology**

## INTRODUCTION

- 2.1 This chapter of the ES sets out the overall approach to, and methodology for, undertaking the EIA. It details the process for identifying the environmental issues (or 'topics') to be included in the EIA and the method of assessing the likely significant effects that have the potential to arise as a result of the Proposed Development, both during the demolition and construction works and on completion and occupation of the Proposed Development.
- 2.2 Further detail on how the assessment methodology is applied to each topic is presented within the respective technical chapters of this ES.

## EIA GUIDANCE AND PLANNING POLICY

### EIA Guidance

- 2.3 This ES has been prepared in accordance with applicable legislation, guidance, and case law for the preparation of such documents. Specifically, this ES has been undertaken in accordance with the Institute of Environmental Management and Assessment (IEMA) Quality Mark indicator checklist and with due consideration to the following:
- At a European level, reference has been made to the European Commission's (EC) various EIA guidance documents available here: <http://ec.europa.eu/environment/eia/eia-support.htm>;
  - At a domestic level, reference has been made to the Ministry of Housing, Communities and Local Government's (MHCLG) overarching Planning Practice Guidance<sup>1</sup>;
  - In addition, the Department for Transport 'Design Manual for Roads and Bridges Volume 11: Environmental Assessment' has been referred to as applicable;
  - In relation to publications from professional bodies, reference has been made to IEMA publications as these include best practice/suggested improvements to the EIA process. This includes:
    - IEMA ES Review Criteria (COM3-6)<sup>2</sup>;
    - IEMA 'Guidelines for Environmental Impact Assessment' (2004)<sup>3</sup>;
    - IEMA 'Special Report into the State Environmental Impact Assessment Practice in the UK' (2011)<sup>4</sup>;
    - IEMA 'Shaping Quality Development' (2015)<sup>5</sup>;
    - IEMA 'Delivering Quality Development' (2016)<sup>6</sup>; and
    - IEMA 'Delivering Proportionate EIA' (2017)<sup>7</sup>.

### Planning Policy

- 2.4 The EIA has considered relevant national, regional and local planning policy and guidance as summarised below.

#### National Planning Policy and Guidance

- 2.5 The EIA has been undertaken, and the ES prepared, having regard to the National Planning Policy Framework<sup>8</sup> (NPPF). The NPPF sets out the Government's economic, environmental and social planning policies for England. Such policies articulate the Government's vision of sustainable development, which are intended to be interpreted at a local level, to meet the requirements of local aspirations.
- 2.6 This ES also refers to the national Planning Practice Guidance (PPG), which is an online resource, aimed at making planning guidance more accessible and ensuring that the guidance is kept up to date.

### Regional and Local Planning Policy and Guidance

- 2.7 At a regional strategic level, Surrey County Council (SCC) refer to the relevant Local Plans and Development Plan Documents produced by each borough; therefore, as relevant to the EIA technical topic scope, methodology or assessment of effects, the ES will have regard to the key planning policy and guidance documents.
- 2.8 Key local planning policy documents that have been considered throughout preparation of the ES, as relevant, include:
- Woking Core Strategy (2012)<sup>9</sup>;
  - Development Management Policies Development Plan Document (DPD) (2016)<sup>10</sup>;
  - Draft Site Allocations DPD (2018)<sup>11</sup>; and
  - Proposals Map<sup>12</sup>.
- 2.9 Any additional planning policy and guidance documents considered relevant to the technical assessments which are covered by the EIA are also considered; these are identified in the technical chapters of this ES (**ES Volume 1, Chapters 6 and 7**).
- 2.10 In addition, where relevant to the assessment, the ES (**ES Volume 1, Chapters 6 and 7**) also presents a summary of any pertinent recognised industry guidance documents.

## EIA SCOPING AND CONSULTATION

### Consultation

- 2.11 Consultation is an ongoing process and has been fed back into the design of the Proposed Development; the views of both key statutory and non-statutory consultees have been considered throughout. **ES Volume 1, Chapter 3: Alternatives and Design Evolution** provides a review of the consultation undertaken in respect of the alternatives considered by the Applicant and the design evolution of the Proposed Development, specifically in relation to environmental considerations. The planning application is supported by a Planning Statement and a Statement of Community Involvement which together summarise the wider consultation that has been undertaken with various consultees throughout the pre-application consultation process.

