



# **SCOPING OPINION:**

## **Proposed Heathrow Western Hub**

**Case Reference: TR020004**

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Adopted by the Planning Inspectorate (on behalf of the Secretary of State pursuant to Regulation 10 of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

**March 2019**

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# 1. INTRODUCTION

## 1.1 Background

- 1.1.1 On 14 February 2019, the Planning Inspectorate (the Inspectorate) on behalf of the Secretary of State (SoS) received a scoping request from Arora Holdings Limited (the Applicant) under Regulation 10 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) for the proposed Heathrow Western Hub (the Proposed Development).
- 1.1.2 In accordance with Regulation 10 of the EIA Regulations, an Applicant may ask the SoS to state in writing its opinion *'as to the scope, and level of detail, of the information to be provided in the environmental statement'*.
- 1.1.3 This document is the Scoping Opinion (the Opinion) provided by the Inspectorate on behalf of the SoS in respect of the Proposed Development. It is made on the basis of the information provided in the Applicant's report entitled Heathrow Western Hub EIA Scoping Report (the Scoping Report). This Opinion can only reflect the proposals as currently described by the Applicant. The Scoping Opinion should be read in conjunction with the Applicant's Scoping Report.
- 1.1.4 The Applicant has notified the SoS under Regulation 8(1)(b) of the EIA Regulations that they propose to provide an Environmental Statement (ES) in respect of the Proposed Development. Therefore, in accordance with Regulation 6(2)(a) of the EIA Regulations, the Proposed Development is EIA development.
- 1.1.5 Regulation 10(9) of the EIA Regulations requires that before adopting a scoping opinion the Inspectorate must take into account:
- (a) *any information provided about the proposed development;*
  - (b) *the specific characteristics of the development;*
  - (c) *the likely significant effects of the development on the environment; and*
  - (d) *in the case of a subsequent application, the environmental statement submitted with the original application.*
- 1.1.6 This Opinion has taken into account the requirements of the EIA Regulations as well as current best practice towards preparation of an ES.
- 1.1.7 The Inspectorate has consulted on the Applicant's Scoping Report and the responses received from the consultation bodies have been taken into account in adopting this Opinion (see Appendix 2).
- 1.1.8 The points addressed by the Applicant in the Scoping Report have been carefully considered and use has been made of professional judgement and experience in order to adopt this Opinion. It should be noted that when it comes to consider the ES, the Inspectorate will take account of relevant legislation and guidelines. The Inspectorate will not be precluded from requiring additional information if it is considered necessary in connection with the ES submitted with the application for a Development Consent Order (DCO).

- 1.1.9 This Opinion should not be construed as implying that the Inspectorate agrees with the information or comments provided by the Applicant in their request for an opinion from the Inspectorate. In particular, comments from the Inspectorate in this Opinion are without prejudice to any later decisions taken (eg on submission of the application) that any development identified by the Applicant is necessarily to be treated as part of a Nationally Significant Infrastructure Project (NSIP) or Associated Development or development that does not require development consent.
- 1.1.10 Regulation 10(3) of the EIA Regulations states that a request for a scoping opinion must include:
- (a) a plan sufficient to identify the land;*
  - (b) a description of the proposed development, including its location and technical capacity;*
  - (c) an explanation of the likely significant effects of the development on the environment; and*
  - (d) such other information or representations as the person making the request may wish to provide or make.*
- 1.1.11 The Inspectorate considers that this has been provided in the Applicant's Scoping Report. The Inspectorate is satisfied that the Scoping Report encompasses the relevant aspects identified in the EIA Regulations.
- 1.1.12 In accordance with Regulation 14(3)(a), where a scoping opinion has been issued in accordance with Regulation 10 an ES accompanying an application for an order granting development consent should be based on 'the most recent scoping opinion adopted (so far as the proposed development remains materially the same as the proposed development which was subject to that opinion)'.
- 1.1.13 The Inspectorate notes the potential need to carry out an assessment under The Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations). This assessment must be co-ordinated with the EIA in accordance with Regulation 26 of the EIA Regulations. The Applicant's ES should therefore be co-ordinated with any assessment made under the Habitats Regulations.

## **1.2 The Planning Inspectorate's Consultation**

- 1.2.1 In accordance with Regulation 10(6) of the EIA Regulations the Inspectorate has consulted the consultation bodies before adopting a scoping opinion. A list of the consultation bodies formally consulted by the Inspectorate is provided at Appendix 1. The consultation bodies have been notified under Regulation 11(1)(a) of the duty imposed on them by Regulation 11(3) of the EIA Regulations to make information available to the Applicant relevant to the preparation of the ES. The Applicant should note that whilst the list can inform their consultation, it should not be relied upon for that purpose.
- 1.2.2 The list of respondents who replied within the statutory timeframe and whose comments have been taken into account in the preparation of this Opinion is

provided, along with copies of their comments, at Appendix 2, to which the Applicant should refer in preparing their ES.

- 1.2.3 The ES submitted by the Applicant should demonstrate consideration of the points raised by the consultation bodies. It is recommended that a table is provided in the ES summarising the scoping responses from the consultation bodies and how they are, or are not, addressed in the ES.
- 1.2.4 Any consultation responses received after the statutory deadline for receipt of comments will not be taken into account within this Opinion. Late responses will be forwarded to the Applicant and will be made available on the Inspectorate's website. The Applicant should also give due consideration to those comments in preparing their ES.

### **1.3 Article 50 of the Treaty on European Union**

- 1.3.1 On 23 June 2016, the United Kingdom (UK) held a referendum and voted to leave the European Union (EU). On 29 March 2017 the Prime Minister triggered Article 50 of the Treaty on European Union, which commenced a two year period of negotiations regarding the UK's exit from the EU. On 26 June 2018 The European Union (Withdrawal) Act 2018 received Royal Assent and work to prepare the UK statute book for Brexit has begun. The European Union (Withdrawal) Act 2018 will make sure that UK laws continue to operate following the UK's exit. There is no immediate change to legislation or policy affecting national infrastructure. Relevant EU Directives have been transposed into UK law and those are unchanged until amended by Parliament.

## 2. THE PROPOSED DEVELOPMENT

### 2.1 Introduction

2.1.1 The following is a summary of the information on the proposed Heathrow Western Hub development and its site and surroundings prepared by the Applicant and included in their Scoping Report. The information has not been verified and it has been assumed that the information provided reflects the existing knowledge of the Proposed Development and the potential receptors/resources.

#### **Relationship with Heathrow Airport Limited Proposed Development**

2.1.2 The Inspectorate received a separate scoping request from Heathrow Airport Limited (HAL) on 21 May 2018 in respect of the proposed remodelling and expansion of the existing Heathrow Airport (the Airport) to include, among other components, a new Northwest Runway, the re-alignment of the M25 motorway and Associated Development. The HAL development is referred to within this Scoping Opinion as the HAL DCO Project and the Scoping Report and Scoping Opinion relating to that development are available online here:

<https://infrastructure.planninginspectorate.gov.uk/projects/london/expansion-of-heathrow-airport-third-runway/?ipcsection=docs>

2.1.3 For the avoidance of doubt, while the Applicant is independent of HAL, the Applicant's Scoping Report states that their Proposed Development would overlap with, and replace, certain elements of the HAL DCO Project and is therefore reliant on the delivery of parts of the proposed HAL DCO Project.

2.1.4 Every effort has been made in this Scoping Opinion to clearly distinguish between the two proposed developments.

### 2.2 Description of the Proposed Development

2.2.1 The Applicant's description of the Proposed Development, its location and technical capacity (where relevant) is provided in section 3 of the Scoping Report and in the associated figures and appendices.

2.2.2 Section 3.2 of the Scoping Report states that the Proposed Development involves the reconfiguration and expansion of certain terminal and airfield facilities on the western boundary of the Airport to enable an increase in *"terminal capacity which will increase the number of passengers for which the airport is capable of providing air passenger transport services by at least 50 million passengers per annum (mppa) and be capable of supporting an additional 260,000 air transport movements (ATM) per annum"*. The Scoping Report further states that *"a DCO is required for the Proposed Development by virtue of sections 14(1)(i), 23 and 31 of the Act. The Proposed Development also includes alterations to Junction 14 and 14A of the M25. These works comprise alteration of a highway for which the Secretary of State is the highway authority"*.

- 2.2.3 The Proposed Development is to be located at the existing site of the Airport, between the Terminal 5 building and the M25 motorway, as shown in Figure 1.1 of the Scoping Report. For the avoidance of doubt, the Applicant states that the Proposed Development does not include works in respect of the Northwest Runway or the changes to the M25 to allow the new Northwest Runway to cross the M25.
- 2.2.4 The key components of the proposed Heathrow Western Hub development are summarised in Scoping Report section 3.2.1 as:
- New and reconfigured terminal capacity;
  - Expansion of the existing airfield, including taxiways to service the NRW and the provision of aprons and stands;
  - Changes to the existing road and rail surface access infrastructure, including local road changes and alterations to junctions 14 and 14A of the M25;
  - Public transport upgrades;
  - Changes to river alignments and flood storage;
  - Associated supporting facilities including cargo, aircraft maintenance, fuel storage, waste and water treatment facilities, public utilities, generation plant to support the energy demand of the airport and consolidation of car parking;
  - Displaced uses;
  - Other airport related development; and
  - Other associated works necessary to deliver the Proposed Development, including landscaping and ecological improvement works.
- 2.2.5 The Scoping Report states at section 3.4.2 that as the HAL DCO Project has not yet been fully defined, the Applicant cannot yet determine the precise level of additional components that will need to be included in its application to support a seamless alignment. For the purposes of the Scoping Report the Applicant has therefore assumed that the Proposed Development will include all necessary components to support expanded capacity at the Airport but as the HAL DCO Project progresses this position may change.
- 2.2.6 Section 3.7 of the Scoping Report states that the Applicant is still developing the detailed approach to construction of the Proposed Development but that it is to be delivered in phases such that it will dovetail with the HAL DCO Project, with an expectation that the Proposed Development will be complete by 2030. Indicative phases include: the enabling works for site preparation (years 1 – 4); construction of the new and reconfigured terminal facilities (years 2 – 10); and airfield expansion (years 2 – 6).

- 2.2.7 A description of the surrounding environment is presented at section 2.2 of the Scoping Report, which provides an outline of the existing built development within the principal works area, to include the Terminal 5 building, the Sofitel hotel and associated car parking facilities, which are separated from an area of green belt land to the west by the Western Perimeter Road and the A3044. The access road to junction 14A of the M25 provides direct access from the motorway to this Western Perimeter Road and Terminal 5. Section 2.3 summarises the existing infrastructure at the wider Airport such as runway arrangements, terminal facilities, taxiways and aprons.
- 2.2.8 Figure 1.3 of the Scoping Report shows that the Airport and principal works area under consideration for the Proposed Development lie within the administrative area of the London Boroughs (LB) of Hillingdon and Hounslow, which are part of the Greater London Authority. However, the entirety of the Proposed Development is located across other administrative areas including; South Bucks District Council (DC); Buckinghamshire County Council (CC); Slough Borough Council (BC); Spelthorne BC; Surrey CC; and the Royal Borough of Windsor and Maidenhead.
- 2.2.9 The Scoping Report recognises that the Airport is located approximately 15 miles west of central London in a semi-urban area with the communities of Longford, Harmondsworth, Sipson, Harlington, Cranford Cross, Cranford, Hatton, Heston Hounslow, Feltham North, Bedfont, Stanwell, Stanwell Moor, Poyle, Colnbrook, Iver and Richings Park; Brands Hill and West Drayton bordering its perimeter or within close proximity to the airport. It is surrounded by suburban housing, business premises and mixed-use open land to the north and south; suburban housing and business premises to the east; and three large reservoirs, mixed-use open land, housing and business premises to the west. The Proposed Development and Associated Development lies within the hydrological catchment of the River Thames and a number of tributaries in the vicinity of the site. Figure 18.1 of the Scoping Report shows the watercourses that will require realignment as part of the Proposed Development - the Rivers Colne, Wraysbury, Duke of Northumberland's, Longford and Crane and the Colne Brook.

## **2.3 The Planning Inspectorate's Comments**

### **Description of the Proposed Development**

- 2.3.1 The description of development within the Scoping Report is high level and lacks detail regarding the specific location and design of the components comprising the Proposed Development. This limits the ability of the Inspectorate to provide specific comments on the scope, and level of detail, of the information to be provided in an ES. It also impedes the ability of the Inspectorate to agree to scope out aspects/ matters for assessment.
- 2.3.2 It is essential that more detailed design information regarding the Proposed Development is provided to relevant consultation bodies as and when appropriate. This will enable effective engagement in the assessment process. The information and engagement will support the Applicant's effort to agree the

detail of specific elements of the scope and methods for the assessment with relevant consultation bodies and in accordance with this Opinion.

- 2.3.3 The Applicant acknowledges that the Proposed Development is intended to be integrated with the HAL DCO Project and that since the exact development extent of the HAL DCO Project is not yet confirmed, the area required for the Heathrow Western Hub is *'defined widely and is likely to be reduced following receipt of further information on the HAL DCO Project'*. The Inspectorate notes that in this context, the application for a Scoping Opinion could be viewed as premature. Whilst the information provided by the Applicant is sufficient to satisfy the requirements of the Regulations when it comes to scoping there is an inherent uncertainty in the nature of the proposals. This uncertainty results in a lack of confidence in the proposed scope of assessment and dictates a more precautionary approach to the Inspectorate's Opinion as to the scope of the assessment.
- 2.3.4 The Scoping Report outlines that the Proposed Development is intended to overlap and replace certain elements of the HAL DCO Project. Section 3.4.1 of the Scoping Report states that the Applicant's *"principal interest is consenting, constructing and operating the Heathrow Western Hub to serve the Northwest Runway component of the Northwest Runway Scheme being developed and operated by HAL"*. Due to the nature of the relationship between these two projects, the Inspectorate assumes that the Proposed Development will not progress to application prior to an application being made for the HAL DCO Project.
- 2.3.5 The Inspectorate considers the approach proposed by the Applicant to be highly complex and challenging. In order to facilitate a robust examination, there will inevitably be a requirement to compare the HAL DCO Project assessment with the proposed Western Hub assessment. It is therefore, the Inspectorate's position that the Scoping Opinion issued by the Inspectorate to HAL in June 2018 (HAL Scoping Opinion) should equally and where relevant be adhered to by the Applicant. Accordingly, any deviation by the Applicant from the methodologies or approaches outlined in the HAL Scoping Opinion must be thoroughly explained, justified and, where possible, agreed with the relevant consultation bodies. Furthermore, all elements of the HAL DCO Project that overlap with, or are replaced by, the Proposed Development must be fully explained and assessed in the ES to ensure that interactions associated with the implementation of both proposals are clearly described and identified. The final ES must set out where the assessments are directly comparable and explain why areas of assessment are not comparable, where applicable.
- 2.3.6 The Scoping Report makes clear that the Proposed Development will exclude the new Northwest Runway and M25 realignment components of the proposed HAL DCO Project but that these would be considered as part of the cumulative effects assessment (CEA). The Inspectorate is concerned that the Applicant's proposed approach to address the runway and motorway realignment components of the HAL DCO Project in the cumulative assessment may influence the level of detail provided and affect the presentation of significant effects in the ES. The ES must include a sufficient level of detail regarding the Proposed Development and the interaction with the HAL DCO Project in order to support

a robust assessment of significant effects. The ES must explain how the Proposed Development relates to the HAL DCO Project and the extent to which it alters the findings of significant effects and any identified worst-case scenario(s).

- 2.3.7 Statements in the Scoping Report that appear to downplay the importance of the Northwest Runway eg referring to it as 'ancillary development' are unhelpful in this respect (see section 7.7.10). In addition, section 4.6.13 of the Scoping Report suggests that the assessments, data, methodologies and reports prepared by HAL in relation to its DCO application will be referenced 'where possible'. This information will be integral to making a robust assessment and the Applicant should ensure appropriate references and data are provided within the ES.
- 2.3.8 The Inspectorate is concerned that the overlapping nature of the two projects will create uncertainty with respect to the delivery of the mitigation commitments set out in the Airports National Policy Statement (ANPS). The Applicant must explicitly set out which mitigation commitments in the ANPS would be fulfilled through the Proposed Development DCO and those that would remain the responsibility of the HAL DCO Project to deliver. The Applicant should ensure that the ES clearly explains how the significant effects arising from the Proposed Development and the HAL DCO Project will be mitigated. The Applicant should ensure that the responsibility to deliver the mitigation commitments in the NPS but also those necessary to address the significant effects from the Proposed Development (including direct, indirect, secondary and cumulative effects) are appropriately apportioned.
- 2.3.9 It is further stated that components of the HAL DCO Project that would no longer be required as a result of the Proposed Development will be excluded from the cumulative assessment. Whilst this is acceptable in principle, the approach to ensuring that an accurate assessment of the relevant elements of both proposals has been presented is unclear. The ES should describe the components excluded from the cumulative effects assessment and demonstrate how the HAL DCO would be modified to prevent such development coming forward. The Inspectorate is concerned that the complexity associated with the Applicant's proposed approach may undermine its capability to provide an effective and detailed assessment of the significant effects associated with the relationship between the overlapping schemes. Due to the ongoing nature of the design development, the Scoping Report states that it has not been determined how much of the Proposed Development will be necessary and lacks specific information on the characteristics of elements to be provided e.g. dimensions, elevations or final locations of the various structures including any highways structures required as part of the changes to the road network. The Inspectorate appreciates that at this point in the evolution of the Proposed Development a final description may not yet be confirmed. However, the Applicant should be aware that the description of the Proposed Development provided in the ES must be sufficiently certain to meet the requirements of the EIA Regulations. The ES must include a detailed description of all components of the Proposed Development and should include reference to the location, alignments and dimensions of each individual element, including relevant design parameters (e.g. maximum heights) and limits of deviation. Where appropriate

this information should be accompanied by figures to assist the reader. It is also important that the ES clearly identifies and distinguishes areas of land or works which are required either permanently or on a temporary basis. In preparing this information the ES should give consideration to statutory heights and safeguarding zones for other aerodromes that may be affected by the Proposed Development (eg RAF Northolt).

- 2.3.10 Section 3.6.46 of the Scoping Report states that the consenting mechanism for the full quantum of airport related development has not yet been determined. The DCO application should confirm the consenting strategy for the Proposed Development.
- 2.3.11 As discussed above, the scenarios to be assessed are still being developed. The Applicant should ensure that the phases of the Proposed Development, and the activities to be undertaken during each phase, are clearly explained in the ES, and consistently reflected in the aspect assessments. Where uncertainty exists, and if flexibility is required the assessment should be based on worst case assumptions about the duration of the construction phases and include consideration of the potential effects of construction activities occurring in conjunction with the operational activities of the Airport. The Inspectorate acknowledges that the worst-case scenarios may be slightly different between the two schemes. The assessment scenarios should, wherever possible, be consistent with those presented for the HAL DCO Project.
- 2.3.12 Section 3.7.6 of the Scoping Report states that the terminal construction may be phased in line with demand. The scenarios assessed in the ES would need to allow for such a construction process.
- 2.3.13 The Scoping Report states that the DCO will seek permission for Associated Development but acknowledges at section 2.5.11 that at this stage the precise extent and nature of such development has not been finalised. The Applicant should clearly define in the draft DCO (dDCO) which elements of the Proposed Development are integral to the NSIP and which are Associated Development under the PA2008 or an ancillary matter. Any proposed works and/or infrastructure identified as Associated Development, or as ancillary to the Proposed Development (whether on or off site) should be assessed as part of an integrated approach to the environmental assessment.
- 2.3.14 Section 3.6.39 of the Scoping Report states that a large proportion of displaced uses identified "*fall under the footprint of the Northwest Runway itself and therefore would not necessarily be affected by the HWH DCO Project and are therefore not included within its scope.*" The Inspectorate considers that such elements should be assessed as part of the ES either individually or cumulatively to ensure that an assessment of the whole development has been provided.
- 2.3.15 The Scoping Report refers to the demolition of existing properties at section 3.6.42 but provides limited details regarding the properties that are to be demolished. As part of the description of the physical characteristics of the Proposed Development, the ES should provide full details of the proposed demolition works and it should be clear at what point in the construction programme the demolition activities would occur. The Applicant should ensure

that the ES aspect chapters assess the likely significant effects resulting from demolition activities taking into account their extent and duration.

- 2.3.16 The Scoping Report states that diversion or realignment of existing watercourses, utilities and roads is required to enable terminal construction to commence and outlines the changes to the road network at high level in sections 3.6.12 – 3.6.18. Limited information is provided in respect of these works which are likely to be substantial. The ES should contain a full explanation of such closures and diversions, including whether they are temporary or permanent, and associated impacts should be fully assessed. Responses from relevant statutory undertakers including Affinity Water, Cadent Gas Ltd, ES Pipelines, National Grid Network Rail and Thames Water should be addressed. This information should also be depicted on figures in the ES to provide further clarity.
- 2.3.17 Temporary construction compounds are referenced in section 3.9 of the Scoping Report, and again in section 13.4.5 which states that these will be located “to the east and south” of the Proposed Development. No further information is provided on these compounds, including the exact number that will be required. The Applicant should ensure that the ES provides specific information on the number, size and final location of the construction compounds, and should explain the length of time for which they are required. The ES should assess any potential significant effects from the use of construction compounds within relevant aspect assessments.
- 2.3.18 Construction of the Proposed Development is anticipated to last approximately 9 - 10 years commencing from late 2021. The ES should include a description of the anticipated:
- construction methods and activities associated with each phase of construction;
  - numbers of workers and the hours of working;
  - types of plant and machinery;
  - lighting equipment/requirements, in particular any lighting at construction compounds;
  - number, type, movements and parking of construction vehicles (both heavy goods vehicles (HGVs) and staff vehicles);
  - noise; and
  - the Construction and Environmental Management Plan and the Code of Construction Practice to be drafted.

### **Alternatives**

- 2.3.19 The EIA Regulations require that the Applicant provide ‘A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects’.

2.3.20 The Inspectorate acknowledges the Applicant's intention to consider alternatives within the ES but notes that at present there do not appear to be any alternatives outlined in terms of the location and functions of the Proposed Development. The Inspectorate would expect to see a discrete section in the ES that provides details of all reasonable alternatives studied and the reasoning for the selection of the chosen option(s), including a comparison of the environmental effects.

### **Flexibility**

2.3.21 The Inspectorate notes the Applicant's desire to incorporate flexibility into their dDCO and its intention to apply a Rochdale Envelope approach for this purpose. Where the details of the Proposed Development cannot be defined precisely, the Applicant will apply a worst-case scenario. The Inspectorate welcomes the reference to Planning Inspectorate Advice Note nine 'Using the 'Rochdale Envelope' in this regard.

2.3.22 Due to the fact that there is uncertainty as to the exact extent of the Proposed Development until such time as the HAL DCO Project is further designed, it is assumed that the Proposed Development will include all necessary components to support expanded capacity at the Airport. However, it remains unclear as to how exactly the Applicant intends to narrow the range of options in its Proposed Development sufficiently to ensure a robust assessment.

2.3.23 The Applicant should make every attempt to narrow the range of options and explain clearly in the ES which elements of the Proposed Development have yet to be finalised and provide the reasons. At the time of application, any Proposed Development parameters should not be so wide-ranging as to represent effectively different developments. The development parameters will need to be clearly defined in the dDCO and in the accompanying ES. It is a matter for the Applicant, in preparing an ES, to consider whether it is possible to robustly assess a range of impacts resulting from a large number of undecided parameters. The description of the Proposed Development in the ES must not be so wide that it is insufficiently certain to comply with the requirements of Regulation 14 of the EIA Regulations.

2.3.24 It should be noted that if the Proposed Development materially changes prior to submission of the DCO application, the Applicant may wish to consider requesting a new scoping opinion.

## **2.4 Airspace Change Process and Regulation**

2.4.1 As outlined in section 3.3 of the Scoping Report, the Civil Aviation Authority (CAA) is the UK's specialist aviation regulator. It is important to clearly distinguish between the role of the Inspectorate, in administering the DCO process and the CAA's role in regulating the aviation industry, administering the Airspace Change Process (ACP) and as the designated competent authority for licensing of aerodromes.

2.4.2 An application for development consent will be examined in accordance with the legislative requirements of the PA2008 and is primarily concerned with issues

relating to powers that would be authorised by the DCO in respect of a land-use consent. The CAA's regulatory approvals process is distinct from the DCO process and is concerned with the detailed design of airspace (including specific flight paths); economic regulation; and aviation safety.

2.4.3 In light of the comments made by the CAA in paragraph 13 of their consultation response, regarding whether to carry out significant work to consider the economic regulation of proposals brought forward by the Aurora Group, the Applicant's ES should confirm what uncertainty this introduces into the programme of works proposed.

2.4.4 The CAA provides guidance regarding the environmental assessment of airspace change proposals. The Inspectorate's Scoping Opinion in respect of the HAL DCO Project required that HAL's ES methodology should be compatible with the methodological approaches outlined in the CAA's CAP 1616<sup>1</sup> and CAP 1616a<sup>2</sup> documents to ensure consistency and continuity between the two assessment processes. To ensure that a consistent assessment, comparable with the HAL DCO Project, is provided by the Applicant, the ES should also explain how it is compatible with the CAP methodologies.

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<sup>1</sup> CAP 1616: Airspace Design: Guidance on the regulatory process for changing airspace design including community engagement requirements' Civil Aviation Authority, December 2017.

<sup>2</sup> CAP 1616a: Airspace Design: Environmental requirements technical annex' Civil Aviation Authority, December 2017.

## **3. ES APPROACH**

### **3.1 Introduction**

- 3.1.1 This section contains the Inspectorate's specific comments on the scope and level of detail of information to be provided in the Applicant's ES. General advice on the presentation of an ES is provided in the Inspectorate's Advice Note Seven 'Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements'<sup>3</sup> and associated appendices.
- 3.1.2 Aspects/ matters (as defined in Advice Note Seven) are not scoped out unless specifically addressed and justified by the Applicant and confirmed as being scoped out by the Inspectorate. The ES should be based on the Scoping Opinion in so far as the Proposed Development remains materially the same as the Proposed Development described in the Applicant's Scoping Report.
- 3.1.3 The Inspectorate has set out in this Opinion where it has/ has not agreed to scope out certain aspects/ matters on the basis of the information available at this time. The Inspectorate is content that the receipt of a Scoping Opinion should not prevent the Applicant from subsequently agreeing with the relevant consultees to scope such aspects/ matters out of the ES, where further evidence has been provided to justify this approach. However, in order to demonstrate that the aspects/ matters have been appropriately addressed, the ES should explain the reasoning for scoping them out and justify the approach taken.
- 3.1.4 Where relevant, the ES should provide reference to how the delivery of measures proposed to prevent/ minimise adverse effects is secured through DCO requirements (or other suitably robust methods) and whether relevant consultees agree on the adequacy of the measures proposed.

### **3.2 Relevant National Policy Statements (NPSs)**

- 3.2.1 Sector-specific NPSs are produced by the relevant Government Departments and set out national policy for NSIPs. They provide the framework within which the Examining Authority (ExA) will make their recommendation to the SoS and include the Government's objectives for the development of NSIPs. The NPSs may include environmental requirements for NSIPs, which Applicants should address within their ES.
- 3.2.2 The designated NPS(s) relevant to the Proposed Development are the:
- NPS for National Networks (NPSNN); and
  - Airports National Policy Statement.

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<sup>3</sup> Advice Note Seven: Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements and annex. Available from: <https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/>

- 3.2.3 The ANPS paragraph 1.17 states that 'if there is conflict between the Airports NPS and other NPSs, the conflict should be resolved in favour of the NPS that has been most recently designated'

### **3.3 Scope of Assessment**

#### **General**

- 3.3.1 The Inspectorate recommends that in order to assist the decision-making process, the Applicant uses tables:
- to demonstrate how the assessment has taken account of this Opinion;
  - to identify and collate the residual effects after mitigation for each of the aspect chapters, including the relevant interrelationships and cumulative effects;
  - to set out the proposed mitigation and/ or monitoring measures including cross-reference to the means of securing such measures (eg a dDCO requirement);
  - to describe any remedial measures that are identified as being necessary following monitoring; and
  - to identify where details are contained in the Habitats Regulations Assessment (HRA report) (where relevant), such as descriptions of European sites and their locations, together with any mitigation or compensation measures, are to be found in the ES.
- 3.3.2 The Inspectorate notes that the high-level nature of scoping tables provided in the Scoping Report and inconsistencies between the text and scope out tables or between scope and summary tables has created uncertainty in the scope of assessment proposed.
- 3.3.3 Numerous references are made in the Scoping Report suggesting an intention to use professional judgement in the assessment of significance. Where professional judgement is used this should be clearly presented and fully justified within the ES.
- 3.3.4 The Scoping Report proposes that much of the assessment scope is left for agreement with relevant stakeholders post-scoping (eg sections 11.7.9 and 11.7.10 of the Scoping Report). The Inspectorate reminds the Applicant that the ES should be based on the Scoping Opinion in so far as the Proposed Development remains materially the same as that which was subject to that Opinion.
- 3.3.5 The study area extents and assessment scenarios for many of the ES aspect chapters are left open to further refinement subject to the evolving design of the Proposed Development. Whilst the Inspectorate understands the reasoning behind this flexibility, it creates uncertainty regarding the final extent of many of the assessments. The Applicant should make effort to agree the final study area extents and assessment scenarios with relevant consultation bodies and should be fully justified within the ES.

- 3.3.6 The Scoping Report states that the open space assessment will be undertaken (outside of the EIA). It is unclear why this assessment would be excluded from the EIA, since it appears to underpin the assessment of effects, for example in relation to recreation; and consideration of mitigation in the form of the green infrastructure strategy. Data used to inform the assessment of significant effects should be included within the ES.

### **Baseline Scenario**

- 3.3.7 The Scoping Report lacks detail on the surveys and data gathering that will be required to inform the ES and ensure that a robust assessment is undertaken. While reference is made to reliance on the HAL Scoping Opinion, the Applicant does not have access to the background data underpinning this. The ES should provide detailed information on the survey efforts relied upon for the purposes of establishing the baseline and provide a thorough justification for the robustness of this information.
- 3.3.8 The ES should also include a description of the baseline scenario with and 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.

### **Forecasting Methods or Evidence**

- 3.3.9 The ES should contain the timescales upon which the surveys which underpin the technical assessments have been based. For clarity, this information should be provided either in the introductory chapters of the ES (with confirmation that these timescales apply to all chapters), or in each aspect chapter. The ES should clearly set out the duration of effects and whether the temporary nature of certain effects has been used to moderate an assessment of significant effects. This is particularly important for a major project where 'temporary' construction activities may persist for a number of years.
- 3.3.10 The Inspectorate expects the ES to include a chapter setting out the overarching methodology for the assessment, which clearly distinguishes effects that are 'significant' from 'non-significant' effects. Any departure from that methodology should be described in individual aspect assessment chapters.
- 3.3.11 The ES should contain the timescales upon which the surveys which underpin the technical assessments have been based. For clarity, this information should be provided either in the introductory chapters of the ES (with confirmation that these timescales apply to all chapters), or in each aspect chapter.
- 3.3.12 The Inspectorate expects the ES to include a chapter setting out the overarching methodology for the assessment, which clearly distinguishes effects that are 'significant' from 'non-significant' effects. Any departure from that methodology should be described in individual aspect assessment chapters.
- 3.3.13 The ES should include details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.

### **Residues and Emissions**

- 3.3.14 The EIA Regulations require an estimate, by type and quantity, of expected residues and emissions. Specific reference should be made to water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases, where relevant. This information should be provided in a clear and consistent fashion and may be integrated into the relevant aspect assessments.
- 3.3.15 Further commentary is provided in relation to the assessment of Land Quality and Waste in section 4.10 of this Opinion.

### **Mitigation**

- 3.3.16 Any mitigation relied upon for the purposes of the assessment should be explained in detail within the ES. The likely efficacy of the mitigation proposed should be explained with reference to residual effects. The ES should also address how any mitigation proposed is secured, with reference to specific DCO requirements or other legally binding agreements.
- 3.3.17 As highlighted in section 2.3 of this Opinion, the Inspectorate is concerned that the certainty of mitigation commitments set out in the ANPS is not undermined by uncertainty regarding the responsibility for delivering mitigation requirements.

### **Risks of Major Accidents and/or Disasters**

- 3.3.18 The ES should include a description and assessment (where relevant) of the likely significant effects resulting from accidents and disasters applicable to the Proposed Development. The Applicant should make use of appropriate guidance (e.g. that referenced in the Health and Safety Executives (HSE) Annex to Advice Note 11) to better understand the likelihood of an occurrence and the Proposed Development's susceptibility to potential major accidents and hazards. The description and assessment should consider the vulnerability of the Proposed Development to a potential accident or disaster and also the Proposed Development's potential to cause an accident or disaster. The assessment should specifically assess significant effects resulting from the risks to human health, cultural heritage or the environment. Any measures that will be employed to prevent and control significant effects should be presented in the ES.
- 3.3.19 Relevant information available and obtained through risk assessments pursuant to European Union legislation such as Directive 2012/18/EU of the European Parliament and of the Council or Council Directive 2009/71/Euratom or relevant assessments carried out pursuant to national legislation may be used for this purpose provided that the requirements of this Directive are met. Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.
- 3.3.20 Further comments on the Applicant's approach to assessing major accidents and disasters are provided in section 4.11 of this Opinion.

### **Climate and Climate Change**

- 3.3.21 The ES should include a description and assessment (where relevant) of the likely significant effects the Proposed Development has on climate (for example having regard to the nature and magnitude of greenhouse gas emissions (GHG)) and the vulnerability of the project to climate change. Where relevant, the ES should describe and assess the adaptive capacity that has been incorporated into the design of the Proposed Development. This may include, for example, alternative measures such as changes in the use of materials or construction and design techniques that will be more resilient to risks from climate change.
- 3.3.22 Further comments on the Applicant's approach to assessing climate change and greenhouse gas emissions are provided in sections 4.3 and 4.4 of this Opinion.

### **Transboundary Effects**

- 3.3.23 Schedule 4 Part 5 of the EIA Regulations requires a description of the likely significant transboundary effects to be provided in an ES.
- 3.3.24 The Scoping Report concludes that the Proposed Development is not likely to have significant effects on another European Economic Area (EEA) State and proposes that transboundary effects do not need to be considered within the ES. The Inspectorate notes the Applicant's conclusion in the Scoping Report; however, recommends that, for the avoidance of doubt, the ES details and justifies this conclusion.

### **A Reference List**

- 3.3.25 A reference list detailing the sources used for the descriptions and assessments must be included in the ES.

## **3.4 Confidential Information**

- 3.4.1 In some circumstances it will be appropriate for information to be kept confidential. In particular, this may relate to information about the presence and locations of rare or sensitive species such as badgers, rare birds and plants where disturbance, damage, persecution or commercial exploitation may result from publication of the information. Where documents are intended to remain confidential the Applicant should provide these as separate paper and electronic documents with their confidential nature clearly indicated in the title and watermarked as such on each page. The information should not be incorporated within other documents that are intended for publication or which the Inspectorate would be required to disclose under the Environmental Information Regulations 2004.

## 4. ASPECT BASED SCOPING TABLES

### 4.1 Air Quality and Odour

(Scoping Report section 5)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.1.1	5.6.2, Tables 5.4 and 5.9	Increases in ozone concentrations resulting from fuel combustion associated with the movement of aircraft on taxiways.	The ES should demonstrate that it is unlikely to give rise to significant air quality effects (including in relation to vegetation) from this pollutant through the provision of a detailed screening assessment where relevant.
4.1.2	5.6.2, Tables 5.4 and 5.9	Operational phase combustion activities: Emissions of pollutants (NO <sub>x</sub> , SO <sub>2</sub> , and Volatile Organic Compounds (VOCs)) which can form secondary particles which may lead to impacts on human health.	The proposed scope out of secondary particulates is ambiguously worded and could be interpreted as scoping out consideration of emissions of pollutants. The Inspectorate considers that formation of secondary particulates may be scoped out of the assessment on the basis that secondary particulate precursors are to be assessed.
4.1.3	5.4.4	Emissions from aircraft in flight and during the landing/take-off (LTO) cycle	The Inspectorate considers that the Heathrow Western Hub proposals have potential to alter the pattern of flights and ground based flight movements during the aircraft LTO cycle due to potential changes in taxiway arrangements relative to the HAL DCO Project. The ES must assess emissions during the LTO cycle to the extent that differences in operational patterns between the two Proposed Developments result in different air quality effects.
4.1.4	Table 5.9	Emissions of dust and fine particulate matter, odours and exhaust emissions from on-site construction vehicles and plant	Table 5.9 indicates that consideration of dust, particulates odour and exhaust emissions in construction are scoped out for operation. In light of the potential overlapping construction and operational phases,

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
		associated with land preparation works - Operation	the Inspectorate considers that an assessment should be undertaken in operation where significant effects are likely to occur.
4.1.5	Table 5.9 Table 5.3	Local reductions in emissions associated with the removal of displaced uses	<p>Table 5.3 highlights this issue as a potential likely significant effect during construction only, whereas Table 5.9 states that such effects are scoped out for construction and scoped into the operational assessment. The text is therefore ambiguous.</p> <p>Table 5.3 proposes to assess removal of displaced uses in terms of an anticipated reduction in emissions, however it omits to consider the impact of the replaced uses (eg removal and reprovision of Lakeside Energy from Waste) and the subsequent increase in emissions. The ES must assess the removal, replacement and subsequent operation of such facilities on human and ecological receptors.</p>
4.1.6	Table 5.9	Exhaust emissions resulting from movements of aircraft on taxiways	<p>This matter is proposed to be scoped out during construction. Insufficient justification has been provided to scope out this matter. Construction activities may lead to reduced taxiway availability and increased airfield congestion during periods of construction. The ES should include an assessment of significant effects associated with exhaust emissions resulting from movements of aircraft on taxiways.</p>

ID	Ref	Other points	Inspectorate's comments
4.1.7	5.4.5	Incorrect cross referencing to Institute of Air Quality Management Guidance (IAQM) 2014	<p>The Scoping Report refers to IAQM construction dust (2014a) and odour guidance (2014b). However, reference 2014a is the IAQM odour guidance and 2014b is the IAQM construction dust guidance. For the avoidance of doubt, the Inspectorate has assumed that all references to odour assessment relate to the IAQM 'Guidance on the Assessment of Odour for Planning' and for dust relate to the IAQM 'Guidance on the Assessment of Dust from Demolition and</p>

ID	Ref	Other points	Inspectorate's comments
			Construction'. The Applicant should ensure that such references in the ES are correct.
4.1.8	5.4.5	IAQM Guidance on the Assessment of Dust from Demolition and Construction	The Inspectorate notes that the most recent revision of the IAQM guidance is v1.1 (2016). The ES should be based on relevant up to date guidance.
4.1.9	5.4.7	Road traffic study area and non-road study area	<p>The spatial extent of the road traffic study area is proposed to be defined by the affected road traffic network, as informed by the traffic and transport assessment. The Inspectorate agrees that the extent of the traffic and transport effects should be used to define the study area for air quality effects and that this should not be limited to the extent of the Proposed Development as currently understood. The Inspectorate recommends that effort is made to agree the final study area and scope of designated sites (Air Quality Management Areas and ecological sites) with the relevant consultation bodies.</p> <p>The Scoping Report states that the non-road study area will be confirmed once the design has been developed. The absence of a confirmed study area limits the Inspectorate's ability to comment on the scope of assessment. The Inspectorate recommends that effort is made to agree the final study area with the relevant consultation bodies.</p>
4.1.10	5.4.10	IAQM-EPUK 2017 criteria	The criteria listed in the Scoping Report exclude the IAQM-EPUK criterion " <i>have an underground car park with extraction system.</i> " It is unclear whether such facilities are excluded from the Proposed Development and therefore do not require specific assessment criteria or whether such facilities would fall within the category of ' <i>operational vehicle emissions</i> ' or ' <i>non-road based emissions</i> '. The ES should include all relevant criteria from the guidance.

ID	Ref	Other points	Inspectorate's comments
4.1.11	5.4.10	Assessment of air quality effects on ecological receptors	The assessment of air quality effects on ecological receptors in the Applicant's ES should also take account of Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001) published by Natural England on 12 July 2018.
4.1.12	5.4.12	Relevant road links	The Scoping Report states that all 'relevant' road links will be assessed. In the absence of a list of relevant road links or definition of 'relevant', the Inspectorate recommends that effort is made to agree the road links to be assessed with relevant consultation bodies. The ES should not focus solely on Pollution Climate Mapping (PCM) links. Induced traffic effects should also be addressed within the assessment and where significant effects may occur, they should be assessed.
4.1.13	5.4.13	IAQM 'Guidance on the Assessment of Odour for Planning'	<p>The Inspectorate is aware that the most recent revision of the IAQM guidance is v1.1 (2018). The ES should be based on relevant, up to date guidance.</p> <p>The Inspectorate welcomes the commitment to assess odour emissions in accordance with IAQM guidance, however the lack of confirmation of the specific sources or detail of approach limits the ability of the Inspectorate to comment on the actual methodology to be undertaken. The Inspectorate recommends that effort is made to agree the detailed approach with relevant consultation bodies.</p>
4.1.14	5.4.14, 5.5.6	Baseline data	The baseline monitoring data should draw on the data held within the London Air Quality Network and from adjacent local planning authorities, identifying any areas of localised poor air quality (eg M25, M4). Efforts should be made to agree the scope and extent of air quality baseline datasets and model verification requirements with the relevant consultation bodies.

ID	Ref	Other points	Inspectorate's comments
			Baseline data sources for ecological receptors should include the Air Pollution Information System (APIS).
4.1.15	Table 5.7.29	Receptor sensitivity and value criteria	The criteria exclude reference to ecological receptors. The ES should include criteria relating to impacts on ecological receptors. Adequate cross referencing should be made between the air quality chapter and biodiversity chapter of the ES.
4.1.16	5.7.36, 5.7.39	Assessment scenarios	The Scoping Report states that the assessment will consider ' <i>a number of different assessment scenarios</i> '. The actual scenarios are not defined. Similarly, ' <i>assessment years will be defined once additional details of the nature of emission sources are known</i> '. The ES should include scenarios and assessment years that adequately represent the worst-case construction and operational assessment scenarios. Assessment years should be replicated between the traffic and transport and air quality assessments. Where possible and appropriate, these should align with scenarios assessed as part of the proposed HAL DCO project.
4.1.17	5.7.37	<i>"Pollutant concentrations.. ..are expected to reduce over time"</i>	Uncertainties associated with the expected reduction in pollutant concentrations should be described within the ES.