### EIA Scoping

- 2.12 Scoping forms one of the first stages of the EIA process and it is through scoping that Woking Borough Council (WBC) (as the local planning authority (LPA)) and other key statutory and non-statutory consultees are consulted on those environmental topics that should be included in the scope of the EIA. Regulation 18(4) of the EIA Regulations require the ES to be based on the most recent EIA Scoping Opinion.
- 2.13 The process of EIA scoping is important to the development of a comprehensive and balanced ES. Views of WBC and consultees have helped to identify specific issues that require further investigation as part of the EIA process.
- 2.14 An EIA Scoping Report was submitted on 24<sup>th</sup> May 2019 to request a formal EIA Scoping Opinion from WBC and statutory consultees regarding the scope of the EIA. An EIA Scoping Opinion was received from the WBC on 9<sup>th</sup> August 2019 and this ES has been based on the EIA Scoping Opinion. The EIA Scoping Report, along with the WBC's Scoping Opinion is presented in **ES Volume 2, Appendix: EIA Methodology (Annex 3)**.
- 2.15 The EIA Scoping process identified the environmental technical topics which are considered unlikely to give rise to significant environmental effects and, therefore, do not need to be assessed further as part of the EIA. Full justification for scoping these technical topics out of the EIA can be found within **ES Volume 2, Appendix: EIA Methodology (Annex 3)**; however, a summary is provided below.

<sup>1</sup> <https://www.gov.uk/government/collections/planning-practice-guidance>.

<sup>2</sup> Institute of Environmental Management and Assessment (IEMA), undated; EIA Quality Mark – ES Review Criteria COM 3-6.

<sup>3</sup> IEMA, (2004); Guidelines for Environmental Impact Assessment.

<sup>4</sup> IEMA, (2011); The State of Environmental Impact Assessment Practice in the UK.

<sup>5</sup> IEMA, (2015); Shaping Quality Development.

<sup>6</sup> IEMA, (2016); Delivering Quality Development.

<sup>7</sup> IEMA, (2017); Delivering Proportionate EIA.

<sup>8</sup> Ministry of Housing, Communities and Local Government, (2019); National Planning Policy Framework.

<sup>9</sup> Woking Borough Council (WBC); Woking Local Development Documents – Woking Core Strategy.

<sup>10</sup> WBC, (2016); Woking Local Development Documents – Development Management Policies Development Plan Document.

<sup>11</sup> WBC, (2018); Woking Local Development Documents – Site Allocations Development Plan Document (Regulation 19 Consultation).

<sup>12</sup> WBC, (2016); Woking Local Development Plan – Proposals Map.

### Scoped-In Disciplines

2.16 The potentially significant environmental issues that were identified during the EIA Scoping process and that have been addressed within this EIA are listed below:

- Air Quality, including a greenhouse gas assessment (**ES Volume 1, Chapter 6**); and
- Ecology (**ES Volume 1, Chapter 7**).

### Climate Change

2.17 In accordance with Schedule 4, paragraph 5(f) of the EIA Regulations, to consider “the impact of the project on climate” and “the vulnerability of the project to climate change”, consideration is given within this ES to greenhouse gases that would be generated by the Proposed Development, as well as the Proposed Development’s resilience to climate change.

#### Effects of the Proposed Development on Climate Change

2.18 The climate change assessment, undertaken in accordance with the IEMA guidance ‘Assessing Greenhouse Gas Emissions and Evaluating Their Significance’<sup>13</sup>, considers the Proposed Development’s impacts and subsequent effects upon climate change by calculating the GHG emissions relating to the demolition and construction, and operation, of the Proposed Development (referred to as a ‘carbon footprint’ or ‘inventory’). The calculated carbon footprint has been compared to appropriate benchmarks, such as national greenhouse gas emissions, in order to provide context for the scale of the carbon footprint.

2.19 This ES presents the carbon mitigation being proposed, which follows the principles of the carbon management hierarchy (i.e. avoid, reduce, off-set), in order to reduce as far as reasonably practicable, the anticipated GHG emissions over the Proposed Development’s lifecycle.

2.20 The assessment of GHG emissions (essentially a carbon footprint or ‘inventory’ of the Proposed Development) and an outline of the carbon mitigation measures proposed is presented in a technical report and included within **ES Volume 2, Appendix, EIA Methodology (Annex 4)**. Relevant information out of this report (specifically relating to carbon mitigation measures) will be presented within the ES (**ES Volume 1, Chapter 4: The Proposed Development, ES Volume 1, Chapter 5: Demolition and Construction** and **ES Volume 1, Chapter 10: Monitoring and Mitigation**).

#### Effects of Climate Change on the Proposed Development

2.21 The approach adopted to assessing the potential impact and subsequent effect of climate change on the Proposed Development has been undertaken in line with the IEMA guidance ‘Climate Change Resilience and Adaption’<sup>14</sup> (as per Trium’s note on this, included in **ES Volume 2, Appendix: EIA Methodology (Annex 5)**), which presents a framework for the consideration of climate change resilience and adaption in the EIA process.

2.22 Consistent with the guidance, a future climate scenario has been developed through the use of the future climate projections published by the Met Office (through the UK Climate Projections (UKCP18) website<sup>15</sup>). The results include projections for variables including annual mean temperatures, and annual changes in summer and winter precipitation.