## 4.2 Biodiversity

(Scoping Report section 6)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.2.1	6.10.1 Table 6.11	Killing or injury of fauna through the removal of occupied resting or breeding sites during operation	<p>The Inspectorate advises that this matter may be scoped out of the operation phase assessment on the basis that such activities are limited to the construction phase.</p> <p>The Inspectorate recommends that the ES includes suitable provisions within a landscape/biodiversity management plan, or similar, to ensure that operation and maintenance effects on fauna are avoided.</p>
4.2.2	6.10.1 Table 6.11	Introduction or spread of invasive species during operation	<p>The Inspectorate advises that this matter should not be scoped out of this aspect of the ES because insufficient survey baseline data has been presented to demonstrate that invasive species are not present.</p> <p>The Inspectorate recommends that the ES includes suitable provisions within a landscape/biodiversity management plan or similar, to ensure that operation and maintenance activities do not give rise to the introduction or spread of invasive species.</p>
4.2.3	6.6.2	Impacts on habitats or species determined to be absent	<p>The Scoping Report suggests that where such impacts are determined to be absent, they may be proposed for later agreement with the Inspectorate to be scoped out of the assessment. Without the information to confirm presence or absence of protected species and habitats the Applicant should ensure that the ES includes an assessment of impacts to habitats and species, where significant effects are likely to occur.</p>

ID	Ref	Other points	Inspectorate's comments
4.2.4	6.4.1-6.4.3 6.7.18- 6.7.19 Table 6.2 Figure 6.2 Table 6.4	Study area	<p>The proposed study areas for biodiversity receptors are set out in Section 6.4.</p> <p>The Applicant states that the study areas were chosen using appropriate Chartered Institute of Ecology and Environmental Management (CIEEM) guidance and professional judgement. Where professional judgement has been used the reasoning as to why certain sites or features have been omitted from the assessment will need to be clearly explained and justified in the ES.</p> <p>The proposed study areas are intended to be refined for the assessment as the design, consultation and related aspect assessments are progressed. The ES should present the final biodiversity study areas in clear figures consistent with the scope of the assessment.</p> <p>Table 6.2 shows that a study area of 5 km has been used for bats. The Inspectorate recommends that a 10 km study area for bats should be used following Bat Conservation Trust guidance 2016 and consistent with the HAL DCO Project.</p> <p>The Inspectorate notes that the study area for UK Habitats of Principal Importance (HPI) and Local Biodiversity Action Plan (LBAP) habitats is within and up to 50m of the Proposed Development area, and the study area for protected and notable species (except Great Crested Newts) is within and up to 500m of the Proposed Development area and for Great Crested Newts is within and up to 50m of the Proposed Development. The HAL Scoping Report has used a wider study area of 2km for both HPI and records of other legally protected or notable species, and a 2km search area for other designated sites, and the Inspectorate expects the Applicant to use the same study area extents as the HAL DCO Project assessment.</p> <p>Table 6.2 does not identify statutory designated sites beyond the 2km study area that may have the potential to be impacted through</p>

ID	Ref	Other points	Inspectorate's comments
			<p>changes to air quality, particularly from increased emissions from ground traffic movements. The study area for the assessment should be based on the extent of the anticipated impacts and the potential for significant effects to occur.</p> <p>The Inspectorate advises that the wider road traffic modelling study area extent should be used to account for effects on designated European sites and protected species due to direct and indirect effects including emissions to air and disturbance.</p> <p>Statutory designated sites for nature conservation are located within the study area, as presented in Table 6.4. The list of sites under consideration should be extended to include Windsor Forest and Great Parks Special Area of Conservation (SAC), and Thames Basin Heath Special Protection Area (SPA), River Colne (from County boundary to Staines Moor Site of Nature Conservation Interest (SNCI), Greenham's Fishing Pond SNCI and Stanwell II SNCI.</p> <p>The Inspectorate notes that reference to SPA 'functionally linked' habitats has not been made. Functionally linked habitats are important for the maintenance of the SPA bird populations through the provision of additional roosting or feeding areas. The ES should assess impacts to functionally linked habitats where significant effects are likely to occur.</p> <p>Although the Scoping Report states that the locations of the statutory designated nature conservation sites listed in Table 6.4 are also shown in Figure 6.2, the Inspectorate notes that Figure 6.2 does not show Langham Pond Site of Special Scientific Interest (SSSI).</p> <p>Other sites such as Thorpe Hay SSSI, Knight and Bessborough SSSI and Kempton Reservoirs SSSI are not listed in Table 6.4 or shown in Figure 6.2 as these are outside the study area. As some of these sites are just beyond the 2km buffer for associated works the Applicant should explain the reasons why any nature conservation sites such as these have been excluded from the assessment and clarify whether</p>

ID	Ref	Other points	Inspectorate's comments
			these or any other ecological features which may have been excluded because of their location just outside the study areas have any biological receptors which may be affected by the Proposed Development.
4.2.5	4.6	Zones of Influence (ZoI)	A likely ZoI for potential cumulative biodiversity effects with other development will be defined separately as part of the CEA, as described in ES Section 4.6. The ZoI should be clearly described and the reasons for its scope fully explained in the ES. This should take account of changes to the extent of the proposed development and reflect the wider air quality study area as discussed above.
4.2.6	6.5.3	Field surveys	Field surveys of the Proposed Development are scheduled to be undertaken in spring 2019 based on a biodiversity method statement. The Inspectorate notes that the biodiversity method statement has not been provided. In the absence of this information, the Inspectorate considers that effort should be made to agree the detail of the method statement relevant consultation bodies.
4.2.7	6.5.7 – 6.5.28	Field surveys – protected, notable and invasive species	The ES should supplement and update any information that has been gained from desk studies with field studies as necessary for the assessment of notable and protected species.
4.2.8	6.7.20	Survey area access	The Applicant states that a field survey will commence in spring 2019 to check the HAL findings as well as surveying areas covered by the HAL Scoping surveys but that this will be subject to landowner approval. The Applicant should ensure that all the baseline information necessary to inform the assessment of effects and mitigation within the ES has been obtained.
4.2.9	6.7.22 18.4.7	Baseline data - ecological receptors	Fish, macrophyte, diatom or macro-invertebrate populations are key elements of the Water Framework Directive (WFD) classification process and a deterioration in one of these could result in a

ID	Ref	Other points	Inspectorate's comments
			<p>deterioration of the respective water bodies. These populations are not specifically referred to in the Scoping Report other than as "rare and notable aquatic...invertebrate species". Impacts that may result in significant effects on these populations from the Proposed Development will need to be assessed in the ES.</p>

## 4.3 Carbon and Greenhouse Gases

(Scoping Report section 7)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.3.1	7.6.6 7.7.42	Section 7.6.6 states that no matters are scoped out of the assessment but section 7.7.42 identifies that the scope of assessment is restricted to the aviation sector and cumulative carbon and GHG effects arising from other developments outside of the Northwest Runway Scheme (NRS) are not proposed to be considered.	The Inspectorate considers that cumulative carbon and GHG effects arising from 'Other Development' outside the NRS should be considered as part of the CEA and consistent with the HAL DCO Project, to the extent that they are likely to give rise to significant effects.
4.3.2	Table 7.4	Land use change	The assessment of land use change effects is proposed to be restricted to the operational phase only. Given that site clearance will result in loss of carbon storage from existing woodlands and soils, this matter should be considered during construction as well.

ID	Ref	Other points	Inspectorate's comments
4.3.3	7.6.5	<i>"Some of these activities will take place outside of the Proposed Development scoping area, detailed in Section Error! Reference source not found., and therefore will be considered as part of the cumulative assessment. The approach that will be undertaken to</i>	Unfortunately, errors exist within section 7.6.5 which creates uncertainty in the proposed assessment approach and scope. In preparing the ES care should be taken to ensure that relevant quality checks have been undertaken in effort to eradicate such errors.  The Inspectorate is unclear which activities are proposed to take place outside of the Proposed Development scoping area, for example does this relate to embodied GHGs within construction materials or

ID	Ref	Other points	Inspectorate's comments
		<i>assess the release of GHG emissions are described further in Section Error! Reference source not found.."</i>	surface transport effects that occur over a wider extent than the Proposed Development footprint. The Inspectorate considers that emissions deriving from the Proposed Development should be considered as part of main assessment. Emissions from 'Other Development' should be considered as part of the CEA.
4.3.4	7.7.11	Anticipated improvement in aircraft and road transport fleet efficiency over time.	In light of the uncertainty regarding the future fleet trends, the ES should include consideration of scenarios addressing outcomes of both no future improvement (ie using a current baseline) and future improvement in efficiency. The scenarios should be accompanied by a clear presentation of the assumptions used to underpin the assessment.
4.3.5	7.7.20 7.7.21	Use of an approved database such as the Inventory of Carbon and Energy (ICE).  Emission factors will be obtained from the most representative data sources, such as those provided by the Department for Business, Energy and Industrial Strategy (BEIS).	The Inspectorate considers that both datasets are appropriate for the purposes of the assessment. The ES should clearly set out the datasets that have been relied on.
4.3.6	7.7.25	Emission factors from 'the most appropriate data source at the time of the assessment'	The ES should incorporate emissions factors from recognised industry standard data sources, stating why these are appropriate for the purposes of the assessment.
4.3.7	7.7.29	Reference to CAP161a	The Inspectorate notes that the correct reference is CAP1616a.
4.3.8	7.7.37	EIA significance criteria will be used to determine the potential	The significance criteria adopted for the assessment of significant effects should mirror those adopted for the HAL DCO Project in order

ID	Ref	Other points	Inspectorate's comments
		effects and temporal scope of the effects.	to allow transparent comparison of the likely significant effects associated with each proposal.

## 4.4 Climate Change

(Scoping Report section 8)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.4.1	n/a	n/a	No matters have been proposed to be scoped out of the assessment

ID	Ref	Other points	Inspectorate's comments
4.4.2	8.4.6	Relevant climate baseline data will be requested from key stakeholders such as the relevant local authorities.	The Scoping Report would have benefited from a description of the baseline climate data required to inform the ES. The ES should clearly justify the baseline datasets used to underpin the climate change assessment.
4.4.3	8.5.3 8.5.4	Climate change projections are reported without emissions scenarios.	To assist the reader in understanding the climate change projections, the relevant emissions scenarios should be stated when reporting future climate forecasts in the ES.

## 4.5 Community

(Scoping Report section 9)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.5.1	Table 9.4	Consideration of effects arising from displacement of residents is limited to operation	It is noted that displacement of residents due to compulsory purchase and the Wider Offer Property Zone (WPOZ) used in the Scoping Report for HAL's DCO has been included in Table 9.4 for operational phase impacts. The Inspectorate considers that these impacts may start to occur during the construction stage ahead of both runway opening (HAL's DCO) and terminal opening for this Proposed Development and should be assessed as part of the construction stage assessment, where relevant. The Applicant should recognise that construction and operational effects may in reality overlap for a number of community related effects. The ES should consider such effects in construction as well as operation.
4.5.2	9.6.5, 9.9.1 Table 9.7	Contradictory statements regarding scoping. Section 9.6.5 and 9.9.1 states that no effects have been scoped out of the assessment, whereas Table 9.7 suggests that relocation of residents – operational stage will be scoped out.	Based on the lack of justification for scoping out relocation of residents in the operational stage and the contradiction between the text and summary table, the Inspectorate does not agree to scope this matter out.

ID	Ref	Other points	Inspectorate's comments
4.5.3	9.1.4	Proposed approach to assessment of likely significant effects	The Scoping Report states that the community assessment for the ES will consider how impacts may affect community receptors and aims to identify the approach to avoid, minimise or mitigate significant effects. Other environmental aspects which inform the community

ID	Ref	Other points	Inspectorate's comments
			<p>assessment use standard thresholds and criteria to identify the significance of environmental effects and these are described in the relevant sections of the Scoping Report.</p> <p>The Inspectorate advises that where other aspects of the ES are related to the community assessment this should be clearly explained and set out within the community aspect chapter of the ES.</p>
4.5.4	9.4.3 – 9.4.10 Table 9.2 Figure 9.1 Figure 9.2 Figure 9.3	Study area	<p>The final study area should be clearly defined and justified in the ES. The ES should demonstrate that both the temporary and permanent land used for the Proposed Development are clearly identified as part of the study area and have been considered for the assessment of effects.</p> <p>The inner study area for population assessments does not include all the land being considered for associated works and no justification has been provided for this. This should be fully explained and justified in the ES.</p> <p>Similarly, Figure 9.3 includes facilities within the inner study area but not within areas being considered for associated works. This should also be fully explained and justified in the ES.</p>
4.5.5	Section 9.5 9.6.3 – 9.6.4 9.7.16 – 9.7.24	Baseline data sources	<p>The Inspectorate recommends that the baseline data used for assessment should include user surveys with respect to all potential community impacts listed in Table 9.4 as appropriate.</p>
4.5.6	9.7.28- 9.7.38 9.9.1	Assessment	<p>The Scoping Report proposes that the community assessment should focus on effects for local and regional communities. The reasoning for this should be explicit in the ES.</p> <p>The section on determining significance (paras 9.7.28 - 9.7.38) does not clarify at what scale significance is to be considered. The ES</p>

ID	Ref	Other points	Inspectorate's comments
			<p>should clarify which receptor is to be considered for this (i.e. an individual group or community, or the entire inner study area).</p> <p>The assessment methodology has been separated into construction and operational stages, and the assessment is likely to overlap with the HAL DCO Project stages as the Proposed Development is constructed and the assessment in the ES should reflect this.</p> <p>The Inspectorate notes that the assessment focuses on recreational spaces and routes. The impact of the Proposed Development on other types of community facilities should be included in the assessment and supported by the Applicant's own user surveys.</p>
4.5.7	9.8.1 – 9.8.2	Mitigation measures	<p>The Scoping Report states that minimisation of impacts on community receptors will be embedded into the design of the Proposed Development where possible. The assessment of impacts will be made with these embedded mitigation measures in place.</p> <p>The Applicant considers that the primary means of mitigation for population impacts is through engagement and inclusion of stakeholder's views in the design and development of the Proposed Development eg measures to minimise dust, emissions and noise and managed plans such as the Surface Access Strategy.</p> <p>Where such mitigation measures are required, including embedded mitigation, these should be clearly set out in the ES. The ES should set out how these measures will be secured and monitored throughout the DCO process for the Proposed Development.</p> <p>Mitigation measures which may be required to address effects from any associated infrastructure should be clearly set out in the ES. The ES should explain how the design of any associated infrastructure will be incorporated into the network of existing green infrastructure which may be used by the community for recreational purposes.</p>

ID	Ref	Other points	Inspectorate's comments
4.5.8	9.8	Community compensation	The ES should also explain the Applicant's commitment to community compensation, with particular reference to paragraphs 5.239-5.253 of the ANPS.

## 4.6 Economics and Employment

(Scoping Report section 10)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.6.1	10.6.5 Table 10.5	Increased trade, Foreign Direct Investment (FDI) and tourism to the UK as a result of improved connectivity and aviation capacity	<p>The Scoping Report proposes to scope out effects associated with increased trade, FDI and tourism, because this matter has been assessed through the ANPS and will therefore not be assessed in the EIA, and the scale of local and regional economic change will be assessed as set out in Table 10.</p> <p>The Scoping Report does not explain the extent to which the matters set out in Table 10.5 account for the objectives at a local and regional authority level. On this basis, the Inspectorate considers that these matters should be assessed to the extent that they are likely to give rise to significant effects.</p>
4.6.2	10.6.5 Table 10.5	Effect on property value and availability	<p>The Scoping Report recognises that there will be impacts on property but states that it is not possible to isolate and empirically estimate the quantitative effect of the Proposed Development on the wider property market. The Inspectorate advises that impacts to housing value (existing and potential) and associated economic impacts which may result in a likely significant effect should be assessed as part of the scope of the assessment.</p>
4.6.3	Table 10.8	<p>Construction stage –</p> <p>Permanent displacement of local businesses and commercial activity;</p> <p>Wider effects on employment and the economy;</p>	<p>The Scoping Report states in Table 10.8 that the permanent displacement of local businesses and commercial activity; wider effects on employment and the economy; potential additional effects on employment in the regional economy; and potential additional effects to the housing market have not been scoped into the assessment during the construction period. Without clear information on why the Applicant considers that these matters should be scoped out, the Inspectorate advises that impacts which may result in a likely</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
		<p>Potential additional effects on employment in the regional economy; and</p> <p>Potential additional effects to the housing market.</p>	<p>significant effect from this displacement should be assessed for the construction stage as part of the scope of the assessment.</p>
4.6.4	Table 10.8	<p>Operational stage -</p> <p>effects on businesses in the construction supply chain;</p> <p>temporary change to labour and housing market; and</p> <p>disruption to residents and their economic activity including users of public and recreational space.</p>	<p>The Scoping Report states in Table 10.8 that effects on businesses in the construction supply chain; the temporary change to labour and housing market; and disruption to residents and their economic activity including users of public and recreational space have been scoped out of the assessment during the operational period. In light of the overlapping nature of the construction and operational stages and without clear information on why the Applicant considers that these matters should be scoped out, the Inspectorate advises that impacts which may result in a likely significant effect from this displacement should be assessed for the operational stage as part of the scope of the assessment.</p>

ID	Ref	Other points	Inspectorate's comments
4.6.5	<p>10.5.2 – 10.5.5</p> <p>10.7.33 – 10.7.35</p> <p>Figure 9.1</p> <p>Appendix 9.1</p>	Study area	<p>The final study area applied to the assessment should be clearly defined and justified in the ES.</p> <p>The ES should demonstrate that both the temporary and permanent land used for the Proposed Development are clearly identified as part of the study area and have been considered for the assessment of effects.</p>
4.6.6	Table 10.4	Apprenticeships	<p>ANPS paragraph 5.263 states that Heathrow Airport has publicly committed to ensuring 10,000 apprenticeships before 2030. The ES</p>

ID	Ref	Other points	Inspectorate's comments
			must set out whether it has potential to affect the delivery of the 10,000 apprenticeships or how the Proposed Development will contribute to a credible plan for the delivery of new apprenticeships.
4.6.7	10.7.22	Projections of economic change at assessment years	The ES should set out details of economic projections applicable to the Proposed Development, which will inform the assessment as well as any assumptions or limitations with the projections and show how these relate to relevant projections for demographic and population change.
4.6.8	10.7.37 Table 10.6	Assessment of significance – professional judgement	The proposed approach to assessing significance is qualitative and reliant on professional experience, interpretation and judgement. Where professional judgement is used this should be justified and shown clearly in the final assessment for the ES.
4.6.9	10.8	Mitigation	Limited information is provided regarding the potential mitigation measures within the Scoping Report. The ES should provide clarity on what mitigation measures and any related monitoring may be required and how this will be secured through the DCO.

## 4.7 Historic Environment

(Scoping Report section 11)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.7.1	11.6.2	Potential effects to be scoped out	<p>The Scoping Report states that at this stage of the assessment, no effects have been scoped out. It goes on to state that where heritage assets are identified as not being impacted by the Proposed Development because of a lack of visual links to the development, or due to no evidence of impacts from other factors such as noise, vibration or traffic, during the production of the Preliminary Environmental Information Report (PEIR) and subsequent ES then these assets will be scoped out of the assessment, and will be detailed within the PEIR and ES. The ES should assess all likely significant effects on heritage assets from the Proposed Development. If an assessment of impacts to assets is scoped out this should be justified in the ES and the Applicant should make effort to agree the conclusions with the relevant consultation bodies.</p>
4.7.2	Table 11.11	Direct impact to designated and non-designated assets – operational stage	<p>Table 11.1 contradicts section 11.6.2, which states that at this stage no effects have been scoped out of the assessment. Table 11.1 proposes to scope out the direct impact of the Proposed Development on designated and non-designated heritage assets from the assessment during the operational stage of the development. The Inspectorate does not consider that there is sufficient information provided within the Scoping Report to justify this approach and therefore, these matters may not be scoped out from the ES.</p>

ID	Ref	Other points	Inspectorate's comments
4.7.3	11.4.1 Figure 11.1	Study area	<p>The Applicant has defined the study areas for the assessment of heritage assets as for the consideration of potential air quality effects. The reasons for this approach should be clearly explained and set out in the ES.</p> <p>The Inspectorate recognises that there is likely to be an interrelationship between the study area applied to this aspect and other aspects such as the landscape and visual amenity, and noise assessments, and recommends that appropriate cross-reference between aspect chapters is made in the ES.</p> <p>The Applicant should ensure that the final study area extent is clearly defined and justified in the ES.</p>
4.7.4	11.5.1 11.5.21 – 11.5.32 Figure 11.2 Appendix 11.1 Table 11.4 Table 11.7	Baseline data – designated assets	<p>The Scoping Report details the listed buildings, registered parks and gardens, conservation areas, ancient woodland and Scheduled Monuments that the Applicant has identified within the Proposed Development area, and within the wider study areas.</p> <p>The initial collated baseline data for the purposes of the Scoping Report are set out in Appendix 11.1 but the collection of baseline data is ongoing. The Applicant states that baseline data and any site survey work required will be identified in the relevant chapters of the full PEIR and ES to identify the significance of any affected heritage assets and their settings. The Inspectorate advises that the Applicant should consult with relevant consultation bodies regarding the likely impacts on designated and important heritage assets.</p> <p>The Inspectorate notes that the conservation areas referred to in section 11.5.33 and Tables 11.4 and 11.7 have not been identified within Appendix 11.1. The ES baseline dataset should incorporate comprehensive data and effort should be made to agree the data with relevant consultation bodies.</p>

ID	Ref	Other points	Inspectorate's comments
4.7.5	11.7.16 – 11.7.19	Archaeological Investigation & Research Strategy (AIRS)	The Inspectorate notes that the AIRS will be produced as a technical appendix for this aspect chapter of the ES and advises that relevant consultation bodies are engaged in efforts to agree the scope of the AIRS from an early stage in the identification of heritage assets and in developing the research strategy.
4.7.6	11.7 Table 11.6	Approach to assessment – relevant guidance	The Inspectorate advises that Table 11.6 should include the London Research Framework, Greater London Archaeology Advisory Service (GLAAS) Archaeological Standards and Chartered Institute of Archaeologists (CIFA) Standards and Guidance as part of the relevant guidance referred to for the historic environment assessment.
4.7.7	11.7.8 – 11.7.19	Baseline data - archaeological evaluation	<p>The approach to archaeological field evaluation after establishing the baseline for the historic environment assessment at pre-construction stage of the Proposed Development should be extended through to construction and operational stages.</p> <p>The Inspectorate advises that the archaeological impact of the Proposed Development should be considered alongside and cumulatively with the new HAL's DCO Project and the proposed Western Rail Link.</p>
4.7.8	11.7.9	Photography and journal review	The Scoping Report states that the 'precise scope of this will be established in further consultation with historic environment stakeholders, post scoping'. The Inspectorate notes that this information will follow and expects the Applicant to provide this in the ES. The review should be sufficiently robust to support the findings in the ES.

ID	Ref	Other points	Inspectorate's comments
4.7.9	11.7.2	Land identified through production of the PEIR and ES as having archaeological potential will require a phased approach to investigation to help inform the PEIR and or ES.	The reasoning in section 11.7.2 appears to be somewhat circular. The Inspectorate considers that any previously unsurveyed land should be evaluated to an appropriate level necessary to inform a robust assessment of the likely significant effects. The Applicant should make effort to agree the approach with relevant consultation bodies.
4.7.10	11.7.21 – 11.7.25	Methodology – heritage settings assessment	<p>The Scoping Report states that all non-designated and designated assets within the core study area, and all designated heritage assets within the wider study area will be assessed to see which of these may have their setting affected by the Proposed Development, identifying heritage assets in the Zone of Theoretical Visibility (ZTV) and using Spatial Noise Modelling.</p> <p>The Inspectorate advises that the assessment of heritage asset settings should be cross-referenced with other relevant ES aspect assessments.</p>
4.7.11	11.7.27	Relevant noise contours and data	The ES should clearly set out what the 'relevant' noise contours and data are that have been used with appropriate cross reference to the noise and vibration assessment.
4.7.12	11.8.1 – 11.8.5	Mitigation and enhancement measures	The Inspectorate considers that the approach to mitigation should emphasise the need to preserve heritage assets in-situ, where possible and appropriate.

## 4.8 Health

(Scoping Report section 12)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.8.1	Table 12.5	Climate Change	The Scoping Report proposes to scope this matter out of the health assessment as a climate change assessment will be undertaken to consider resilience to global climate change and the measures that will need to be taken to adapt to climate change. The Scoping Report further states that the health assessment will cross refer to the assessment undertaken in the ES chapter on climate change. On this basis the Inspectorate is satisfied that health impacts associated with changes to the global climate (as a result of the Proposed Development only) can be scoped out of the health assessment.
4.8.2	Table 12.5	Risks to construction workers from exposure to contamination in soil	The Scoping Report proposes to scope this matter out of the health effects assessment as this will be addressed in the land quality and waste assessment. The Inspectorate is satisfied with this approach but the assessment of health in the ES should cross-reference and signpost to the matter within the relevant other aspects of the ES and in particular the relevant construction environmental management plans and/or the CoCP.
4.8.3	Table 12.5	Major accidents and disasters	It is proposed that this matter be scoped out of the assessment on the basis that major accidents, outbreaks of communicable disease and health effects due to flooding are rare, considered low probability risks that are managed and controlled by appropriate methods. The Inspectorate does not consider that sufficient information has been provided to justify scoping this matter out. The ES must provide an explanation of the 'appropriate methods' that are referred to as managing and controlling such risks. Where significant effects are likely to occur, this should be assessed within the ES. The Inspectorate's comments on the impact to health from flooding are

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			presented at point 4.8.5 below, and on the impact to health from outbreaks of communicable diseases are presented at point 4.8.4 below.
4.8.4	Table 12.5	Outbreaks of communicable diseases	The Scoping Report proposes to scope this matter out of the health assessment as the measures that are currently in place are expected to be applied to the expanded airport. The Inspectorate does not consider that sufficient information has been provided to justify the scoping out of these matters at this stage. The ES must provide an in-depth justification for such scoping out, including an explanation of the current systems, controls, procedures and requirements that are currently in place to address these matters. Where significant effects are likely to occur, this should be assessed within the ES.
4.8.5	Table 12.5	Flooding	The Scoping Report proposes to scope this matter out of the health assessment as this is to be regulated by the Environment Agency and due to existing policies, no increase in flood risk would be consented. As flooding could create a public health emergency in the area, and a perceptual risk of flooding among local communities could lead to impacts on health the Inspectorate does not consider that enough information has been provided at this stage to demonstrate that there are no likely significant effects in this regard. Spelthorne BC has, in its consultation response, pointed out that the Lower Thames catchment was subject to serious flooding in 2014 and that stress and anxiety is high in the local population about when such flooding could reoccur, such that public perception about flooding risks may not match those concluded within the flood risk assessment. Where significant effects are likely to occur, this should be assessed within the ES and mitigation proposals such as a flood risk management plan and the interaction of the Applicant with emergency services should be presented.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.8.6	Table 12.5	Non-communicable diseases	<p>The Scoping Report proposes to scope this matter out of the health assessment as the controllable health determinants that increase the likelihood of contracting a non-communicable disease ('NCD') are the same as those for general health and, as such, are considered within the assessment. The Scoping Report does state that NCDs may be included where they are a relevant health outcome of a specific change to a health determinant. The Inspectorate does not consider that sufficient information has been provided to justify the scoping out of these matters at this stage. Where significant effects are likely to occur, this should be assessed within the ES.</p>
4.8.7	Table 12.5	Electromagnetic fields	<p>The Scoping Report seeks to scope out the impact of electromagnetic fields on health effects on the basis that all electrical infrastructure will be built to comply with current standards (1998 ICNIRP9) and that there is little scientific evidence linking EMF exposure to adverse health effects. In accordance with the National Policy Statement for Electricity Networks Infrastructure (EN-5), the Inspectorate is satisfied that provided all electrical infrastructure is built to comply with the current standards this matter can be scoped out of the health assessment.</p>
4.8.8	Table 12.5	Pests	<p>The Scoping Report seeks to scope out the likely risk to human health from pests due to the fact that health and safety measures will be scrutinised and agreed with local authorities, which will include the control of pests, and that the Proposed Development will be built in accordance with the Construction (Design and Management) Regulations 2015 which include pest control measures. The Inspectorate does not consider that enough information has been provided to demonstrate that there are no likely significant effects in this regard. Where significant effects are likely to occur, this should be assessed within the ES.</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.8.9	Table 12.5	Aviation fuel storage facilities	The Scoping Report states that aviation fuel storage facilities will be designed and built in compliance with relevant regulations such as the Control of Major Accident Hazards (COMAH) Regulations and the Control of Substances Hazardous to Health Regulations 2002 and any such effect on health would therefore be unlikely to give rise to significant effects. The Inspectorate does not consider that sufficient design or location information has been provided to demonstrate that there are no likely significant effects in this regard. The ES must provide an assessment where significant effects are likely to occur.
4.8.10	12.8.5	Factors considered in other ES chapters	The Scoping Report states that human health may be affected by factors considered in other chapters of the ES, such as climate change, land quality and flooding. As these are detailed elsewhere the Scoping Report states that it would be disproportionate to also consider these in the health assessment, but states that if a significant residual adverse effect is identified this will then be considered as a health effect. The Inspectorate agrees with this approach but asks that clear cross-referencing is in place to ensure that the reader is directed to the relevant assessments throughout the ES.
4.8.11	12.9.19	Workforce and passengers of Heathrow Airport and construction workers for the Proposed Development.	The Scoping Report states that workforce and passengers of the Airport and construction workers for the Proposed Development will not be included in the assessment as their health is managed by separate health and safety procedures. The general population scope of the health assessment would therefore include only residents of and visitors to the local communities in the study area. The Inspectorate does not believe that sufficient information has been provided to justify a scoping out of this matter at this stage. Detailed information should be provided on the health and safety procedures that would be relied on to manage the health of the Airport workforce, the Airport passengers and the Proposed Development

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			construction workers. Where significant effects are likely to occur, these should be assessed in the ES.
4.8.12	Table 12.9	Economic effects from the presence of a construction workforce.	The Proposed Development may be phased in nature (as set out in the description of development). Since construction and operation activities may overlap, the Inspectorate considers that the impact on health due to economic effects from the presence of a construction workforce during operation may not be scoped out of the assessment.
4.8.13	Table 12.9	Changes to residents living conditions resulting from relocation	Since relocations may be required during the construction phase, the Inspectorate considers that changes to residents living conditions resulting from relocation may not be scoped out during construction.

ID	Ref	Other points	Inspectorate's comments
4.8.14	12.3.1	Stakeholder engagement	The Scoping Report states that a detailed stakeholder engagement plan is currently being developed, and that care will be taken to ensure that all key stakeholders with views and concerns regarding health are provided with sufficient information on the Proposed Development to agree the details of the assessment. However, within Chapter 12 of the Scoping Report it appears that an inconsistent approach has been taken in identifying the local authorities that would form part of this stakeholder engagement, with three different lists provided at 12.3.2, 12.6.1 and Table 12.3. All local authorities likely to experience health impacts as a result of the Proposed Development should be consulted. The ES should clearly set out the stakeholders that have been consulted, and the outcome of such engagement.
4.8.15	12.4.2	Determinants of health and well-being	The Inspectorate welcomes the Applicant's intention to examine the ecological determinants of health and wellbeing shown in Diagram

			12.1 of the Scoping Report in its assessment of human health. The ES should also examine the social determinants of health and wellbeing, to include living and working conditions, social and community networks, and individual lifestyle factors. Public Health England, in its consultation response, has provided a table of the various determinants it considers should be assessed. The Applicant should make effort to agree the relevant determinants of health with consultation bodies.
4.8.16	12.5.2	Study area	The Scoping Report states that both the inner study area, which relates to the direct effects of the Proposed Development, and the wider study area, which relates to indirect effects, may be refined at the assessment stage to focus on the comparatively smaller scale of the Proposed Development. The Inspectorate recommends that effort is made to agree any such changes to the final study with the relevant consultation bodies.
4.8.17	12.5.6 – 12.5.13	Study area	The Scoping Report states that the study area will vary depending on which determinant is being assessed. It should be clear in the text of the ES which study area is being applied to each determinant and effect in the assessment of health impacts. This should include a clear cross reference to the relevant sections of other chapters and, where relevant, the supporting plans in order to assist the reader.
4.8.18	12.5.14	Baseline data	The Scoping Report states that the baseline data for the human health chapter will be informed by other relevant chapters of the ES. There should be clear cross-referencing between ES chapters so that it is clear how the baseline for the health assessment has been established. The ES should clearly set out all studies and surveys undertaken to inform the final baseline dataset, including a description of the current health facilities within the study area. An attempt should be made to agree the approach with the relevant consultation bodies.

4.8.19	12.5.17 Table 12.2	Scientific literature	The scientific literature review presented appears to be of limited scope. The Inspectorate would expect that the literature review presented in the ES is sufficient to support a robust assessment of likely significant impacts from a health perspective.
4.8.20	12.9.8	Assessment scenarios	The Scoping Report refers to the health impacts of the Proposed Development at 'key stages' in its construction and operation. The ES must include clear reference to the 'key stages' that will be assessed, defining a baseline year and year of predicted maximum environmental effects.
4.8.21	12.10	Mitigation	Limited information is provided with respect to mitigation measures. Whilst the Inspectorate supports a mitigation hierarchy approach it does not agree that the primary means of mitigating impacts to population is through proactive engagement. A range of specific mitigation and compensation measures are outlined within the ANPS which have potential to mitigate health impacts. The ES should demonstrate how the design of the Proposed Development and the powers requested in the DCO accord with the ANPS.
4.8.22	N/A	Major accident hazard sites and major accident hazard pipelines	The Health and Safety Executive has confirmed in its consultation response that there are no major accident hazard sites or major accident hazard pipelines within the principal works area for the Proposed Development. However, the Inspectorate notes that major accident hazard sites and major accident hazard pipelines were identified by the Health and Safety Executive in the wider area as part of the scoping process for the HAL DCO Project. The baseline description presented in the ES should take account of these to ensure that a complete assessment of all likely significant effects can be undertaken

## 4.9 Landscape and Visual amenity

(Scoping Report section 13)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.9.1	13.1.3	Effects associated with the NWR and the major M25 realignment works to accommodate the Northwest Runway.	The Applicant proposes to scope out an assessment of potential landscape and visual effects associated with these elements on the basis that the components do not form part of the Proposed Development but highlights that any such effects will be considered as part of its CEA. The Inspectorate agrees with this approach.
4.9.2	Table 13.2	Effects of lighting during construction and operation	The Applicant proposes to include an assessment of the effects of lighting during the construction and operational periods. The Inspectorate considers that the assessment should refer to The Guidance Notes for the Reduction of Obtrusive Light, Institution of Lighting Professionals (2011) for the identification of Environmental Zones that define the broad night-time characteristics of areas in terms of relative brightness or darkness, which has a bearing on night-time visual amenity.
4.9.3	Table 13.3	Effects on perceptual characteristics, views and special qualities of valued landscapes with no or very limited visibility of: <ul style="list-style-type: none"> <li>all construction activity linked to the Proposed Development; and</li> </ul>	The Applicant proposes to scope out an assessment of effects from construction activity related to the Proposed Development on landscape/ townscape character areas, views and locally valued landscapes with no or limited visibility of the construction activity or the Proposed Development during the operation of the airport and associated development. The Applicant states that significant effects are unlikely to arise where there is no or limited visibility of the Proposed Development and as such this element should be scoped out. The Inspectorate agrees with this approach and the scoping out

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
		<ul style="list-style-type: none"> <li>the Proposed Development during the operation of the airport and associated development.</li> </ul>	<p>of these matters from the assessment. However, as no Zone of Theoretical Visibility (ZTV) has been prepared at this stage, the Applicant should provide full justification to ensure that it is clear within the ES which characteristics, views and special qualities of valued landscapes will have no or limited visibility of such activity and, consequently, are not likely to experience significant effects.</p>
4.9.4	Table 13.3	Visual effects on tranquillity during construction and operation	<p>The Applicant proposes to scope out an assessment of visual effects on the tranquillity of landscape/ townscape areas, views and valued landscapes during construction and operation on the basis that noise is the primary factor in tranquillity and changes to views are unlikely to significantly impact tranquillity. The Inspectorate does not agree to this approach as the Campaign to Protect Rural England (CPRE) methodology referred to categorises 'seeing low flying aircraft' and 'seeing urban development' as negative detractors from tranquillity, and therefore expects the assessment of the visual effects on tranquillity to be included where significant effects are likely.</p>
4.9.5	Table 13.5	Cumulative effects on perceptual characteristics, views and special qualities of valued landscapes from overhead aircraft during the operation of the Proposed Development	<p>The Applicant proposes to scope out an assessment of these matters on the basis that receptors within the study area are already affected by existing flights and that the increase in number of flights is unlikely to give rise to significant effects on receptors, with the exception of those receptors affected by planes as they use the Northwest Runway, which have been included in the scope. The Inspectorate does not agree this approach and the Applicant should assess any likely significant effects associated with these matters.</p>
4.9.6	Table 13.5	Cumulative effects on residential visual amenity from overhead aircraft during the operation of the Proposed Development	<p>The Applicant proposes to scope out an assessment of these matters on the basis that CAA low flying rules and flight path selection best practice tend to ensure that planes are not close enough overhead to be visually oppressive. The Inspectorate does not agree this approach and the Applicant should assess any likely significant effects</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			associated with this matter, including whether the planes would be visually oppressive.

ID	Ref	Other points	Inspectorate's comments
4.9.7	13.4.1	ZTV	The Scoping Report states that the design of the Proposed Development is not sufficiently advanced to prepare a ZTV at this stage. The ES should clearly evidence and justify the final extent of the ZTV used in the assessment of landscape and visual impacts, based on actual height parameters. Effort should be made to agree the ZTV with relevant consultation bodies. The ES should describe the model and methodology used and should provide information on the area covered and the seasonal timing of any survey work.
4.9.8	13.7.7- 13.7.14	Methodology	The Inspectorate notes that the assessment will be undertaken in accordance with the recommendations of the Third Edition of the Guidelines for Landscape and Visual Impact Assessment. The assessment methodology should be based on clearly defined criteria to enable full justification of the judgements made in respect of sensitivity, magnitude and significance of effects. Reference is made to the duration of effects and the assessment should make clear whether effects are expected to be experienced in the short or long term, taking account of the likely period or periods, which any mitigation measures would take to become effective.
4.9.9	13.4.1; 13.7.15	Representative viewpoints	The Inspectorate notes that viewpoint selection will be informed by those identified as part of the scoping process undertaken for the HAL DCO Project, modified as required to address differences between the two schemes. The ES should explain the reasons supporting the inclusion of each viewpoint to be assessed, and where relevant a justification for excluding any viewpoints that have been requested by

ID	Ref	Other points	Inspectorate's comments
			<p>consultation bodies and for excluding any viewpoints within the study area that have been assessed by HAL for the expansion of Heathrow Airport. The ES should include photographic visualisations of both the baseline view and the view incorporating the Proposed Development, which should be numbered and cross-referenced to accurately plotted locations on an OS map of appropriate scale, which should also show the angles of the views. The importance of local landmarks and viewpoints, and the assessment of the extent and direction of views from properties should also be recorded. The assessment should also take into consideration any committed development.</p>
4.9.10	13.4.2, 13.4.3	Study area	<p>The Scoping Report states that at this stage in the design an initial study area has been set as 5km from the Proposed Development, but that this may continue to evolve as the design process progresses. The ES should clearly evidence and justify the final extent of the study area used in the assessment of landscape and visual impacts, having regard to the ZTV. The study area should contain all likely significant effects of the Proposed Development on any component of landscape and visual resource and effort should be made to agree this with relevant consultation bodies where possible. In this regard, the Inspectorate considers that the study area proposed of 2km for all development less than 25m in height is unlikely to be sufficiently wide to identify all significant landscape and visual effects and expects full justification of any omission of the assessment of effects to landscape character area and viewpoints or receptors between 2km and 5km from the proposed development.</p>
4.9.11	13.5.2 and Figure 13.1	Designated and valued landscapes	<p>The Applicant should clarify the definition of valued landscapes which may include landscapes of community value which are not designated. The assessment of impact to designated and valued landscapes should include consideration of any effects on green belt, with reference to the ANPS. Green belt should also be shown on relevant Figures within the ES.</p>

ID	Ref	Other points	Inspectorate's comments
49.12,	13.7.11-12	Receptors	Canals and other waterbodies should be taken into account in the assessment as both landscape and visual receptors.
49.13	13.4.3	Additional receptors	The Scoping Report states that the final study area will extend to additional receptors included by exception on an individual basis where they are of local or national value and there is potential for significant effects, to include the Chilterns AONB and valued views from Royal Airforce Memorial, King Henry VII's Mound and Osterley Park viewpoints. The ES should contain a list of any such additional receptors, as agreed with the relevant consultation bodies, and the Applicant should ensure that these are accurately marked on an accompanying plan. Where any such additional receptors have been requested by a consultation body but not included in the final study area, the Applicant should ensure that this is fully justified.
49.14	13.4.7	Baseline Assessment	The Scoping Report states that a suitable approach to baseline assessment will be agreed for potentially affected areas once the final study area is defined and the ZTV analysis has been undertaken. The ES should clearly set out all studies and surveys undertaken to inform the final baseline information, including the timing of any site visit and how/ if professional judgement has been applied. The Applicant should make effort to agree its approach with the relevant consultation bodies.
49.15	13.7.6	Cumulative Effects Assessment	The Applicant should make clear whether a second air traffic control tower will be included within the scope of the landscape and visual effects assessment, as indicated by section 3.6.38 of the scoping report or only within the CEA, as stated in Table 13.4.
49.16	13.8.3	Mitigation	The Applicant should make clear any assumptions regarding the establishment of mitigation measures which are taken into account in the assessment of residual effects, for example heights expected to be attained by screen planting at stated years following the

ID	Ref	Other points	Inspectorate's comments
			completion of construction. Details of, and a clear commitment to, any management or monitoring needed to ensure successful establishment should be made.

## 4.10 Land Quality and Waste

(Scoping Report section 14)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.10.1	Table 14.4	Loss of non-Best and Most Versatile (BMV) agricultural land	<p>The Scoping Report seeks to scope out an assessment of the permanent or temporary loss of non-BMV agricultural land on the basis that the NPSNN demonstrates that little weight should be given to its loss. The Inspectorate agrees with this approach and considers that an assessment of the loss of non-BMV agricultural land is not required, although such loss should be quantified within the ES.</p>
4.10.2	Appendix 14.1	Waste as a separate ES aspect chapter	<p>Appendix 14.1 of the Scoping Report states that potential environmental impacts associated with waste will be managed by regulatory obligations, good and best practice construction processes, and the use of non-regulatory principles. However, due to the quantities and types of waste that are likely to be produced, the Scoping Report recommends that waste is included in the ES, albeit in the form of a Technical Report.</p> <p>The Inspectorate does not agree with this approach. The ES must include an assessment of effects on waste where significant effects are likely to occur. The waste assessment must demonstrate that an effective process will be followed to ensure effective management of hazardous and non-hazardous waste arising from all phases of the lifetime of the Proposed Development; that the types of waste produced during construction and operation are quantified; and that any likely significant effects arising from the disposal and recovery of waste have been identified.</p> <p>The Inspectorate notes that ANPS paragraph 5.137 sets out minimum acceptable practice targets for new airport infrastructure in respect of the re-use and recycling of municipal waste (50%) and of construction and demolition waste (70%). The ES should demonstrate</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			how this target has been met or exceeded when assessing the likely significant impacts of the Proposed Development from a waste perspective.