2.23 As relevant, the technical chapters (**ES Volume 1, Chapters 6 and 7**) have assessed, using the UKCP18 scenario, the potential impacts and associated effects of climate change on the Proposed Development. The aim of the assessment will be to consider whether the effect on receptors (under the current (2019) condition, without climate change) are likely to be different under a future alternative future climate regime, in particular, to identify whether the potential impacts and subsequent effects of the Proposed Development will worsen or improve under the future baseline. This has been quantified where possible and, where not possible, a qualitative review is presented.

2.24 The adaptation and resilience measures that form part of the Proposed Development have been summarised within **ES Volume 1, Chapter 4: The Proposed Development** and are clearly explained throughout the ES as requested within the EIA Scoping Opinion.

### Scoped-Out Disciplines

2.25 The EIA Scoping Report identifies the technical topics that have been scoped out of this ES, as agreed with WBC as part of the extensive scoping exercise. Technical topics that have been scoped out of the ES are set

out below, along with a high level summary as to why. Further justification is provided within the Scoping Report (**ES Volume 2, Appendix: EIA Methodology (Annex 3)**).

- **Project Vulnerability, Major Accidents and Natural Disasters:** Project vulnerability to major accidents and natural disasters has been scoped out of the EIA, as the majority of large scale accidents and disasters are not applicable to the Proposed Development. The planning application is accompanied by a Flood Risk Assessment (FRA) (submitted as a standalone document); and fire risk is managed outside of the EIA process. Therefore, no likely significant effects relating to major accidents and disasters were anticipated;
- **Land Take and Soil:** It was anticipated that potential significant effects of the Proposed Development, in terms of land and soil (e.g. loss of biodiversity resulting from landscape fragmentation), would be comprehensively considered throughout this ES or within standalone technical reports, including the: air quality assessment (**ES Volume 1, Chapter 6: Air Quality**), ecology assessment (**ES Volume 1, Chapter 7: Ecology**), FRA (including the Drainage Strategy) (submitted as a standalone report accompanying the planning application); and Residential Operational Waste Strategy and Operational Waste Strategy for the David Lloyd Leisure Centre (presented in the Design and Access Statement), all of which include mitigation measures to reduce any potential adverse effects of the Proposed Development on land and soils as far as reasonable practicable. Therefore, whilst the Proposed Development would introduce building activities on a site which falls within land designated as Green Belt, it was anticipated that no significant effects were likely to arise as a result of the Proposed Development;
- **Socio-Economics:** A high level review of socio-economic baseline conditions considered to be most relevant to the Proposed Development was undertaken and whilst it was determined that there is potential for the Proposed Development to generate both beneficial and adverse effects during the demolition and construction, and operational, phases, it was considered that such effects would unlikely be significant in the context of the wider borough of Woking given the scale of the Proposed Development.
- **Health:** human health was scoped out on the basis that the ES would only assess impacts on air quality and ecology. The air quality assessment is provided in **ES Volume 1, Chapter 6: Air Quality** and has reported non-significant effects.
- **Highways and Transport:** No likely significant highways and transport effects were expected to arise, given that mitigation measures (including an Environmental Management Plan (EMP) and Construction Logistics Plan (CLP)) would be employed during the demolition and construction of the Proposed Development, to minimise the effect of demolition and construction traffic as far as reasonably practicable. Once the Proposed Development is completed and operational, Travel Plans and a Delivery and Servicing Plan would be implemented to mitigate any potential effects. A Transport Assessment has been prepared to accompany the planning application and is submitted as a standalone document;
- **Noise and Vibration:** No likely significant effects were expected to arise, as it was anticipated that any potential demolition and construction noise effects would be adequately controlled, via best practice measures (in accordance with a Section 61 application of the Control of Pollution Act) and the implementation of a construction logistics plan. Additionally, it was anticipated that mitigation measures required to achieve appropriate internal and external noise levels would be incorporated within the design of the Proposed Development, and that any noise producing building services plant would be controlled in accordance with the relevant guidance. A Residential Planning Noise and Vibration Report has been prepared to accompany the planning application, which is presented in **ES Volume 2: EIA Methodology (Annex 6)**;
- **Wind Microclimate:** A qualitative, high level review of the existing site and emerging design of the Proposed Development was undertaken, and it was considered that whilst the construction of new buildings could affect the local wind microclimate, the scale of construction equipment to be used was expected to be small and it was acknowledged that wind conditions would gradually transition to that of the completed Development. Similarly, the height of the Proposed Development is low and, therefore,

<sup>13</sup> IEMA, (2017); Assessing Greenhouse Gas Emissions and Evaluating Their Significance.

<sup>14</sup> IEMA, (2015); Climate Change Resilience and Adaptation.