ID	Ref	Other points	Inspectorate's comments
4.10.3	14.3.1	Stakeholder engagement	The Scoping Report states that a detailed stakeholder engagement plan is currently being developed, and that care will be taken to ensure that all key stakeholders with views and concerns regarding land quality and waste are provided with sufficient information on the Proposed Development to agree the details of the assessment. However, very few consultation bodies have been consulted on these matters to date. Relevant consultation bodies concerned with impacts to land quality or to waste generated as a result of the Proposed Development should be consulted. The ES should identify the relevant consultation bodies involved in these matters, and the describe the level of engagement made and where agreements have been reached.
4.10.4	14.4.3	Study area	The Scoping Report states that the study area may continue to evolve to accommodate any changes as the design process progresses. The ES should provide clear evidence to justify the final extent of the study area used in the assessment. If different study areas are used for the assessment of land quality, agricultural land quality, and minerals safeguarding these should be depicted on separate plans or figures. The study areas used for the assessment should be established according to the extent of the likely impacts and significant effects. The Applicant should make effort to agree the approach with relevant consultation bodies including the affected local authorities. The Inspectorate recommends that any interpretative

ID	Ref	Other points	Inspectorate's comments
			reports in the ES are arranged by local authority area in order to facilitate understanding of the potential effects at a local level.
4.10.5	14.7.8	Ground investigations	The Scoping Report states that in the event that future ground investigations are needed for the purposes of baseline data collection, such investigations would be subject to agreeing suitable land access. Sufficient baseline information should be obtained to inform an adequate assessment of effects and to demonstrate the required mitigation within the ES.
4.10.6	14.7.12	Agricultural Land Classification (ALC) surveys methodology	For the avoidance of doubt, and in accordance with the Natural England guidance, the ALC survey methodology for surveys to inform the ES should also include consideration of local climate and site data as part of the reporting process.
4.10.7	14.8.5; Appendix 14.1	Site Waste Management Plan (SWMP)	The Scoping Report states that adherence to a SWMP will form part of the suite of mitigation measures for the land quality and waste assessment. Where the ES relies upon mitigation measures that would be secured through management plans such as the SWMP, it should be clear how each measure is secured. The ES should set out the measures necessary to mitigate effects required in the management plan. Draft copies of these documents should be appended to the ES.
4.10.8	N/A	Hazardous, inert and liquid Controlled Wastes during operation	The Scoping Report does not specifically make reference to the assessment of hazardous, inert and liquid controlled wastes during operation. For the avoidance of doubt, the potential volume of such wastes should be quantified in the ES and their disposal methods identified, including confiscated liquids and liquid wastes generated during aircraft maintenance.

## 4.11 Major Accidents and Disasters

(Scoping Report section 15)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.11.1	Table 15.5	Seismic activity within the development area of a significant magnitude to cause harm and damage to receptors	The Scoping Report proposes to scope this matter out because the likelihood of occurrence is low and the potential future changes to the baseline are also low. The Scoping Report states that the area of the Proposed Development is one of low seismicity, and points to the BGS seismic hazard map and seismic monitoring as an evidential basis for this claim. The Inspectorate is satisfied with this approach and agrees that this matter can be scoped out.
4.11.2	Table 15.5	Land instability and land movement during construction and operation	The Scoping Report proposes to scope this matter out due to the fact that the likelihood of occurrence is low and the potential future changes to the baseline are also low. The Scoping Report points to available British Geological Survey (BGS) online records, which do not appear to show that the study area is at risk from land instability and landslides, and the Coal Authority interactive map which shows that the Proposed Development is not within a coal mining reporting area. The Inspectorate notes the Applicant's comments but considers that due to the extensive landfilling within the area, the ES should assess impacts to land stability from the Proposed Development and where significant effects are likely to occur. The ES should be informed by necessary investigations in order to confirm that the Proposed Development its site and immediate surrounds will remain stable.
4.11.3	15.6.2	Consideration of effects that will be covered under existing operating licences	The Scoping Report proposes to scope this matter out on the basis that effects to the Airport will be covered by existing operational licence requirements determined by the CAA, and cites malicious incidents including public nuisances leading to major accidents as an example. The Inspectorate does not consider that sufficient information has been provided to justify the scoping out these

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			matters. The ES should assess impacts associated with these matters where significant effects are likely. If the findings in the ES rely upon licences, systems, controls, procedures and requirements this should be clearly presented.
4.11.4	Table 15.5 and 15.8	Storm surges	Whilst the Proposed Development is not located in a coastal area, the project has potential to impact on downstream flooding on the River Thames, which may be subject to storm surges. This issue should be considered as part of the flood risk assessment accompanying the water chapter of the ES, where the storm surge risk is identified to be negligible in that assessment, an assessment under major accidents and disasters may be scoped out.

ID	Ref	Other points	Inspectorate's comments
4.11.5	15.3.1	Stakeholder engagement	The Inspectorate notes the engagement made to date with HSE and recommends that effort is made to consult with the other relevant consultation bodies that have views and concerns regarding major accidents and disasters and that these are detailed within the ES.
4.11.6	15.4.4	Study area	The Scoping report states that the study area for the Proposed Development has been defined based on the identified receptors and receptor characteristics, meaning that the assessment will consider different distance thresholds for receptors identified for each hazard. The ES should provide an in-depth description of the various study areas for the assessment of each receptor, including cross references to Figures depicting the extent of each study area.
4.11.7	15.4.5	Study area	The Scoping Report states that the study area may continue to evolve to accommodate any changes as the design process progresses. The ES should clearly evidence and justify the final extent of the study

ID	Ref	Other points	Inspectorate's comments
			<p>area used in the assessment of major accidents and disasters. The study area should be sufficiently broad in order to address all likely significant effects of the Proposed Development from the perspective of major accidents and disasters. The Applicant should make effort to agree the study area with relevant consultation bodies including the CAA and relevant local authorities.</p>
4.11.8	15.4.6	Baseline conditions	<p>The Scoping Report states that the baseline conditions have been largely informed by other topic chapters. ES should provide an in-depth description of the baseline for the assessment of major accidents and disasters, including cross referencing and signposting to the relevant sections of other chapters that are being relied upon. In addition to the conditions set out in other aspect assessments the ES should establish a baseline in respect of natural disasters, for example setting out the current susceptibility of the site to extreme storms, tornadoes, snow and fog.</p>
4.11.9	Table 15.4	Air traffic and land-based traffic	<p>It is unclear from the Scoping Report whether the assessment of 'air traffic and land-based traffic' includes an assessment of the impact associated with how aircraft are moved to, from and around the Proposed Development. For the avoidance of doubt, this should form part of the major accidents and disasters assessment, and where significant effects are likely to occur this should be assessed within the ES.</p>
4.11.10	Table 15.4	Human receptors	<p>Throughout Table 15.4 of the Scoping Report, reference is made to 'human receptors' which are defined as 'airport users, staff and local population'. It is unclear from the drafting whether 'staff' extends to construction workers for the Proposed Development. For the avoidance of doubt the Inspectorate would expect that such workers should be assessed as receptors during the construction phase.</p>

ID	Ref	Other points	Inspectorate's comments
4.11.11	Table 15.4	Infectious disease epidemics and pandemics	The Scoping Report states that an assessment will be carried out on the release and proliferation of infectious diseases which could occur leading to major consequences. The receptors noted for this assessment include the human population, specifically airport users, staff and local population. The Inspectorate welcomes this approach but would also expect to see an assessment of the potential for further infection beyond the airport and/ or the impairment of essential services.
4.11.12	Table 15.4	<p>Absent or deficient safety/ environmental management systems (e.g. inadequate planning, resource, provision, procedures);</p> <p>Absent or deficient security provision (e.g. inadequate planning, resource provision, procedures);</p> <p>Occupational safety incidents during construction or operation affecting at most 1 – 2 workers including exposure to hazardous substances (chemical, biological, radiological), physical agents, and hostile environments (confined spaces or extreme temperatures) including falls from heights, vehicle impact during operation only;</p> <p>Importation of biological agents/ biohazard/ disease/ pathogen including disembarkation of passengers;</p>	The Scoping Report does not appear to specifically address these matters as being scoped in to the assessment of major accidents and disasters. The Inspectorate does not consider that sufficient information has been provided to justify the scoping out of these matters at this stage. The ES should assess impacts to these matters where significant effects are likely to occur.

ID	Ref	Other points	Inspectorate's comments
		<p>Loss of essential air safety or airside systems or loss of critical workers (e.g. due to industrial action or pandemic illness);</p> <p>Release/ exposure to hazardous substance (chemicals, radiological, biological) during import or export due to inadequate documentation/ screening; and</p> <p>Damage to artefacts of national or international importance during import or export.</p>	

## 4.12 Noise and Vibration

(Scoping Report section 16)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.12.1	Table 16.2 Table 16.5	Scope of receptors	Table 16.2 lists the scope of receptors that are likely to experience significant noise and vibration effects. No reference is made to ecological receptors. Summary Table 16.5 refers to both human and ecological receptors. For the avoidance of doubt, the ES should include an assessment of effects on both receptor groups and appropriate cross references should be provided to assessments within relevant aspect chapters eg biodiversity.
4.12.2	Table 16.2	Aviation noise from aircraft in flight and during the LTO cycle	The Inspectorate considers that the Proposed Development alone and cumulatively with the HAL DCO has the potential to alter the pattern of flights and ground based flight movements during the aircraft LTO cycle due to potential changes in taxiway. The ES must assess noise effects during the LTO cycle to the extent that differences in operational patterns between the two proposed developments result in different noise effects.
4.12.3	Table 16.3	Environmental noise induced hearing loss	The Inspectorate has had regard to information presented in Table 16.3 of the Scoping Report and considers that effects on hearing loss may be scoped out of the assessment as significant effects are unlikely to occur.

ID	Ref	Other points	Inspectorate's comments
4.12.4	16.5	Baseline data collection	The baseline data collection description states that data will be collected at residential and non-residential receptors. No information is provided in relation to the timing, duration or methodology of surveys and no reference is made to recognised survey standards.

ID	Ref	Other points	Inspectorate's comments
			The Inspectorate considers that surveys should be to a recognised standard such as BS7445-1:2003 and that effort should be made to agree the detailed scope and extent of surveys with relevant consultation bodies.
4.12.5	16.7.2	A likely ZoI for cumulative air quality effects	The Inspectorate assumes that the statement should read 'cumulative noise and vibration impacts'.
4.12.6	16.7.8	There is no impact below the three thresholds	Annex E of BS5228-1:2009+A1:2014 clearly states that the ABC thresholds are " <i>an example of the threshold of potential significant effect</i> ". It may be the case that there is no significant impact below this level but it is incorrect to state that there is no impact below the thresholds.
4.12.7	16.7.14	Qualitative appraisal of potential impacts of construction site vibration at sensitive non-residential receptors.	The Scoping Report states that " <i>where the predicted levels, taking account of mitigation exceed the screening criteria then a receptor specific assessment will be undertaken</i> ". In the absence of qualitative screening criteria, the Inspectorate is unclear how such an assessment would be made and how a qualitative assessment would be able to predict vibration levels. The Inspectorate considers that the ES should also include empirical calculations of vibration for non-residential receptors.
4.12.8	16.7.18	SoundPLAN	The Inspectorate considers that the noise modelling approach must be consistent with the HAL DCO Project and the requirements of CAP1616a to ensure that assessment results are comparable. Consequently, either the Aviation Environmental Design Tool (AEDT), the CAA Aircraft Noise Model (ANCON) or both models should be used to model the ground based aircraft noise. Given that the type of aircraft that the airport will operate is not secured for the future baseline scenarios, the fleet mix assumptions should assume a worst case in terms of noise.

ID	Ref	Other points	Inspectorate's comments
4.12.9	16.7.21	Noise metrics	The Scoping Report refers to the prediction of $L_{Aeq16hr}$ and $L_{Aeq8hr}$ noise metrics for the various baseline and assessment years. The ES should be made consistent with the CAP1616a approach and consider the full range of relevant metrics included therein. The metrics reported should be consistent with those provided in respect of the HAL DCO Project.
4.12.10	Table 16.1	LOAEL and Significant Observed Adverse Effect Level (SOAEL)	The Scoping Report does not provide a definition of LOAEL and SOAEL criteria. The Applicant should ensure that the criteria used in their ES are consistent with that used in the HAL DCO Project. This information should be included within the ES and an assessment provided in respect of the thresholds.
4.12.11	16.7.34	'A method is fully consistent with ISO14837-1103'	The methodology for calculation of ground borne vibration should be consistent with the HAL DCO Project.
4.12.12	16.7.36	Exposure response functions	Criteria used to assess effects on health and quality of life should be consistent with the HAL DCO Project to facilitate comparison of the outcomes of the assessments.
4.12.13	16.7.37	Town and Country Planning (Environmental Impact Assessment) Regulations	The correct regulatory reference is to the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.
4.12.14	16.8	Mitigation	<p>The ES should demonstrate how the principles of the International Civil Aviation Organisation (ICAO) 'Balanced Approach' have been taken into account in developing mitigation strategies for the Proposed Development.</p> <p>Mitigation proposals should address both indoor and outdoor noise impacts.</p>

ID	Ref	Other points	Inspectorate's comments
4.12.15	16.8	Community compensation	As highlighted above, the ES should explain the Applicant's commitment to community compensation, with reference to paragraphs 5.239-5.253 of the ANPS.

## 4.13 Traffic and Transport

(Scoping Report section 17)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.13.1	17.1.5 9.5.14	Off-road footpaths and cycle routes	The Inspectorate notes that use of off-road footpaths and cycle routes is proposed to be scoped out of the ES and that reference is made to consideration of such effects in Chapter 9 Community. However, Chapter 9 scopes out cycle routes that are promoted for use by commuters. The ES should include an assessment of effects on off-road commuter footpaths and cycle routes.
4.13.2	Table 17.1 17.3.3 Table 17.5	Hazardous loads/Hazardous material spilling onto the transport network.	Table 17.1 states that hazardous loads will be assessed for the Proposed Development, with section 17.3.3 clarifying that hazardous loads won't be assessed as a cumulative effect. Table 17.5 in contrast states that hazardous loads are scoped out in operation. The tables create some ambiguity in the scope of assessment since the justification for scoping out assessment of hazardous loads could equally apply to construction assessment. The Inspectorate considers that in light of the increased volume of traffic on the road network during construction and the potential for excavated landfill materials to be transported during this period, the ES should include an assessment of hazardous loads during construction.

ID	Ref	Other points	Inspectorate's comments
4.13.3	17.2.1	Transport Assessment (TA)	The traffic and transport chapter will be supported by a TA. The scope of the TA is not set out in the ES. The Applicant should make effort agree the scope of the transport assessment with relevant consultation bodies. The approach to the assessment should be fully explained and justified within the ES and should be comparable with the assessment prepared for the HAL DCO application. Transport for

ID	Ref	Other points	Inspectorate's comments
			London's (TfL) Cycling Network Model for London (Cynemon) should be used to inform the assessment of effects on cycling. Pedestrian modelling at key stations and interchanges affected by the Proposed Development should also be assessed.
4.134	17.6.5	Study area for non-motorised users	Limited information is provided in relation to the study area for non-motorised users. The Inspectorate recommends that the study area for cyclists is informed by TfL's isochronal data. The study area for non-motorised users is reduced relative to the study area for road based and public transport. The Inspectorate considers that the same study areas should be used in both cases to ensure that effects due to indirect or induced traffic impacts are assessed.
4.135	17.6.17-18	Baseline data	Reference is made to collation of third-party baseline data but the Scoping Report makes no reference to collection of baseline data such as automatic traffic count data. The Applicant should make effort to agree the scope and location of baseline traffic data to be collected with the relevant consultation bodies in order to allow verification of the traffic impact against regional models. The baseline data to inform the assessment must be comparable with that prepared for the HAL DCO Project.
4.136	Table 17.4	Movement of people to and from the proposed development	The assessment study area should include areas currently affected by on street parking by private hire vehicle.
4.137	17.8.2	List of receptors	The list of receptors should include businesses that may be impacted by the changes to public transport provision, network delay or amenity and severance.
4.138	17.9.24	'Onshore' highway study area	The Inspectorate assumes that no offshore study areas are proposed to be assessed.

ID	Ref	Other points	Inspectorate's comments
4.13.9	17.9.30- 17.9.35	Magnitude of effect and significance criteria	The assessment methodology should incorporate the relevant thresholds from the Guidelines for the Environmental Assessment of Road Traffic (GEART) into the criteria for establishing magnitude of effect and significance. The Applicant should set out which of the relevant Design Manual for Roads and Bridges (DMRB) have been applied and why.
4.13.10	17.10	Mitigation	The ES should describe any proposed improvement to public transport links to the site and to the improvement/development of the network of walking and cycling routes to the airport to facilitate sustainable access to the site. Mitigation should conform with the requirements of Department for Transport (DfT) Circular 02/13.
4.13.11	Appendix 17.1	Traffic modelling	<p>The Applicant should make effort to agree the modelling assumptions with relevant consultation bodies. Modelling work and assessment scenarios must be compatible with those being prepared for the HAL DCO Project. The Applicant should make effort to agree the scope of relevant junctions requiring assessment with the relevant consultation bodies.</p> <p>The ES must explain how the Transport for London (TfL) Model proposed to be used for the assessment has been expanded to provide network wide trip assignment for areas outside London.</p>

## 4.14 Water

(Scoping Report section 18)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.14.1	18.6.7; Table 18.15 Table 18.17	Ambiguity regarding whether matters are proposed to be scoped out of the assessment	Section 18.6.7 states that no matters are scoped out of the assessment, whereas Table 18.15 identifies matters that are to be scoped out during construction and operation. Table 18.7 creates ambiguity as the list of receptors changes for each potentially significant effect but the reasons for receptor inclusion/exclusion are not stated. For example, the scope for realignment or modification of existing surface watercourses excludes reference to the Duke of Northumberland's River and Longford River. No explanation of this exclusion is given or whether works to these watercourses will occur. In the absence of a more detailed description of the Proposed Development, the Inspectorate considers that it is premature to scope specific receptors out an assessment of at this stage. The ES should report on all sensitive receptors that are likely to be significantly affected by the Proposed Development.
4.14.2	Table 18.7	Consideration of flooding during construction	The Inspectorate considers that the lakes at Wraysbury provide existing flood storage capacity which should be taken into account within the assessment of significant effects. The Applicant should make effort to engage with Spelthorne BC regarding this matter which was raised in their consultation response to this Opinion.

ID	Ref	Other points	Inspectorate's comments
4.14.3	18.3.1	Stakeholder engagement	The Scoping Report states that a detailed stakeholder engagement plan is currently being developed, and that care will be taken to ensure that all key stakeholders with views and concerns regarding the water environment are provided with sufficient information on the

ID	Ref	Other points	Inspectorate's comments
			Proposed Development to agree the details of the assessment. A limited number of local authorities have been consulted to date. The Applicant should make effort to ensure that relevant flood authorities are consulted and the ES should explain the outcome of such engagement including how it has shaped the approach to the assessment of likely significant effects.
4.14.4	18.4.4	Study area	The Scoping Report states that the study area may continue to evolve to accommodate any changes as the design process progresses. The ES should clearly evidence and justify the final extent of the study area used in the assessment of water quality. The study area should be sufficient to encompass all of the likely significant effects of the Proposed Development relevant to this aspect. The Applicant should make effort to agree the study area with relevant consultation bodies.
4.14.5	18.4.5; 18.7.4	Baseline data	The Scoping Report states that data requests will be made to the Environment Agency, local authorities and water utilities for further information to support subsequent stages of the assessment for the purposes of the ES. It also refers to reviewing the relevant technical reports and data produced to inform the ES for the HAL DCO Project, where available. The ES should be based on sufficient baseline information to inform an adequate assessment of effects.
4.14.6	18.4.7	Water Framework Directive assessment	The Scoping Report states that although WFD classification data have been used to inform the baseline characterisation of surface and ground water quality and define the extent of receptors, the assessment of potential scheme implications on WFD compliance will be considered separately to the EIA. The ES should clearly demonstrate the link between the WFD assessment and the EIA, including any overlap of likely effects that have been identified, to demonstrate that a robust assessment has been undertaken. For the purposes of the EIA, supporting elements of WFD waterbody status should be considered in assessing the sensitivity of receptors, and

ID	Ref	Other points	Inspectorate's comments
			deterioration in WFD status should be taken into account for the assessment of impact magnitude. Any requirements of Articles 4.7 – 4.9 of the WFD should be considered and addressed throughout the WFD assessment.
4.14.7	Table 18.4	Chalk aquifer	The Inspectorate notes that the Chalk Aquifer is also designated as a Drinking Water Protected Area and a WFD groundwater body, but that this has not been reflected in Table 18.4 setting out the hydrogeological characteristics of the study area. The ES should include a detailed and accurate description of the receiving environment to ensure that a robust assessment of likely significant effects is undertaken.
4.14.8	18.7.3	Additional baseline water collection	The Scoping Report states that subsequent stages of the assessment will be informed by detailed desk-based studies supported by a series of field investigations and monitoring programmes. The Applicant should make effort to ensure that the extent of its survey effort is agreed with the relevant consultation bodies.
4.14.9	18.7.13; Table 18.13	Evaluation of impact significance	The Scoping Report sets out the assessment methodology, highlighting that the potential significance of an impact is derived as a function of the sensitivity and value of the receptor and the magnitude of the impact, noting that value and sensitivity are not necessarily linked. However, the significance of effect matrix at Table 18.13 shows only the relationship between receptor sensitivity and impact magnitude and does not explain how receptor value will be considered in assessing significance. The ES should clearly demonstrate the approach to the assessment of significance including, where relevant, how receptor value is to be taken into account.
4.14.10	18.7.15	Assessment scenarios	The Scoping Report states that the water assessment will consider a number of different assessment scenarios for the construction and

ID	Ref	Other points	Inspectorate's comments
			operational phases of the Proposed Development. Where different assessment scenarios are to be applied, these should be clearly presented within the ES.
4.14.11	18.7.6	Field surveys	Field surveys are identified as being provided 'where appropriate'. Table 18.9 suggests broad scopes of surveys but does not give details of recognised survey methodologies, timeframes or extents. Sufficient baseline information must be obtained to inform an adequate assessment of effects and to demonstrate the required mitigation within the ES. The Inspectorate considers that groundwater level monitoring to include shallow and deep groundwater monitoring; groundwater modelling to understand the impact on licensed abstractions and catchment water balances; 3D geology modelling to take advantage of the ground investigations and to enhance conceptual understanding of the likely impacts should be undertaken. These matters were raised by the Environment Agency in their consultation response and should be included in the assessment.
4.14.12	18.9.1	Flood Risk Assessment (FRA) and WFD compliance assessment	The ES water chapter is proposed to be supported by an FRA and WFD compliance assessment. The detailed scope and methodology of these assessments is not presented and effort should be made to agree these with the relevant consultation bodies.
4.14.13	Table 18.10 Table 18.11 Table 18.12	Sensitivity, value and magnitude of effect criteria.	The adopted criteria are more restrictive than those applied to the HAL DCO Project, for example, value criteria do not include 'supporting human health and economic activity'. The ES should be consistent with the criteria used for the HAL DCO Project.
4.14.14	N/A	Aquatic and terrestrial species	The Water chapter of the Scoping Report lacks specific content regarding effects on biodiversity. The ES should assess the impact of the Proposed Development on aquatic and terrestrial species present within the study area in order to adequately assess the direct and

ID	Ref	Other points	Inspectorate's comments
			indirect biodiversity impacts to the rivers and subsequent downstream receptors.
4.14.15	N/A	Slough Arm, Grand Union Canal	The Inspectorate notes that the Slough Arm and Grand Union Canal have not been referenced in the Scoping Report as forming part of the water assessment. The ES should include an assessment of all relevant waterbodies within the study area in order to ensure a robust assessment and an identification of all likely significant effects of the Proposed Development on the surrounding water environment.