<sup>15</sup> <https://www.metoffice.gov.uk/binaries/content/assets/mohippo/pdf/ukcp18/ukcp18-guidance-rcp.pdf>



unlikely to result in down draughting that would usually cause wind effects. Therefore, no likely significant effects related to wind microclimate were anticipated;

- **Daylight, Sunlight, Overshadowing, Light Pollution and Solar Glare:** No likely significant effects were expected to arise, as it was anticipated that whilst any potential demolition and construction equipment would lead to some degree of daylight and sunlight related effects, it was considered that any potential effects would be temporary and short-term. Therefore, the effects were not considered to be significant. Although the massing of the completed Proposed Development was predicted to alter the daylight and sunlight levels, given the scale and layout of the proposed buildings, it was deemed that effects arising from the Proposed Development would also not be considered significant.

With regards to solar glare, large areas of highly glazed glass or material are not proposed. Consequently, no significant solar glare related effects were deemed likely.

In relation to light pollution, it was originally anticipated that a degree of light spillage to neighbouring ecological receptors from the external lighting of the Proposed Development's sports pitches would be possible, and as a result a lighting strategy was to be prepared. However, as the design progressed, a lighting strategy was no longer deemed necessary as David Lloyd confirmed that lighting of the pitches would not be required. With regard to potential light spillage to residential receptors, it was expected that there would be a sufficient buffer between the proposed external lighting and existing residential properties, so as to prevent light pollution nuisance.

In summary, it was concluded that no significant effects were considered likely in relation to daylight, sunlight, overshadowing, light pollution and solar glare.

- **Archaeology (Buried Heritage):** An Historic Environment Assessment (HEA) was undertaken, which determined that the site has low potential for archaeological remains of all periods. Furthermore there has been no development on-site, due to the distance between the site and areas of known settlement. It was, therefore, considered that provided that the recommendations for further works set out within the HEA were secured by an appropriately worded planning condition, no likely significant archaeological effects would be generated by the Proposed Development. However, an updated HEA, incorporating the final Proposed Development, is presented in **ES Volume 2, Appendix: EIA Methodology (Annex 7)**.
- **Built Heritage:** An initial review of built heritage assets found that there are no designated or non-designated built heritage assets located on-site; however, it was identified that 11 designated built heritage assets were located within a 1km radius of the site. As the site is currently undeveloped, open land and located in a visible location, the Proposed Development would physically transform a noticeable extent of the townscape area. Nevertheless, the Proposed Development will have landmark qualities in the context of the existing undeveloped site and, therefore, it was anticipated that the Proposed Development would likely result in neutral / negligible effects on the identified built heritage assets.
- **Geo-Environmental (Land Contamination, Ground Conditions and Groundwater):** A Phase 1 Desk Study (including a Qualitative Risk Assessment) was undertaken, which determined that the site has a moderate to low risk of potential contamination on sensitive receptors. Consequently, it was recommended that an intrusive site investigation be undertaken to clarify the potential risks to the identified receptors, which concluded that provided the recommended remediation measures identified as a result of the site investigation (submitted as a standalone report to accompany the planning application) would be implemented, no likely significant effects associated with land contamination, ground conditions and controlled waters would be generated by the Proposed Development. Good practice measures are referenced within this ES (**ES Volume 1, Chapter 10: Mitigation and Monitoring**);
- **Water Resources, Drainage and Flood Risk:** The site is: located entirely within Flood Zone 1, with the majority of the site having a very low surface water flood risk, but with some ponded areas the south of the site having an 'up to high' surface water flood risk; located in an area with limited potential for groundwater flooding to occur; and not located within an area at risk of reservoir flooding. On the basis of the site being greater than 1ha in area and having some ponded areas with an 'up to a high' surface water flood risk in the south the site, a Flood Risk Assessment (FRA) will be prepared, to investigate the potential sources of flooding at the site and for the Proposed Development, and demonstrate that any flood risk to the Proposed Development, or caused by the Proposed Development, will be mitigated

through the use of appropriate design solutions and management procedures. The results of the FRA are presented in **ES Volume 1, Chapter 4: The Proposed Development**.

In addition to the above, the site is: located approximately 250m to the west of Hoe Stream; not located within a Critical Drainage Area (CDA); and is required to achieve pre-development greenfield run-off rates. Consequently, a Drainage Strategy will also be prepared (as part of the FRA) to ensure that surface water runoff is discharged appropriately and is compliant with the target discharge rates. The design principles set out in the Drainage Strategy and its conclusions are presented in **ES Volume 1, Chapter 4: The Proposed Development**.

In summary, it is considered that through a well-informed Drainage Strategy, coupled with the appropriate mitigation measures in place to manage the residual flood risk on-site once the Proposed Development is completed and operational, no likely significant effects associated with flooding and surface water drainage are anticipated to arise as a result of the Proposed Development. The FRA (including the Drainage Strategy) is submitted as a standalone document to accompany the planning application.