## 5. INFORMATION SOURCES

5.0.1 The Inspectorate's National Infrastructure Planning website includes links to a range of advice regarding the making of applications and environmental procedures, these include:

- Pre-application prospectus<sup>4</sup>
- Planning Inspectorate advice notes<sup>5</sup>:
  - Advice Note Three: EIA Notification and Consultation;
  - Advice Note Four: Section 52: Obtaining information about interests in land (Planning Act 2008);
  - Advice Note Five: Section 53: Rights of Entry (Planning Act 2008);
  - Advice Note Seven: Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements;
  - Advice Note Nine: Using the 'Rochdale Envelope';
  - Advice Note Ten: Habitat Regulations Assessment relevant to nationally significant infrastructure projects (includes discussion of Evidence Plan process);
  - Advice Note Twelve: Transboundary Impacts;
  - Advice Note Seventeen: Cumulative Effects Assessment; and
  - Advice Note Eighteen: The Water Framework Directive.

5.0.2 Applicants are also advised to review the list of information required to be submitted within an application for Development as set out in The Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009.

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<sup>4</sup> The Planning Inspectorate's pre-application services for applicants. Available from: <https://infrastructure.planninginspectorate.gov.uk/application-process/pre-application-service-for-applicants/>

<sup>5</sup> The Planning Inspectorate's series of advice notes in relation to the Planning Act 2008 process. Available from: <https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/>

## APPENDIX 1: CONSULTATION BODIES FORMALLY CONSULTED

**TABLE A1: PRESCRIBED CONSULTATION BODIES<sup>6</sup>**

SCHEDULE 1 DESCRIPTION	ORGANISATION
The Health and Safety Executive	Health and Safety Executive
The National Health Service Commissioning Board	NHS England
The relevant clinical commissioning group	NHS North West Surrey Clinical Commissioning Group
	NHS Hillingdon Clinical Commissioning Group
	NHS East Berkshire Clinical Commissioning Group
	NHS Buckinghamshire Clinical Commissioning Group
	NHS Hounslow Clinical Commissioning Group
Natural England	Natural England
The Historic Buildings and Monuments Commission for England	Historic England - London Greater London
The relevant fire and rescue authority	London Fire Brigade
	Buckinghamshire Fire and Rescue Service
	Surrey Fire and Rescue Services Headquarters
	Royal Berkshire Fire and Rescue
The relevant police and crime commissioner	Thames Valley Police and Crime Commissioner

<sup>6</sup> Schedule 1 of The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (the 'APFP Regulations')

SCHEDULE 1 DESCRIPTION	ORGANISATION
	Metropolitan Police and Crime Commissioner
	Surrey Police and Crime Commissioner
The relevant parish council(s) or, where the application relates to land [in] Wales or Scotland, the relevant community council	Iver Parish Council
	Datchet Parish Council
	Horton Parish Council
	Wraysbury Parish Council
	Old Windsor Parish Council
	Colnbrook with Poyle Parish Council
The Environment Agency	The Environment Agency - Hertfordshire and North London
	The Environment Agency - Thames
The relevant AONB Conservation Boards	Chilterns Conservation Board
The Civil Aviation Authority	Civil Aviation Authority
The Relevant Highways Authority	Surrey County Council
	Slough Borough Council
	London Borough of Hillingdon
	London Borough of Hounslow
	Royal Borough of Windsor and Maidenhead
	Buckinghamshire County Council
The relevant strategic highways company	Highways England - South East
Transport for London	Transport for London
The Canal and River Trust	The Canal and River Trust
Public Health England, an executive agency of the Department of Health	Public Health England

<b>SCHEDULE 1 DESCRIPTION</b>	<b>ORGANISATION</b>
The Crown Estate Commissioners	The Crown Estate
The Forestry Commission	Forestry Commission - South East and London
The Secretary of State for Defence	Ministry of Defence

**TABLE A2: RELEVANT STATUTORY UNDERTAKERS<sup>7</sup>**

<b>STATUTORY UNDERTAKER</b>	<b>ORGANISATION</b>
The National Health Service Commissioning Board	NHS England
The relevant NHS Trust	The Hillingdon Hospitals NHS Trust
	London Ambulance Service NHS Trust
The relevant NHS Foundation Trust	South Central Ambulance Service NHS Foundation Trust
	South East Coast Ambulance Service NHS Foundation Trust
Railways	Network Rail Infrastructure Ltd
	Highways England Historical Railways Estate
	Network Rail
Road Transport	Transport for London
Canal Or Inland Navigation Authorities	The Canal and River Trust
Civil Aviation Authority	Civil Aviation Authority
Licence Holder (Chapter 1 Of Part 1 Of Transport Act 2000)	NATS En-Route Safeguarding
Universal Service Provider	Royal Mail Group

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<sup>7</sup> 'Statutory Undertaker' is defined in the APFP Regulations as having the same meaning as in Section 127 of the Planning Act 2008 (PA2008)

STATUTORY UNDERTAKER	ORGANISATION
Homes and Communities Agency	Homes England
The relevant Environment Agency	Environment Agency – Hertfordshire and North London
The relevant water and sewage undertaker	Affinity Water (Southeast region)
	Thames Water
The relevant public gas transporter	Cadent Gas Limited
	Energetics Gas Limited
	Energy Assets Pipelines Limited
	ES Pipelines Ltd
	ESP Connections Ltd
	ESP Networks Ltd
	ESP Pipelines Ltd
	Fulcrum Pipelines Limited
	Harlaxton Gas Networks Limited
	GTC Pipelines Limited
	Independent Pipelines Limited
	Indigo Pipelines Limited
	Murphy Gas Networks limited
	Quadrant Pipelines Limited
	National Grid Gas Plc
The relevant electricity distributor with CPO Powers	Eclipse Power Network Limited
	Energetics Electricity Limited
	Energy Assets Networks Limited

STATUTORY UNDERTAKER	ORGANISATION
	Energy Assets Power Networks Limited
	ESP Electricity Limited
	Fulcrum Electricity Assets Limited
	Harlaxton Energy Networks Limited
	Independent Power Networks Limited
	Leep Electricity Networks Limited
	Murphy Power Distribution Limited
	The Electricity Network Company Limited
	UK Power Distribution Limited
	Utility Assets Limited
	Vattenfall Networks Limited
	UK Power Networks Limited
The relevant electricity transmitter with CPO Powers	National Grid Electricity Transmission Plc

**TABLE A3: SECTION 43 CONSULTEES (FOR THE PURPOSES OF SECTION 42(1)(B))<sup>8</sup>**

LOCAL AUTHORITY <sup>9</sup>
Wycombe District Council
Surrey Heath District Council
Runnymede District Council
Elmbridge District Council
Spelthorne District Council

<sup>8</sup> Sections 43 and 42(B) of the PA2008

<sup>9</sup> As defined in Section 43(3) of the PA2008

<b>LOCAL AUTHORITY<sup>9</sup></b>
South Bucks District Council
Chiltern District Council
Three Rivers District Council
South Downs National Park Authority
London Borough of Kingston upon Thames
Milton Keynes Council
London Borough of Sutton
London Borough of Croydon
London Borough of Bromley
Central Bedfordshire Council
Kent County Council
Northamptonshire County Council
Oxfordshire County Council
West Sussex County Council
East Sussex County Council
Hampshire County Council
Slough (Borough Council
London Borough of Hillingdon
Bracknell Forest Borough Council
London Borough of Harrow
Buckinghamshire County Council
Hertfordshire County Council
Surrey County Council
Royal Borough of Windsor and Maidenhead

<b>LOCAL AUTHORITY<sup>9</sup></b>
Wokingham Borough Council
London Borough of Richmond upon Thames
London Borough of Hammersmith and Fulham
London Borough of Hounslow
London Borough of Ealing

**THE GREATER LONDON AUTHORITY**

<b>ORGANISATION</b>
The Greater London Authority

**TABLE A4: NON-PRESCRIBED CONSULTATION BODIES**

<b>ORGANISATION</b>
N/A

## APPENDIX 2: RESPONDENTS TO CONSULTATION AND COPIES OF REPLIES

Consultation bodies who replied by the statutory deadline:

Affinity Water
Bracknell Forest Council
Buckinghamshire County Council
Cadent Gas Limited
Cadent Gas Limited (Plant Protection)
Canal and River Trust
Chilterns Conservation Board
Civil Aviation Authority
Defence Infrastructure Organisation
Environment Agency
ESP Utilities Group
Forestry Commission
Hampshire County Council
Harlaxton Energy Networks Limited
Harlaxton Gas Networks Limited
Health and Safety Executive
Heathrow Strategic Planning Group, which includes Buckinghamshire County Council, London Borough of Ealing, Elmbridge Borough Council, London Borough of Hounslow, Royal Borough of Windsor and Maidenhead, Runnymede Borough Council, Slough Borough Council, South Bucks District Council, Spelthorne Borough Council, and Surrey County Council. <sup>10</sup>

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<sup>10</sup> Mr Edward Chetwynd-Stapylton of Elmbridge Borough Council confirmed in an email to the Inspectorate at 15:52 on 29 March 2019 that the response received from the Heathrow Strategic Planning Group reflects the jointly held views of all local authority members of the Heathrow Strategic Planning Group. LB Hounslow provided similar confirmation on 26 March 2019.

Highways England
Historic England
Horton Parish Council
National Grid
NHS Hillingdon Clinical Commissioning Group
NATS
Natural England
Network Rail
Old Windsor Parish Council
Public Health England
Royal Borough of Kingston upon Thames
Royal Borough of Windsor and Maidenhead
Runnymede Borough Council
Slough Borough Council
Spelthorne Borough Council
Surrey County Council
Surrey Heath Borough Council
Thames Water
Transport for London
West Sussex County Council
Wraysbury Parish Council



The Planning Inspectorate  
3D Eagle Wing  
Temple Quay House  
2 The Square  
Bristol  
BS1 6PN

**SPECIAL DELIVERY and EMAIL**

Our ref: 78 of 2019. SMM  
Your ref: TR020004 \_31095887

14 March 2019

Dear Sir/Madam,

**Planning Act 2008 (as amended) and The Infrastructure Planning  
(Environmental Impact Assessment) Regulations 2017 (the EIA Regulations)  
- Regulations 10 and 11**

**Application by Arora Holdings Limited (the Applicant) for an Order  
granting Development Consent for the Heathrow Western Hub  
(the Proposed Development)**

**Scoping consultation and notification of the Applicant's contact details and  
duty to make available information to the Applicant if requested**

We refer to your letter of 15 February 2019. This letter was sent to a regional office of Affinity Water Limited rather than our head office in Hatfield, which caused some lost time within our organisation. As discussed in email correspondence since, please can future correspondence be addressed to the registered office address and reference in this letter. Please can this be marked for my attention and [REDACTED] within the Legal Team.

We confirm that Affinity Water Limited ("AWL") is a statutory consultee under the EIA Regulations as a water supply company. AWL is a Statutory Undertaker providing drinking water to around 3.5 million customers in 1.4 million properties in the South East of England across three distinct geographical regions. This is a statutory responsibility and supply duty under section 37 of the Water Industry Act 1991.

In respect to the Proposed Development (located within our statutory area of supply of our Central region) our undertaking extends from Guildford in Surrey to Saffron Walden in Essex,

much of Hertfordshire and Buckinghamshire and north and west London including the area around Heathrow Airport. We serve approximately 3.3 million customers. Around 60% of the water we abstract in our Central region comes from the aquifer via many boreholes sunk down to abstract it. In addition, AWL also obtains some water supply for customers for treatment and supply from the River Thames via various Works and Pumping Stations and for example via a water intake at Sunnymeads for the Iver Water Treatment Works.

We have reviewed the request for a Scoping Opinion.

We appreciate that the Planning Inspectorate has a statutory timetable to meet to issue its Scoping Opinion, but the time available has meant that we have not been able to give the issues raised in this request detailed consideration. We will be writing further directly to the Applicant in due course to discuss the Proposed Development in relation to the time, costs and resources needed to properly deal with this matter.

We have received some high level preliminary information from the Applicant to the extent that we have been advised in general terms of the likely footprint of the Proposed Development and the possible effects it may have on our undertaking. Diversions may need to be made in relation to our existing and extensive network of water mains, service pipes, equipment, operational apparatus and accessories within the Proposed Development.

From the preliminary high level review carried out, and from our knowledge of our apparatus within the proposed red line boundary, compared with our own network plans covering this area, the points of sensitivity and potential concern which we would like to highlight are set out below. Please note this is not intended to be a fully comprehensive list as we have insufficient knowledge of the detail of the Applicant's Proposed Development at this stage.

- We have major strategic pipelines that will be within the Proposed Development including a 450mm diameter trunk water main
- We have smaller distribution pipelines and service pipes that are in the Proposed Development.
- We have leakage zones and monitoring in place which we use to manage and control leakage as well as water supply and pressure to customers. Any interference with this network will impact on the service we provide. There are potential impacts on network resilience arising from the Proposed Development. We currently have multiple ways of supplying household and non-household properties customers that could be put at risk as the options available to us could be significantly reduced if they are not factored into the Proposed Development. The effects could extend 3-4 km beyond the red line
- The western edge of the Proposed Development crosses over one of the two water tunnels that provide untreated water from the River Thames to our works at Iver. This Iver Tunnel No2 is the emergency link that carries water from Wraysbury Reservoir to Iver. and is used if for operational reasons we are unable to abstract from River Thames

at our own intake at Sunnymeads. Building over the tunnel will create significant access issues over the tunnel.

- The Proposed Development may increase the loading transmitted onto the tunnel which could damage the structure or lead to increase deterioration of the fabric of the tunnel.
- Construction of the runway may require excavation over the tunnel; removing the overburden above the tunnel could impact its structural integrity.
- We have concerns that the Proposed Development could exacerbate the risk of contamination of the water quality at our surface water abstractions. This is due to the multiple landfills located in the vicinity which has the potential to create new pollutant pathways and potential turbidity related issues triggered by the proposed construction works.
- We also have concerns with regards to the river channel modifications and how this will change the hydraulics between the associated rivers and lakes which are currently used for emergency supply.
- We would also be interested in the determination of the downstream impacts on flows in the rivers during extreme events such as drought and flood risk. The proposed changes to the baseflow of the rivers have the potential to affect the water quality at our surface water abstractions and could impact our ability to respond in the event of a pollution incident.
- If there are plans to abstract water onsite we would like to know the plans of how this will be managed.

Yours faithfully



Patrick Campbell  
Head of Infrastructure Strategy  
Affinity Water Limited  
Direct Tel: 01707 268111  
[patrick.campbell@affinitywater.co.uk](mailto:patrick.campbell@affinitywater.co.uk)



The Planning Inspectorate  
Major Casework Directorate  
Temple Quay House  
2 The Square  
Bristol  
BS1 6PN

19th March 2019

## Consultation Response

Dear Sir/Madam

### Town and Country Planning Act 1990

**REFERENCE:** 19/00166/OBS/OBSZ

**DESCRIPTION:** Request for observations on a scoping opinion under Regulations 10 and 11 of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.

**LOCATION:** Arora Holdings Ltd Heathrow Western Hub

**CASE OFFICER:** Matthew Miller, direct line 01344 351764

I refer to your consultation on the above application received on 15th February 2019. My comments are;

PINS ref: TR020004\_ 31095887

Thank you for consulting Bracknell Forest Council on this matter.

It is recognised that the applicant is preparing a Stakeholder Engagement Plan (SEP). However, in the absence of a completed document and from the information that has been provided in the submitted Environmental Statement (ES), it is unclear what methodology the applicant has undertaken to identify the affected Local Authorities, beyond consulting the immediately adjoining authorities, which does not reflect the impacts of a development of this scale, nor is it accurate, as parts of Bracknell Forest Borough are in fact closer to Heathrow than parts of the identified Local Authorities (e.g. South Bucks).

The eastern boundary of Bracknell Forest Borough lies only c.10 kilometres (6 miles) from the western edge of the existing Heathrow site. Therefore the development has potential to impact Bracknell Forest Borough in a number of ways. In addition, it is highlighted that parts of Windsor Great Park and the Thames Basin Heath Special Protection Area also lie within Bracknell Forest Borough, and in considering this comprehensively, these areas would be potentially significantly impacted by the development. This matter is expanded upon in the individual sections below.

It is therefore requested that the Planning Inspectorate consider and review the strategy for identifying which Stakeholders would be affected as part of the ES and Scoping Opinion.

## a) Cumulative Assessment

Given the split nature of Development Consent Order applications for the overall development at Heathrow, along with the high level of other development in the region, the cumulative effects assessment is of most relevance and of greatest interest to Bracknell Forest Council (BFC).

BFC would recommend that a defined and justified study area be determined for each topic area, and Zone of Influences (ZOI) be agreed with Local Authorities relative to cumulative effects. BFC would like to be consulted on the ZOI for the cumulative assessment of air quality, biodiversity (where it relates to air quality - see further comments below), noise, minerals, waste and traffic and transport; all of which have the potential to affect Bracknell Forest on a cumulative basis.

## b) Air Quality

The air quality assessment focuses on human health impacts and omits consideration of ecological receptors, a potentially significant issue.

Para 5.7.2 and Section 4.6 identify that a likely ZOI for potential cumulative air quality effect with other development will be defined separately as part of the CEA; however no details as to the extent of this zone are provided. Given the potential for cumulative air quality impacts within Bracknell Forest on human health and the Windsor Forest and Great Parks Special Area of Conservation; and the Thames Basin Heath Special Protection Area, BFC request to be consulted on the ZOI as further details become available.

Para 5.4.10 identifies when strategic road links will be included in the study area. This list should be expanded to take account of Natural England guidance.

Section 5.5 Baseline Conditions deals only with air quality in relation to human health impact; biodiversity is not considered. Table 5.2 omits the national air quality objectives and European Directive limit and target values for the protection of vegetation and ecosystems.

Para 5.5.2 identifies Air Quality Management Areas (AQMAs) within the development area. The Environmental Statement (ES) should also consider the wider area which may be impacted by ground traffic movements.

Para 5.6.1 and Table 5.3 scopes into the assessment the removal of displaced uses, which may lead to benefits for human health at designated habitats. It is assumed that this predominantly refers to the removal of the Lakeside Waste to Energy plant. However the replacement of this facility is not referenced in terms of air quality; which has the potential to have significant air quality impacts. No justification is provided for scoping this out of the assessment. This issue requires further consideration.

Receptor sensitivity and value (para 5.7.29) fail to consider ecological receptors. Assessment criteria (para 5.7.34) fail to assess the impact of ground traffic movements on ecological receptors (assessment of these is limited to industrial sources of emissions only).

5.7.37 identifies that pollution concentrations associated with the proposed development are expected to reduce over time, due to improved vehicle and emission reduction technologies. The use of such mitigation within assessments is the subject of recent legal judgements in relation to habitat sites and requires further consideration.

## c) Biodiversity

Table 6.2 identifies the study areas for different onshore ecology receptors, including statutory designated sites within and up to 2km of the Proposed Development area. This fails to incorporate statutory designated sites over the much wider area which have the potential to be

impacted as a result of changes to air quality, principally from ground traffic movements; these could extend into Bracknell Forest Borough. Again, this is not included within the assessment of cumulative impact in para 6.7.25.

Para 6.7.19 and Section 4.6 identify that a likely ZOI for potential cumulative biodiversity effects with other development will be defined separately as part of the CEA; however no details as to the extent of this zone are provided. Given the potential for cumulative biodiversity impacts on Bracknell Forest on the Windsor Forest and Great Parks Special Area of Conservation; and the Thames Basin Heaths Special Protection Area, BFC request to be consulted on the ZOI as further details become available.

Section 6.9 Habitats Regulations Assessment (HRA) fails to identify the statutory designated sites over the much wider area which have the potential to be impacted as a result of changes to air quality, principally from ground traffic movements; these could extend into Bracknell Forest Borough. Para 6.9.5 considers that the focus of the screening report will be on the potential effect to qualifying features of the South West London Waterbodies SPA, with note of qualifying bird species. This focussing of the screening is premature and cannot be undertaken until all emissions to air are known (including in combination transport movements to input to transport modelling), to enable air quality assessment in relation to national air quality objectives for the protection of vegetation and ecosystems, and site-specific critical loads and critical levels for habitat sites.