- **Waste and Recycling:** No significant effects in terms of waste and recycling were considered likely to arise, as it was anticipated that mitigation measures would be employed during the demolition and construction phases of the Proposed Development. Additionally, once the Proposed Development is completed and operational, a Residential Operational Waste Strategy and Operational Waste Strategy for the David Lloyd Leisure Centre will be implemented; and
  - **Landscape and Visual:** A baseline appraisal of the site's existing conditions, potential sensitive receptors, and likely effects of the Proposed Development on the landscape and visual receptors was undertaken, which identified a number of sensitive receptors with the potential to be affected by the Proposed Development. It was considered that the demolition and construction works would result in the permanent removal of a number of trees, a temporary change to a landscape character area, and a temporary change to views from the visual receptors, however, these effects would unlikely be significant. The completed Proposed Development was also expected to affect the landscape character receptor and views from visual receptors; however, such effects were also deemed unlikely to be significant, due to the sensitivity of the receptors and magnitude of change that the operational effects of the Proposed Development would bring. On this basis, a standalone Landscape and Visual Impact Appraisal has been undertaken and submitted to accompany the planning application.
- 2.26 Any necessary mitigation measures relating to the above points are included in **ES Volume 1, Chapter 10: Mitigation and Monitoring** – measures should be secured through a condition by the WBC.

## EIA METHODOLOGY

### Sensitive Receptors

- 2.27 The EIA process has included the identification and assessment of impacts to and effects on potentially sensitive receptors resulting from construction activities and from the completed Proposed Development.
- 2.28 A list of the potentially sensitive receptors, as assessed within this EIA, are presented in each of the technical chapters of this ES (**ES Volume 1, Chapters 6 and 7**).
- 2.29 Potential future receptors have also been identified from a review of the description of the Proposed Development sought for approval and the potential impacts and resultant effects which may occur as a result of newly introduced sensitive receptors of the Proposed Development.

## IDENTIFICATION OF IMPACTS, EFFECTS AND EFFECT SIGNIFICANCE

### Terminology and Definitions

#### Reference to 'Impact' and 'Effect'

- 2.30 Where definitions are available in EIA guidance, the general consensus is that 'impacts' are defined as the changes resulting from an action, and 'effects' are defined as the consequences of impacts. Therefore, both

terms have been used within this ES. The assessment of the likely significant effects of the development is a requirement identified by Schedule 4 of the EIA Regulations.

**Receptor Sensitivity and Magnitude of Impact**

- 2.31 To achieve a consistent approach across the different technical disciplines addressed within this ES, assessments broadly define the **sensitivity of the receptors** that could be affected by the Proposed Development and the **magnitude of impact or change** from the baseline conditions or against specific technical criteria in order to derive the resultant effect.
- 2.32 Terminology to describe the sensitivity of receptors and magnitude of impact or change from the baseline conditions is broadly as follows:
  - High;
  - Medium;
  - Low; and
  - No Impact (in relation to magnitude of impact or change only).
- 2.33 Each of the technical assessments of this ES provide further detail on the definition of each of the above terms specific to the topic in question and also provide the criteria, including sources and justifications, for quantifying the different levels of receptor sensitivity and 'impact magnitude'. Where possible, this is based upon quantitative and accepted criteria (for example, national standards for air quality and noise), together with the use of value judgement and expert interpretation.
- 2.34 Alternatively, some technical assessments differ in the terminology adopted to describe the magnitude of impact or change from the baseline conditions. Where this occurs, the alternative terminology adopted has been clearly set out within the individual ES chapter.

**Likely Significant Effects**

**Identification of a Scale of Effect**

- 2.35 The basis for determining the resultant scale of effect generally takes into account the sensitivity of the receptor and magnitude of impact or change from the baseline conditions, combining these two factors to identify the resultant effect.
- 2.36 A generic matrix that combines the sensitivity of the receptor and the magnitude of impact to identify the resultant scale of effect is provided within Table 2.1.

**Table 2.1 Scale of Effects**

Receptor Sensitivity	Magnitude of Impact		
	High	Medium	Low
High	Major	Major	Moderate
Medium	Major	Moderate	Minor
Low	Moderate	Minor	Negligible

- 2.37 Table 2.2 provides the broad definition of the 'scale' of the resultant effect i.e. definitions of major, moderate, minor and negligible effects. The definitions in Table 2.2 may be adjusted to suit the technical topic in question; where this is the case, revised definitions of effect scale will be presented in the technical assessment chapters of the ES.
- 2.38 Where there is 'No Effect', this will be stated.

**Table 2.2 Broad Definitions of the Scale of the Resultant Effect**

Type of Effect	Description
Major	Major effects generally result from receptors of high sensitivity (such national importance or likely to be important considerations at a regional or district scale) and/or impacts of a high magnitude (such as the loss of large areas of land). Major effects can also result from receptors of medium sensitivity combined with an impact of a high magnitude, or receptors of high sensitivity combined with an impact of a medium magnitude.
Moderate	Moderate effects generally result from receptors of medium sensitivity combined with an impact of a medium magnitude. Moderate effects can also result from receptors of low sensitivity combined with an impact of a high magnitude, or receptors of high sensitivity combined with an impact of a low magnitude.
Minor	Minor effects generally result from receptors of medium sensitivity combined with an impact of a low magnitude, or receptors of low sensitivity combined with an impact of a medium magnitude.
Negligible	Effects which are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error. Negligible effects generally result from receptors of low sensitivity, combined with an impact of a low magnitude.

**Effect Nature**

- 2.39 The definitions of the 'nature' of the resultant effect i.e. definitions of adverse, beneficial and neutral, which are used throughout the ES are provided within Table 2.3.

**Table 2.3 Definition of the Nature of the Resultant Effect**

Nature of Effect	Description
Adverse	Detrimental or negative effects to an environmental / socio-economic resource or receptor. The quality of the environment is diminished or harmed.
Beneficial	Advantageous or positive effect to an environmental / socio-economic resource or receptor. The quality of the environment is enhanced.
Neutral	Where the quality of the environment is preserved or sustained or where there is an equal balance of benefit and harm.

**Geographic Extent of Effect**

- 2.40 The ES identifies the geographic extent of the identified effects. At a spatial level, 'site' or 'local' effects are those affecting the site and neighbouring receptors, while effects upon receptors in the borough beyond the vicinity of the site and its neighbours are at a 'district / borough' level. Effects affecting Surrey are at a 'regional' level, whilst those which affect different parts of the country, or England, are considered being at a 'national' level.

**Effect Duration**

- 2.41 For the purposes of the ES, effects that are generated as a result of the demolition and construction works (i.e. those that last for this set period of time) will be classed as 'temporary'; these maybe further classified as either 'short term' or 'medium-term' effects depending on the duration of the demolition and construction works that generate the effect in question. Effects that result from the completed and operational Proposed Development will be classed as 'permanent' or 'long-term' effects.

**Direct and Indirect, Reversible or Irreversible Effects**

- 2.42 The ES identifies whether the effect is 'direct' (i.e. resulting without any intervening factors) or 'indirect' or 'secondary' (i.e. not directly caused or resulting from something else).

**Mitigation Measures**

- 2.43 Throughout the impact assessments, assumptions have been made that the standard environmental controls required under legislation and best practice guidance are met as a matter of course Therefore, where adverse effects are identified, bespoke environmental management or mitigation measures have been explored to ascertain whether the effect can be minimised or eliminated.



2.44 Where mitigation measures have been identified, these have been incorporated into the Proposed Development, for example, either through the detailed design, or have been translated into construction commitments, or translated into operational or managerial standards / procedures. Those measures not inherent in the design of the Proposed Development (i.e. submitted for approval as part of the planning application), will need to be secured through an appropriate means by WBC.

### Effect Significance

2.45 Following identification of an effect, the effect scale, nature, geographic extent and duration and whether the effects are direct or indirect, using the above summarised terminology, a clear statement is then made within this ES as to whether the residual effect is significant or not significant. Each technical assessment determines at what scale an effect is deemed to be significant, as this varies depending on the topic.

2.46 In all cases, the overall approach and specific methods of predicting the likely magnitude of impact and resultant scale, nature, geographic extent, duration etc. of an effect, and whether an effect is significant or not significant, is set out in each of the technical assessments. Where used, recognised specific predictive methods are referenced. Any assumptions or limitations to knowledge are stated.

## IMPACT ASSESSMENT SCENARIOS

2.47 Each of the technical topic areas that have the potential for significant effects consider the following scenarios within their assessments:

- Baseline conditions;
- The demolition and construction of the Proposed Development; and
- The completed and operational Proposed Development.

2.48 The detail of each of these assessments is set out below.

### Baseline Conditions

2.49 Baseline assessments utilise any existing and available information, as well as new information either collected through baseline surveys undertaken during the course of the EIA process or additional information provided as part of the EIA Scoping Opinion and consultation process. This information has been presented within this ES, within the individual technical chapters.

#### The Existing Baseline Condition

2.50 The existing baseline condition considers the surrounding environment at it currently stands, as well as the existing conditions on the site itself, i.e. in 2019. Where information is not available for this year, appropriate data from an alternative year will be utilised, as well as new information either collected through baseline surveys undertaken during the course of the EIA process or additional information provided as part of EIA scoping and consultation process. This has ensured that a worst-case scenario has been assessed. This information has been used to present within this ES (within the individual technical chapters) an up to date description of the current baseline conditions of the site and surrounding area.

#### Future Baseline Condition

2.51 The assessment of the effects of the Proposed Development against a future baseline is also necessary, as this is the anticipated year that the Proposed Development would be completed and operational. This is normally utilised in the transport assessment and, therefore, the traffic assessment within the noise and air quality assessments, as the future traffic flows would in turn affect the future air quality and future noise levels.

2.52 For the purposes of this ES, as Highways and Transport, and Noise and Vibration have been scoped out of this ES, the future baseline is only applicable to air quality and will be determined based on the traffic data provided by the Applicant's transport consultants (Vectos).