#### d) Land Quality and Waste

Bracknell Forest Council, Reading Borough Council, The Royal Borough of Windsor & Maidenhead and Wokingham Borough Council (collectively known as the Central and Eastern Berkshire Authorities) are working in partnership with Hampshire County Council to produce a Joint Minerals and Waste Plan. It is understood that separate comments have been provided from this partnership and so therefore these are not repeated here. However, BFC would like to draw particular attention to any implications of burrow pits and stockpile locations located outside the designated Construction Area, and also in respect of the loss of the Lakeside Energy from Waste facility.

#### e) Traffic and Transport

The cumulative assessment of traffic and transport is unclear and contradictory within the Scoping Report. As such it is not possible to provide an informed comment as to the scope of the transport assessment; which has consequences for the air quality, biodiversity, human health and noise assessments. For example:

- Table 4.5, Stage 1 includes the identification of 'other development' in the ZOIs. This stage includes identification of projects in the relevant Development Plans, noting that 'At Stage 1 all 'other development' will be included in long-list, regardless of development scale'.
- Para 4.6.6 goes on to identify only residential schemes of 100+ units within certain boroughs.
- Table 4.5, Stage 4 Assessment goes on to state 'Likewise an explanation will be provided for excluding topics from the CEA that are inherently cumulative, such as transport that uses modelled traffic data that accounts for future traffic flows'.

No justification is provided for only considering residential schemes of 100+ units. It could be argued that this does not provide a cumulative assessment.

The selection of Hillingdon, Hounslow, Slough, Spelthorne and Ealing is unlikely to comprehensively cover the areas over which traffic and transport impact may have a cumulative impact with other development. The ZOI should be determined on an iterative process based on the criteria in para 5.4.9-5.4.10 (including Natural England guidance).

#### f) Noise

As Heathrow have also undertaken separate consultations regarding potential changes to flight paths, it is not known at this stage whether the proposal would result in a significant increase in aircraft movements above Bracknell Forest Borough. It is acknowledged that a significant number of aircraft already utilise air space above Bracknell Forest Borough, and in view of the distance from Heathrow these are often at relatively low altitude. It is therefore requested that any Scoping Opinion take account of these facts, and BFC would expect to be an identified stakeholder in this matter in order to consider any implications should the development progress.

Should you wish to discuss this matter further, please do not hesitate to contact me.

Yours faithfully

**Matthew Miller**

Senior Planning Officer  
Planning Transport and Countryside  
email [matthew.miller@bracknell-forest.gov.uk](mailto:matthew.miller@bracknell-forest.gov.uk)  
Direct Line 01344 351764

**PLACE PLANNING AND REGENERATION**

Bracknell Forest Borough Council, Time Square, Market Street, Bracknell, Berkshire RG12 1JD  
T: 01344 352000 Minicom: 01344 352045 [www.bracknell-forest.gov.uk](http://www.bracknell-forest.gov.uk)

## Land Quality and Waste

Bracknell Forest Council, Reading Borough Council, The Royal Borough of Windsor & Maidenhead and Wokingham Borough Council (collectively known as the Central and Eastern Berkshire Authorities) are working in partnership to produce a Joint Minerals and Waste Plan. This will guide minerals and waste decision-making in the Plan area for the period up to 2036.

### *Mineral Resources*

With regards to the proposed approach to mineral resources, we were pleased to see that the impacts of the proposed development on; active or former quarries, sites allocated for mineral extraction in a local plan, sites of high significance regionally or nationally and sites allocated as a Safeguarded Mineral Site or Mineral Safeguarding Area, were scoped in to the Land quality, Agricultural Land Quality and Mineral Safeguarding Assessment. We also support the stance that the avoidance of mineral sterilisation and additional mitigation requirements for mineral safeguarding will be considered as part of the waste assessment for the project.

Firstly, whilst our assessment of aggregate demand recognises that the development will have a significant impact on aggregate demand (and supply in the area) it does not take into account the identified need of the project specifically as the quantities and timescales are not yet confirmed. Therefore, the Draft Plan which was recently subject to consultation stated that the projected demand of the Plan could be reviewed subject to a change in local circumstances, such as Heathrow. It is important that the Heathrow proposals should also consider sources of aggregates outside the area of Central and Eastern Berkshire Joint Minerals and Waste Plan Area especially due to the fact that materials can be transported via the rail depot at Colnbrook which would help to minimise vehicle movements in the area. There also needs to be a more comprehensive statement about the use of recycled materials, so that the need for primary aggregates is reduced.

Secondly, it is understood that borrow pits and stockpile locations may be located outside the designated Construction Area, with a preference for sites within reasonable proximity to the airport. While we understand that these are still under consideration, we have noticed that Figure 11.4q (Appendices) depicts land being considered for associated works, including two sites within the Royal Borough of Windsor and Maidenhead; Ham Island and the land immediately to the north west on the other side of the river, known as Southlea Farm. We would therefore like to point out the following with regards to these land areas:

- As part of the preparation of the Central and Eastern Berkshire Joint Minerals and Waste Plan, Ham Island and Southlea Farm were considered for inclusion as potential allocations.
- Ham Island was actively promoted as a potential extraction site. However, following consultation with Historic England concern has been raised regarding the potential for de-watering of the adjacent Scheduled Ancient Monument. For the site to be considered further for allocation, it would need to be demonstrated that there would be no impact on the Scheduled monument, and in particular, no de-watering effect would occur to the nationally important archaeological site. Further information can be provided on this issue, should this be required. In addition, consultation with the Environment Agency raised concerns over the viability of a structure in the river to serve the site which is fundamental due to the traffic restrictions associated with the site. Further issues regarding loss of flood plain and river navigation have also been raised. We will need demonstration from the site promoter that these can be overcome

in order to progress with the allocation. These issues would also apply should the site be considered as a borrow pit.

- Following a review of the proposed Construction Management Plan for the Heathrow Expansion, we contacted the Crown Estate as landowners of the land known as Southlea Farm to enquire whether they would like to promote the land in the Joint Plan. They confirmed that they had not promoted the land as a borrow pit and did not want to promote the land in the Joint Plan. Without landowner support, we ruled the site out from further consideration. The issue of landowner support should also be taken into account should the site be considered as a borrow pit.
- It is recognised there is a strong need to utilise nearby materials in order to meet the substantial aggregate demands. However, it is important to do so in a sustainable and efficient way that limits the potential impacts on local communities.
- Nationally Significant Infrastructure Projects should take into account relevant Local Plans, which would include the emerging Joint Central and Eastern Berkshire Minerals and Waste Plan.

### *Waste Management*

With regards to the approach to waste management, as set out within the Scoping Report and Appendix 14.1 (Waste Appraisal Methodology), the Central and Eastern Berkshire Authorities were pleased to see that proposed development design will aim to make a positive contribution to waste management. We agree that the effect of removing the Lakeside Energy from Waste Facility on capacity for treatment of waste will require assessment. However, we would like to emphasise the regional significance of this site for authorities in the South East. The Central and Eastern Berkshire Authorities, along with the South East Waste Planning Advisory Group (SEWPAG), have particular concerns regarding the permanent loss of this facility and how the recovery capacity will be compensated for.

Furthermore, we support the stance that an assessment of the potential impact of waste will be needed and that the mitigation and waste management measures proposed will be based on the principle of moving waste up the hierarchy. We would like to promote the re-use of any construction demolition and excavation (CDE) arisings on site and that any wastes not used on site should also be sent to an appropriate waste facility, at the highest level possible within the waste hierarchy.

### *Conclusion*

In conclusion, given the impact that the expansion of Heathrow could have on the emerging Plan, it is essential that the above points be taken into consideration, especially as more details regarding the certainty and the details of the project emerge, as well as its timescale. Overall, it is felt that more studies are needed to determine the impact the Heathrow expansion will have and how its effects can be mitigated most notably in relation to waste management provision in the area and potential borrow pits. Going forward, the Central and Eastern Berkshire Authorities would like to be consulted and we have particular interest in the Environmental Statement, Site Waste Management Plan and borrow pit locations.

**From:** [Sweetland, Darl](#)  
**To:** [Heathrow Western Hub](#)  
**Cc:** [Sullivan, Luisa](#); [Smith, Rob](#); [Michelson, Lisa](#); [Sutherland, David](#); [Back, Alexander](#); [acolwell@chiltern.gov.uk](mailto:acolwell@chiltern.gov.uk); [Sukhpreet Khull \(SKhull@chiltern.gov.uk\)](mailto:Sukhpreet.Khull@chiltern.gov.uk); [jerry@unsworthplanning.co.uk](mailto:jerry@unsworthplanning.co.uk); [ian@btvlep.co.uk](mailto:ian@btvlep.co.uk); [sbraund@chiltern.gov.uk](mailto:sbraund@chiltern.gov.uk); [Balakrishnan, Ravikumar](#); [Bishop, Hannah](#); [Milambo, Oster](#); [Cerys Williams \(Cerys.Williams@chilternandsouthbucks.gov.uk\)](mailto:Cerys.Williams@chilternandsouthbucks.gov.uk); [Mayhew, Jack](#)  
**Subject:** RE: TR020004 – Heathrow Western Hub – EIA Scoping Notification and Consultation / Reg 11 Notification  
**Date:** 13 March 2019 08:33:57  
**Attachments:** [REDACTED]  
**Sensitivity:** Confidential

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Dear Major Casework Directorate

We write with reference to the Scoping request dated 15.2.19.

In view of the significant similarities between the Western Hub and the Heathrow Airports Limited (HAL) proposals and the limited information provided on the Associated Works in Buckinghamshire we would refer the applicant to the Council's Scoping response provided to PINS and HAL last year. We attach that response for ease of reference. We would draw the applicant's attention to a number of points including:

- Green Belt, which with reference to the Airports National Policy Statement should be assessed and, for example should be shown in Figure 13.1 of the applicant's report.
- Fluvial, Groundwater and Surface flooding should be assessed for the Associated Works areas as well as the terminal areas the applicant proposes and cumulatively, with aspects of the Heathrow expansion which the applicant proposes would be brought forward by others and other foreseeable development in view of the multiple projects planned in and around the Ivers.
- Traffic and transport impacts, including related air quality and health impacts should also be assessed for the Associated Works. We request that the applicant consider the community facilities shown on the attached plans, provided previously to HAL including as part of HALs Statement of Community Consultation work. Specifically, we note that the schools in the Ivers are not shown on the applicant's Figures 9.2 and 17.11. The applicant has though identified that the Ivers area is an AQMA.

We note that the applicant includes land in Buckinghamshire which is in the ownership of Buckinghamshire County Council but has not sought either to discuss the proposals with the Council as landowner or to agree access arrangements to undertake surveys.

We would also request that the applicant refers to the Council's response to the recent HAL Airspace consultation in considering aspects of the Western Hub assessment including the impact of noise from flights from an expanded Heathrow. The HAL Airspace response was prepared joint with Chiltern and South Bucks District Councils and the Buckinghamshire Thames Valley LEP. One critical element of both the HAL DCO Scoping and Airspace responses is our 'triple lock' on expansion which requires investment in surface access capacity, measures to enable the effective utilisation of that capacity and the achievement of air quality targets to then unlock the use of additional passenger and freight capacity

delivered by the expansion of Heathrow. The joint Airspace consultation response is attached.

*Best regards*

**Darl**

Darl Sweetland  
Strategic Infrastructure Projects Lead  
Transport - Economy - Environment  
Buckinghamshire County Council  
01296 383463

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**From:** Heathrow Western Hub [mailto:HeathrowWesternHub@planninginspectorate.gov.uk]  
**Sent:** 15 February 2019 14:49  
**To:** Strategic Planning  
**Cc:** Sweetland, Darl  
**Subject:** TR020004 – Heathrow Western Hub – EIA Scoping Notification and Consultation / Reg 11 Notification

Dear Sir/Madam

Please see attached correspondence on the proposed Heathrow Western Hub.

Please note the deadline for consultation responses is 15/03/2019 and is a statutory requirement that cannot be extended.

Kind regards

Major Casework Directorate  
The Planning Inspectorate, Temple Quay House, Temple Quay, Bristol, BS1 6PN

Twitter: @PINSgov  
Helpline: 0303 444 5000  
Email: [HeathrowWesternHub@planninginspectorate.gov.uk](mailto:HeathrowWesternHub@planninginspectorate.gov.uk)

Web: <http://infrastructure.planninginspectorate.gov.uk> (National Infrastructure Planning website)

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Please view our [Privacy Notice](#) before sending information to the Planning Inspectorate.

Time to Change is a growing movement of people changing how we all think and act about mental health problems..

Although attitudes to mental health are changing for the better, too many people are still made to feel ashamed or isolated because they have a mental health problem.

In Buckinghamshire, we're working with local communities, workplaces and

schools to help end negative attitudes and behaviours towards people experiencing mental health problems.

Time to Talk Day on 7th February aims to get more people talking openly about mental health.

Find out about events taking place on Time to Talk Day or more about Time to Change at [www.timetochangebucks.org](http://www.timetochangebucks.org)



**Buckinghamshire County Council**

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## **Heathrow Expansion – Scoping Consultation**

Buckinghamshire County Council (BCC) welcomes the opportunity as a statutory consultation body for the prospective Development Consent Order (DCO) application to respond to the request to The Planning Inspectorate (PINS) by Heathrow Airport Limited (HAL) for a Scoping Opinion, (the 'Scoping'). From previous meetings with the Heathrow team I understand that Buckinghamshire will be a 'host authority' for the DCO and a statutory consultee on the Airspace Change Process (ACP). In view of the current division of responsibilities in a two tier area, such as Buckinghamshire, we continue to work with our district colleagues including South Bucks District Council (SBDC) and countywide bodies such as Buckinghamshire Thames Valley LEP (BTVLEP) in considering expansion proposals.

BCC is also working with key partners, not least the Colne Valley Park Community Interest Company (CVP) to consider HAL's proposals, their impact and potential mitigation within Buckinghamshire, on the county's communities, businesses and environment. As the strategic authority in Buckinghamshire, BCC recognises the potential economic benefits that the expansion of Heathrow could bring to the county and the wider South East. From my and the Council Leader's discussions with the HAL team, I know that HAL recognise the increasing importance of surface connectivity through the county to the England's Economic Heartlands area for business and leisure passengers, as well as freight.

BCC was one of the first Councils to publicly support the growth of the airport, on the proviso that adverse economic, community and environmental impacts including noise, air quality and traffic are appropriately mitigated. I recognise the importance therefore in ensuring that HAL consider the impacts - including potential benefits - on our communities, businesses and environment within the geographic area of Buckinghamshire. It is important that at this early stage HAL does not scope out these interests and impacts without suitable assessment and the agreement of BCC in our statutory role.

Turning to the DCO proposal we understand from the consultation documents that:

- HAL now identifies one site for Airport Related Development at Thorney Sidings, Iver.
- HAL continues to identify sites for potential flood storage capacity including BCC land at Thorney Park and New Denham Quarry. Other land in southern Buckinghamshire is likely to be needed for ecology and landscape mitigation.
- HAL propose removing the cap on flight numbers in 2022, increasing passenger numbers and freight before new rail and coach/ bus capacity is available to serve a third runway.

- It is too early in the airspace change process (ACP) to know the flightpaths and the precise impacts of noise on residents and on Council service locations including Schools and Country Parks and the impact on service and park users.

Following the Council Leader's responses to Government consultations in 2017 and HAL's non statutory consultations (DCO and ACP) earlier this year, two key issues remain for Buckinghamshire.

## **Local impacts**

Impacts around the Iver area in southern Buckinghamshire must be appropriately mitigated, including cumulative impacts arising from a number of national infrastructure schemes. These include the expansion of Heathrow Airport, HS2, Western Rail Link to Heathrow (WRLtH), Crossrail and the approved M4 & future M25 Smart Motorway Projects. The Ivers Area is unique in being subject to so much change and the Council continues to request that the Department for Transport (DfT) commits dedicated co-ordinating resources to support the alignment and joint programming of these nationally significant infrastructure projects to minimise the extended construction impacts and mitigate cumulative transport and environmental impacts on the local community. In view of the existing cumulative impacts, Green Belt protection and the potential harm to the landscape of the CVP, BCC supports the HAL proposal not to bring forward multiple airport related development sites in the Ivers area.

As a 'host' community for airport expansion and other major projects, we support the local aspiration for an Iver Relief Road to provide mitigation from construction traffic and to prevent the current HGV issue worsening leading to local congestion, air quality and health issues and road user safety concerns. The mitigation, which the Iver Relief Road would provide, has wide stakeholder support and is endorsed by Council Leaders and the three LEP's represented on the Heathrow Strategic Planning Group.

## **Aircraft Noise**

On airspace and aircraft noise, BCC support the national modernisation programme. HAL's redesign of airspace has the potential to continue the airport's track record of reducing its noise footprint. Airspace modernisation alongside HAL's financial incentives for airlines to upgrade fleets can lower emissions with both air quality and carbon benefits.

Whilst consideration of detailed flight paths (Stage 3 of the ACP) is planned by HAL to follow the DCO process we note that a number of options could mean aircraft using the expanded airport and third runway after 2025 may overfly areas within southern Buckinghamshire that have not been previously overflowed. From the CAA/ DfT and HAL consultation events over the past year you will have gathered from residents and elected members that the extended process for the ACP creates unnecessary uncertainty for those communities in the county.

New flightpaths could have a significant adverse impact on not just the quality of life of residents in the county but also have negative health impacts for residents, service users, business and workers in the newly affected areas. HAL's consultants have advised the BCC team that the effects on health for communities not previously overflowed is greater than for communities already overflowed and to an extent have become acclimatised to aircraft noise. Minimising the need to affect new populations and business should be the first principle in Heathrow's redesign of airspace. This principle can and should guide HAL's EIA noise assessment and mitigation design and would complement the reduction in the footprint of the noise envelope which Heathrow has achieved for communities already affected by noise. With regard to the Scoping, applying this 'minimise newly overflowed' principle can in turn provide some certainty to communities during the DCO process that requirements and obligations set out in the Secretary of State's future DCO Order(s) will not be overturned by ACP or other CAA regulatory decisions. If new communities, businesses and services are to be affected in Buckinghamshire

then the area of that impact should be minimised through appropriate baseline work and design of envelopes so that residents have confidence in the current noise assessment and that HAL will keep them informed of monitoring and changes to impacts during the DCO process, construction and then operation. This includes respite from noise for predictable periods which should be applied equally across all affected populations.

As the Lead member for Heathrow, and working with Cabinet colleagues for transport and public health in Buckinghamshire, I want to highlight two opportunities which Heathrow's first consultation - and on which the Scoping request is based - provides for the next stage in designing the airport, assessment and mitigation. Perhaps most importantly these can also assist in providing information to the residents on the current situation and future position on these issues and are areas where BCC have and will be seeking HAL commitments and HAL reporting in their Consultation Report.

- **Rail Surface Access**

Access from Buckinghamshire to Heathrow is usually by private car, as rail travel currently requires a journey into London, a number of connections and then back out to the airport. Many airport workers and travellers from Buckinghamshire to Heathrow therefore drive, in view of the proximity – if not journey time reliability – to Heathrow. Iver's position close to the airport, mean it is the location of many airport workers homes and given that there is no bus service to the airport many drive direct. This unnecessary traffic adds to congestion on the local road and motorway network. There are limited bus services to Heathrow from a number of the county's towns. Better public transport connectivity to Heathrow is needed throughout Buckinghamshire via hubs in our major towns. HAL's Transport Assessment and Surface Access Strategy should consider the current missing transport links and bring forward funded options to deliver local and sub regional connections and the links to those stations via sustainable transport modes.

We support HAL's objective of securing 'no net increase in traffic' to the expanded airport and recognise the important part that transport schemes within and connecting Buckinghamshire can play in delivering an airport which is accessible to more people by enhanced rail and public transport. BCC continues to advocate that HAL sign up to a 'triple lock' on surface access to an expanded airport which then enables capacity from a third runway to become operational when Heathrow demonstrates to local planning, transport and health authorities that :

1. Transport interventions including funding for new local bus and cycle routes for Heathrow workers and appropriate financial for support for WRLtH, for example, are delivering HAL's '**no net increase in traffic**' commitment.
2. Committed projects to enable passengers, workers, commuters and freight to move to more sustainable and accessible modes of travel, including links by rail and coach to High Wycombe and from other towns in Buckinghamshire will enable delivery on Heathrow's and the draft Airports National Policy Statement NPS **mode share targets** when new aircraft movement capacity is released.
3. **Air quality** requirements are and can continue to be delivered in and around Heathrow, including southern Buckinghamshire and that Heathrow's contribution to emissions does cause not worsening air quality and consequent health impacts in the Ivers area as a result of construction traffic from the multiple major projects or from displacement of road traffic on to local roads, for example when the M25, M4 and A4 are heavily congested. For Buckinghamshire, HAL must provide monitoring at locations which are near to the current air quality hotspots to the north and west of the airport. This is required to provide a baseline for residents and service users, for example at Country Parks, to show the current position and provide monitoring information which demonstrates HAL actions at the hotspots isn't simply displacing poor air quality to locations in the Ivers area.

Our expectation from the proposed expansion of Heathrow is that HAL will clearly set out what mitigation is required to address transport impacts - including through the Health Impact Assessment and Cumulative assessment – and how communities will be engaged in these options and when schemes will be delivered to mitigate impacts and/ or compensate the local community. Mitigation should first look to address impacts during construction, particularly at sensitive locations such as schools. On compensation, the guiding principle should be to put in place long lasting legacy projects with multiple benefits, such as investment in landscape along transport and river corridors including tree planting, flooding and ecology protection and public access enhancements within the Colne Valley Park.