#### Evolution of the Baseline

2.53 Schedule 4 of the EIA Regulations require 'A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge'.

2.54 As such, consideration as to how the existing baseline conditions at the site may evolve in the future, in the absence of the Proposed Development, has been presented in this ES. This considers the natural changes from the baseline scenario, based on available environmental information / scientific knowledge. This has been provided as a qualitative review.

2.55 The specifics of how the evolution of the baseline has been considered for each topic is described in each of the individual technical chapters of this ES (**ES Volume 1, Chapters 6 and 7**).

### Demolition and Construction

2.56 **ES Volume 1, Chapter 5: Demolition and Construction** provides an outline of the anticipated demolition and construction programme and related activities and aspects (i.e. enabling works, substructure works, superstructure works etc., construction material quantities, heavy goods vehicle (HGV) movements and HGV routing). In addition, the standard environmental controls required under legislation and best practice guidance are presented. This information informs the demolition and construction impact assessments of each technical chapter of this ES (**ES Volume 1, Chapters 6 and 7**).

2.57 There is some (minimal) phased construction / occupation of the Proposed Development. Further detail on this is provided in **ES Volume 1, Chapter 5: Demolition and Construction** and the potential for likely significant effects is assessed as necessary in the technical assessments (**ES Volume 1, Chapters 6 and 7**).

2.58 The demolition and construction assessments presented within the technical chapters of the ES identifies (where necessary) the need for any additional or bespoke environmental management or mitigation measures in order to avoid, prevent, reduce or off-set any significant adverse effects identified.

2.59 Where required, a description of any proposed monitoring arrangements is also presented and defines (where appropriate) the procedures regarding the monitoring of the relevant significant adverse effects, the types of parameters to be monitored and the monitoring duration proposed.

2.60 All the demolition and construction related mitigation measures proposed within the technical chapters are compiled and presented in a mitigation and monitoring schedule (**ES Volume 1, Chapter 10: Mitigation and Monitoring**).

2.61 Any required demolition and construction related environmental management / mitigation and monitoring measures would be secured and controlled through an appropriate Construction Environmental Management Plan (CEMP) (or equivalent). Key mitigation and management controls that would later form part of a CEMP have been presented in this ES to help define the policies, procedures and management framework for the implementation of any identified specific environmental management and mitigation controls and monitoring.

### Completed and Operational Development

2.62 The ES presents a description of the Proposed Development sought for approval in **ES Volume 1, Chapter 4: The Proposed Development**. Sufficient information on the Proposed Development, in terms of the key aspects, has been presented to allow an understanding of the development being proposed and subsequently enable the assessment of potential and likely significant environmental effects of the completed and operational Proposed Development in each of the technical chapters.

2.63 The assessment of the nature and scale of a predicted change is undertaken against the baseline. In most cases, the baseline represents the environmental condition of the site and the surrounding area at the time of the assessment (as described within this chapter).

## CUMULATIVE EFFECTS AND EFFECT INTERACTIONS

### Cumulative Effects

2.64 The EIA Regulations require an assessment of potentially significant cumulative effects of the Proposed Development coming forward along with cumulative schemes. The cumulative schemes that are considered within an ES are typically located within a 1km radius from the centre of a site, as this spatial extent is considered appropriate for determining cumulative effects in an urban site context.

2.65 Generally, in addition to being located within a 1km radius from the centre of a site, the schemes to be included within a cumulative effects assessment will either:

- Have full planning consent or a resolution to grant consent; and
- Produce an uplift of more than 10,000m<sup>2</sup> (Gross External Area (GEA)) of mixed-use floorspace, or

- Provide over 150 residential units.

**2.66** These parameters have been set to allow all the cumulative schemes coming forward (i.e. within the planning system) within the area of a site to be subject to an initial screening exercise to determine the schemes that, based on the scale of redevelopment (amount and mix of uses), could potentially have a cumulative effect with a new development and should be considered further within a cumulative effects assessment of an EIA.

**2.67** By applying these parameters to all the cumulative schemes coming forward, a cumulative effects assessment of an EIA becomes more focused on the larger schemes (i.e. those with the potential to interact in a cumulative manner).

**2.68** However, there are no cumulative schemes located within a 1km radius of the site. Therefore, a cumulative effects assessment will not be undertaken as part of the EIA or presented within this ES.

### **Woking Football Club**

**2.69** The Applicant is seeking detailed planning permission for the Proposed Development. In addition to this, the Applicant is also seeking detailed planning permission for a separate scheme, known as the Woking Football Club scheme.

**2.70** The Applicant intends to demolish the existing David Lloyd Leisure Centre as part of the Woking Football Club scheme; however, this will be re-provided within the proposals for this Egley Road site. The relocation of the David Lloyd Leisure Centre has been assessed in the ES accompanying the Woking Football Club planning application.

### **Effect Interactions**

**2.71** Intra-project cumulative effects (known as effect interactions) occur as interactions between effects associated with just one project (i.e. the combination of individual effects arising as a result of the Proposed Development), for example, effects in relation to noise, airborne dust or traffic on a single receptor from the Proposed Development itself on surrounding sensitive receptors. Effect interactions during the demolition and construction works, and also once the Proposed Development is completed and operational, are considered within this ES (**ES Volume 1, Chapter 8: Effects Interactions**). However, it is possible that, depending on the individual predicted 'completed and operational' effects, only the demolition and construction work effects are actually considered, as they often generate the greatest likelihood of interactions occurring and hence significant effect interactions. Indeed, demolition and construction effects are usually more adverse (albeit on a temporary basis) than effects as a result of a completed development.

**2.72** Dependent on the relevant sensitive receptors, the assessment focuses either on key individual receptors or on groups considered to be most sensitive to potential effect interactions. It should be noted that only residual effects that are minor, moderate or major in scale are considered within this assessment, as negligible effects are, by definition, imperceptible in their nature. The assessment results are presented within **ES Volume 1, Chapter 8: Effect Interactions**.

**2.73** It should be noted that as there is no established methodology for assessing the impact of effect interactions on a particular receptor, a scale of effect will not be applied to the combination of individual effects; instead, the effect interaction will be discussed and, where possible, professional judgement will be applied to determine whether the effect interaction is considered significant.

**2.74** With regards to the potential for effect interactions to occur during demolition and construction, it is anticipated that standard mitigation measures, as detailed in a site-specific CEMP (as referred to in **ES Volume 1, Chapter 10: Mitigation and Monitoring**), can be applied to prevent temporary and unacceptable effect interactions from occurring on-site.

## **STRUCTURE OF TECHNICAL ASSESSMENTS**

**2.75** Each of the environmental topics considered in the EIA has been assigned a separate chapter in **ES Volume 1 (Chapters 6 and 7)**. Within each of the technical chapters, the assessment is presented and reported in the following format:

- An Introductory Table – setting out the author of the technical topic assessment, identification of relevant appendices, and key topic related considerations;
- Assessment Methodology – an explanation of the approach to defining the baseline conditions, likely evolution of the baseline conditions, and future baseline conditions; undertaking the impact assessment

(demolition and construction, and operation, including any key assumptions made); and defining the nature and scale of effects, as well as effect significance;

- Baseline Conditions – a description of the baseline conditions of the site and surrounding area (as relevant to the technical topic in question);
- Identification of Receptors and Receptor Sensitivity – identification of the existing and proposed (new) receptors on the site and in the surrounding area that may be affected by the Proposed Development and identification of their sensitivity;
- Potential Effects – an assessment of the likely significant effects of the Proposed Development during demolition and construction, and on completion, along with an evaluation of the nature and scale of each effect against defined criteria (without the implementation of mitigation);
- Mitigation and Monitoring Measures – a description of the mitigation measures that are being committed to during demolition and construction of the Proposed Development, and on completion;
- Residual Effects – a summary of the residual effects of the Proposed Development (assuming the mitigation measures are being committed to);
- Likely Significant Effects – a short statement confirming which residual effects are considered to be significant;
- Climate Change – as relevant, an assessment of the likely significant effects of the Proposed Development when considering, and in the context of, the potential for future climate change and taking into consideration the vulnerability of sensitive receptors to such change; and
- Assessment of Future Environment – an overview of how the baseline condition is expected to evolve in the future, in the absence of the Proposed Development coming forward, and an assessment of the potential for cumulative effects to arise (i.e. an assessment of the effects of the Proposed Development in combination with the effects of other cumulative schemes).

## **ASSUMPTIONS AND LIMITATIONS**

**2.76** The principal assumptions that have been made, and any limitations that have been identified, in undertaking the EIA are set out below. Assumptions specifically relevant to each technical topic have been set out in each technical chapter of the ES.

- Baseline conditions have been established from a variety of sources, including historical data, but due to the dynamic nature of certain aspects of the environment, conditions at the site and surrounding land uses may change;
- It is assumed that information received from third parties is accurate, complete and up to date;
- The assessments contained within each of the ES Volume 1 technical chapters are based on the assumption that mitigation measures set out in application drawings or documents are implemented, through regulatory regimes or via the management controls as set out in **ES Volume 1, Chapter 4: The Proposed Development** and **ES Volume 1, Chapter 5: Demolition and Construction**. It is assumed that the implementation of the mitigation measures identified in this ES are secured by WBC, through planning conditions (as appropriate);
- Demolition and construction works across the site would primarily take place in accordance with the programme of works described in **ES Volume 1, Chapter 5: Demolition and Construction**; and
- Where detailed information has not been available, reasonable assumptions have been made, and have been clearly set out, based on experience of developments of similar type and scale to enable assessment of likely significant effects.