- **New noise impacts**

The third runway means that the Dorney and Taplow communities would be directly under the east – west flight path of planes landing and taking off from the expanded airport. They are likely to be severely impacted in the mid- 2020s for the first time by aircraft noise when the third runway is operational. We are also concerned that increased aircraft noise from Heathrow will affect the tranquillity and rural experience of visitors and users of Black Park, Langley Park and Thorney Park. The Parks are regularly used by Pinewood Studios for filming and an increase in noise is likely to jeopardise the use of the Parks and so increase costs for Pinewood. This would significantly reduce income which supports the park's management and use by one million visitors a year.

We request HAL fund noise monitoring locations in Dorney, Taplow and at BCC service locations in the Ivers including schools and Country Parks to ensure that sufficient data is available for HAL, regulators and for residents and business to understand current noise levels and how potential changes approved under the DCO and ACP process may impact on health, particularly night time noise, and the use and enjoyment of public space in southern Buckinghamshire and the Colne Valley Park.

I and the BCC team look forward to continue working with PINs, the DCO Examiners and HAL to assist in making a robust decision and in explaining the Heathrow expansion plans to residents and business in the County and so ensure appropriate mitigation and benefits are felt by the local community. This may include a need to revisit the Scoping when HAL identify additional land in Buckinghamshire as part of design iteration and preferred mitigation. BCC therefore reserves its final position on Scoping to ensure that effects not currently set out in the HAL report are assessed following and agreed methodology. The BCC technical response to the Scoping is appended.

Yours sincerely,



Bill Chapple  
Cabinet for Planning & Environment  
Buckinghamshire County Council

cc:  
Buckinghamshire's Members of Parliament  
Bucks Planning Group  
Colne Valley Park  
Chilterns AONB  
County Councillors  
Iver Member Liaison Group

LEP Board Members  
England's Economic Heartlands  
Chiltern Railways  
London Luton Airport Limited

## Appendix One - BCC Technical Response

The BCC response follows the structure of the report submitted by HAL to PINS. The job title(s) in brackets denotes the position of the main technical lead for BCC on that topic.

### 1. Introduction

1. BCC's technical team have welcomed the Workshops offered by HAL to Councils, LEPs and Colne Valley Park officers setting out the Scoping process. One general comment is that the limited detail in HAL's Consultation one (Q1 2018) means that the Scoping Report although long is also relatively short on detail. As a consequence de scoping aspects of the Project now appears to be based on limited information (at least that visible to BCC). When considering cumulative aspects and the May 2017 EA Regulations the proposed areas of de scoping are highly likely to be required to be reintroduced to the assessment. For example, (Table 1 and Table 3.6) the use of land for flood storage in Bucks may preclude that land from being used for new employment or may aid adjacent/ up & down stream areas being used for job creation through betterment which removes a delivery obstacle. This impact scope not be de scoped at this stage & not be considered for de scope until the land for flood mitigation is more definitively identified by HAL.
2. BCC consider that 'local roads' (paragraph 1.1.2, line 3) are likely to include those in southern Buckinghamshire including the A4 and local roads from junctions off the motorway network. This is based on initial modelling by HAL as well previous DCO and non DCO schemes BCC has considered.
3. With reference to paragraph 1.2.3, BCC's submission to HAL'S Consultation One set out a triple lock on airport capacity coming forward including the need to meet air quality standards through investment in surface access capacity and connectivity. This is also a policy requirement in the draft ANPS laid before in early June 2018 (ANPS 1.37, 3.36, 3.38 and 5.9, for example, with the need to consult BCC as a highway and transport authority at ANPS 5.11).
4. HAL at Scoping paragraph 1.9.21 onwards should refer to statutory planning (minerals and waste) policy and transport policy which will be material considerations for those aspects of the DCO. This includes the adopted [Buckinghamshire Minerals and Waste Core Strategy](#). The ES should also include our 'Saved' Minerals and Waste Local Plan policies, and the Minerals and Waste Core Strategy adopted in 2012. These form part of the statutory development plan.

### 2. Description

1. BCC notes that there is not reference to the Ivers villages (Richings Park, Iver and Iver Heath). BCC welcomes though the initial work by HAL to engage with these communities acknowledging that the Ivers will become near neighbours of expanded airport and that design iteration and mitigation is highly likely to include land with the Ivers community area of southern Buckinghamshire.
2. BCC supports the proposed night time ban on flights (paragraph 2.2.27) and would ask that HAL and PINs ensure that the ES Scope clarifies the respective roles and timing of the DCO decision, CAA economic regulation and the Airspace Change Process (ACP) and government in setting night time restrictions on Heathrow as a regulated airport.

### 3. DCO Project

1. BCC notes that the project is currently defined by the parameters and geographic area essentially drawn from the Davies Commission and HAL's Consultation One information

(Paragraph 3.2.1). HAL have confirmed, most recently in early June 2018 after the scoping request was submitted, that land and sites in Buckinghamshire will be required for flood capacity. Given the size of areas involved and opportunities flagged to HAL for other mitigation in the county, including land in BCC control, the redline and/ or areas required to be HAL control for the duration of construction and with access and revenue/ maintenance cost agreements in place will require the DCO project 'redline' to be drawn more widely. For the construction phase, and in view of rail and motorway access points the centroid for consideration of impacts across all topics will move significantly north including the Ivers area and potentially Denham and Stoke Poges.

2. BCC acknowledges and supports the process (paragraph 3.2.13) for development not in the DCO application to be brought forwards as part of the local plan making process. This follows NNPF principles for a 'plan led' planning system (NPPF, para.17)
3. BCC notes the potential extended period of construction to 2035 (3.4.12) and that whilst this may reduce the intensity of construction impacts on the Ivers area it would extend the duration of impacts which may then impact on sites cumulative construction impacts (HGVs etc) and the other development sites' phasing, as identified in the emerging South Bucks Local Plan.
4. BCC as transport authority supports the maximum use of rail for both construction materials and operational freight serving Heathrow (3.4.14), which then minimises HGV movements on local Buckinghamshire roads.

#### **4. Scoping Approach**

1. BCC is reassured by the confirmation from several different members of the HAL team, covering a number of topics at workshops in May and June 2018 setting out the Scoping approach, that the area to be assessed will increase as HAL confirm the inclusion of mitigation and associated works in land to the north of the M4 i.e. in southern Buckinghamshire. The nature of this work including flooding, access, recreation, archaeology and biodiversity will necessarily require the future agreement with BCC as either the statutory body or the local authority hosting the local topic experts on behalf of other councils and groups to the scope and methodology the EA for this land and works.
2. BCC reiterates that the number of projects in and around Iver, with their attendant HGV impacts requires cumulative assessment by HAL. With reference to Future Baseline (4.3.5(2)), first phase capacity (4.3.5(3)) and Year of maximum construction effects (4.3.5(4)) BCC requests that HAL assess the impact of an uplift in ATM with the increasing size/ load factor of aircraft and freight growth to ensure that traffic impacts and resultant air quality effects are not pushed into southern Buckinghamshire, as a consequence of surface access capacity not being in operation to enable an early mode shift by passengers, employees and freight.
3. BCC as M&WPA requests early sight of the Resource Management Plan (Table 4.5) and in particular the waste sections to enable an Inspector at the forthcoming M&WLP Examination to be advised on the implications of Heathrow construction and operation. For construction BCC considers that HAL should, even at this early stage, be able to provide an outline of the construction and waste management methodology which will be passed through to contractors bidding for Tier 1 contracts and then passed down through contract awards to sub- contractors.

#### **5. Air Quality and Odour**

1. BCC will continue to work with our District colleagues through the Bucks Air Quality Management Group to ensure that the air quality and odour sources and receptors within the BCC remit are considered and design changes and mitigations sought from HAL which deliver improved Public Health outcomes. Where possible the Council's other roles, such as right of way, Country Parks and Schools will be used to both inform that design and facilitate mitigation delivery.

## **6. Biodiversity (Ecology Advisor and Consultant to SBDC)**

1. The approach to the EIA appears satisfactory with respect to the predicted impacts and methods of assessment. BCC's main concern is that the scope of the DCO must be fully accounted for, especially with respect to the ecological vectors which are scoped in and out and the value placed on them.
2. BCC understand that HAL advise that detailed design and therefore full impacts cannot be applied initially (i.e. initially during the EIA assessment) but will be left until after the determination of the order or application. As a consequence, BCC is concerned that vital information may therefore be omitted and vectors scoped out incorrectly. It is important therefore to adopt a precautionary approach to biodiversity and over scoping rather than under scoping occurs.
3. For instance, the current level of surveys (south of the M4) has, it is reported, found no major ecological constraints. However once the survey area has been extended to the north (i.e. into Buckinghamshire) to cover road developments and flood prevention elements, this may impact on the Colne valley more and more constraints may be present. Therefore changes to the scope of the DCO need to be incorporated into the EIA at all times and survey and data searches need to reflect these changes.
4. Paragraph ii of the scoping document states 'environment assessment does not rely upon precise component location or detailed design information but informs the Preliminary Environmental Information Report to be published with the preferred plans' This approach potentially will mean vectors are undervalued, scoped out or impacts predicted incorrectly. They may not then be considered during changes/ the addition of new land areas which come later.
5. HAL's desk studies and surveys must also take into account the fact that ecology impacts can occur a long way from the source of impact, especially when river catchments and protected sites are being considered. Data collection and surveys covering a restricted buffer of 2km (as currently requested by HAL) may not be adequate.
6. The Colne Valley and chalk river catchments are particularly important areas for the vital movement of biodiversity. Therefore the impact to connectivity of habitat need to be carefully considered, not just in relation to the most protected species but also more common species or assemblages (such as migrating birds and mammals of open spaces and reptiles) All these groups (and others) contain species which are in decline, but once considered common (e.g. hares, hedgehogs, adders, common lizard) The danger is that these species will suffer extinctions if connectivity is cut off. Therefore it is vital that HAL in the EIA does not just value our most protected species but places them in the context of other species and habitats.
7. In a major development such as this it may be common species assemblages that are most at risk of local extinction because of fragmentation of habitat. This should be fully considered within the EIA.
8. BCC notes that HAL's surveys have identified the presence of protected species to the north and west of the airport i.e. close to the administrative boundary of the county. This

reinforces the need to consider the wider connectivity of the ecology network particularly along river/ water course corridors.

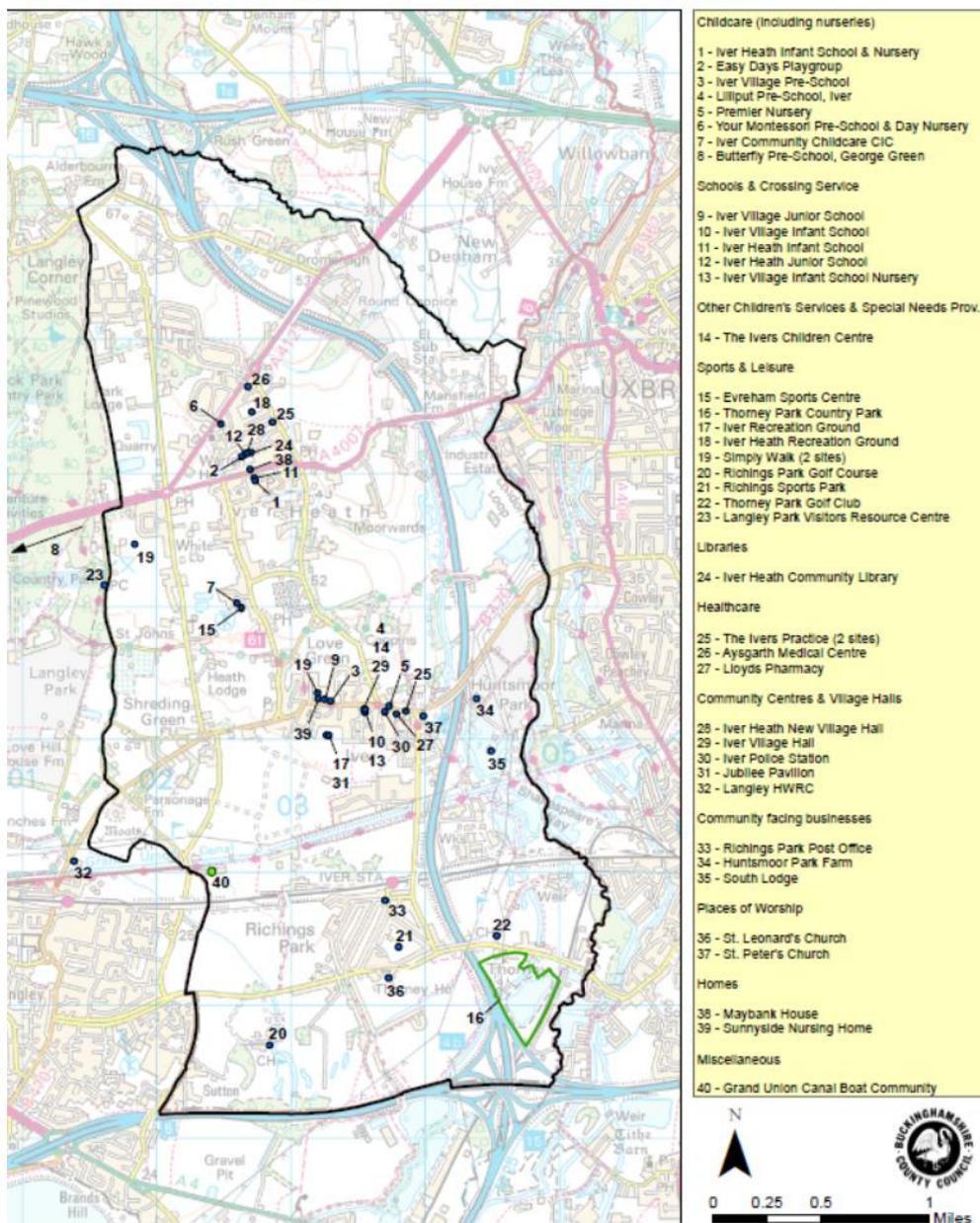
## **7. Carbon & Other GHG and 8. Climate Change**

1. BCC will address Carbon. GHG and Climate Change matters through interrelated topics including Transport.

## **9. Community (Strategic Infrastructure Project Lead and Strategic Access Officer)**

1. BCC has been working with HAL and as a founding member of the Iver Member Liaison Group: a partnership between the parish, district and county councillors, to ensure that the Ivers community is fully considered as part of the multiple major projects permitted, planned and to be constructed and operated in the area. The Community Facility Plan below has been provided to HAL to show the community assets (in response to the HAL: Socio Economic technical note (April 2018)) to assist HAL's consideration of these services and locations as part of master planning, DCO design iteration, mitigation and compensation.
2. With reference to Table 9.4 BCC has provided comments to HAL on its Socio economic technical note (provided to HSPG members on 24 April 2018) which includes Iver within the Inner Study Area. BCC acknowledges that the ES is a 'work in practice' and that HAL themselves recognise that the Study Area is highly likely to increase to cover more of southern Bucks as mitigation areas are confirmed in the county. It is unfortunate that Table 9.4 does not include or reference the Ivers community. BCC requests that HAL re confirm the Ivers community is in the Inner Study Area, as set out in the April 2018 Technical Note.

## Heathrow: Community Service Locations & Facilities in Iver



3. BCC notes that footpaths are considered in the Community topic rather than Traffic and Transport. BCC has responsibility for the maintenance of public rights of way, including footpaths, bridleways, restricted byways and byways. These routes are legally recorded on the definitive map and statement, and the council has a statutory duty to review and keep it up-to-date. BCC is strategically guided by the Buckinghamshire Rights of Way Improvement Plan 2008-18 and The Buckinghamshire Local Access Forum.
4. Rights of Way form an important part of the strategic sustainable transport network by allowing public access for walking and cycling between communities and for travelling to work as an alternative to the private car. They are part of an integrated transport network, linking transport modes such as railway stations, bus and cycle routes. Much of the National Cycle Network follow rights of way. BCC in view of the local access opportunities that the Project can provide **recommends** that Rights of Way be considered in the Transport and Traffic topic. BCC suggests that rights of way also need to be addressed under the socio-economic, health and landscape and visual impact topics and be considered in the Cumulative assessment. This includes impacts with other projects including the Western Rail Link to Heathrow DCO.

5. Impacts on the severance of footpaths and bridleways needs to be addressed by HAL and convenient alternative routes provided. More ambitious walking and cycling routes, separated from roads, and part of a wider green infrastructure network, should also be addressed as mitigation for the local communities affected by the Project. Examples where cross-boundary improvements could be made include the Grand Union Canal, sections of the Colne Valley Trail and Thames Path (National Trail) corridor from Maidenhead to Windsor. Another link is a potential M4 crossing at Old Slade Lane where a bridge is being replaced under the M4 Smart Motorway DCO project. Footpath links including current permissive routes under the M25 should link with Colne Valley Trail. HAL should follow Sustrans construction standards and also ensure bridleway rights are recorded.
6. The rights of way network also provides recreational opportunities for people seeking fresh air and exercise. Local, regional and nationally promoted routes need to be identified in the EIA, as well as locally popular routes. Open access land, common land, village greens and other recreational open spaces should be assessed. Impacts should be recognised and measures proposed to mitigate any restricted access to green spaces and open countryside as a result of the scheme. If rights of way need to be formally closed during construction, suitable alternatives should be available.
7. BCC has provided Information on rights of way in the Buckinghamshire to HAL.

## **10. Economics and Employment**

1. BCC is working with BTVLEP to consider and support the economic benefits of expansion for the county's residents and businesses and the wider England's Economic Heartlands area. BCC will consider the adverse economic impacts of the Project through the Transport topic and seek to ensure that mitigation provides for improved local and wider county access to employment, training and business opportunities. The key measures of this will be:
  - reducing journey times to the Heathrow area from High Wycombe, Aylesbury and other Bucks towns and so for all residents and businesses
  - improving the availability and frequency of travel options for residents and businesses in southern Bucks

## **11. Historic Environment (Senior Archaeology Officer)**

1. BCC's Buckinghamshire County Archaeological Service maintains the local Historic Environment Record and provide expert advice on archaeology and related matters.
2. BCC welcome that the Historic Environment is included in all of the design components and development phases in Table 1 on page iv of the EIA Scoping Report Vol 1 Main Report May 2018. We also welcome the inclusion of the Historic Environment in Chapter 4: Approach to EIA Scoping, page 4.26, which includes the direct loss of significance and the change in significance during construction and change in significance through the material and/or perceptual change to heritage assets during the operation phase.
3. BCC especially welcomes the inclusion of Chapter 11 of the EIA Scoping Report Vol 1 Main Report May 2018 starting on page 11.2. Stakeholder engagement has taken place as stated in section 11.3 and welcome that ...This dialogue will continue throughout the pre-application period as part of the EIA process...
4. BCC expect that the impact area of the proposed scheme will increase as ecological and flood mitigation schemes are developed and welcome that 11.4 includes ...As the design and consultation processes progress and the DCO Project is refined, the study areas may

continue to evolve to accommodate any changes that are generated. As the study areas change, data collection may also be reviewed and updated...

5. Paragraph 11.4.3 on page 11.7 of Vol 1 Main report states, the core historic environment study area will be used to develop an understanding of the historic environment relating to the development footprint of the DCO Project. BCC consider this extensive study area allows for a holistic approach to the characterisation and assessment of the historic landscape and informs the identification of designated and non-designated historic environment assets, especially their setting, across the wider area.
6. We welcome the inclusion of the following paragraphs:
  - Paragraph 11.5.6 on page 11.10 states, Archaeological monitoring of the on-going investigation works and review of borehole logs is currently underway.
  - Paragraph 11.6.28 on page 11.14 states, Base line data on non-designated heritage assets will be incorporated as part of the detailed baseline studies and non-designated heritage assets will form part of the historic environment assessment ...
  - Paragraph 11.9.8 on page 11.18 states, In accordance with Historic England advice and guidance, the historic environment baseline surveys (incorporating existing HERs) will include:
    1. Historic Landscape Characterisation
    2. Historic Area Assessment
    3. Historic Aerial Photographic Survey
    4. Archaeological Archive Review
    5. Archaeological Field Evaluation
  - Paragraph 11.9.13 on page 11.19 states, A programme of archaeological field evaluation will be undertaken in accordance with the overarching written scheme of investigation to be produced in agreement with Historic England, the HSPG and Greater London Archaeology Advisory Service (GLASS). This may include non-intrusive geophysical survey and a programme of targeted trial trench evaluation. These arrangements will be subject to further agreement with those stakeholders following consultation of the archaeological archive review.
  - Paragraph 11.9.14 on page 11.19 states, Design of any future archaeological field evaluation will be based on the extent of the design, which will define the spatial extent of intrusive groundworks...
7. BCC welcome section 11.10 Approach to Mitigation on page 11.25 and its two principle elements:
  1. Appropriate historic environment mitigation will be embedded within the design of the DCO Project. Where possible, scheme design, construction and operational practices will be used to avoid or reduce impacts on known historic environment assets. These measures will be taken as part of the assessment of effects of the DCO Project against baseline conditions.
  2. Where such built in design changes have not fully addressed likely environmental effects on the historic environment, a mitigation strategy will be developed. The approach to historic environment mitigation, where required, will be developed in consultation with Historic England and relevant stakeholders and follow appropriate guidelines and current best practice and in reference to mitigation proposed or other environmental topics.

8. Whilst BCC had concerns over the approach to the historic environment being focussed on designated assets and the built environment these issues appear to have been addressed and BCC welcome the commitment to consultation with stakeholders. We understand that an additional document is currently being produced entitled the Archaeology Strategy Plan and we look forward to reviewing this and the overarching written scheme of investigation when these are available.

## **12. Health (BCC Public Health Consultant)**

1. Overall the Scoping Report appears comprehensive, if generic, given the unique elements of the Heathrow project. BCC will need to consider the initial HAL baseline work and findings before being able to advise on whether HAL have considered the community in southern Buckinghamshire appropriately, their public health characteristics and the likelihood that HAL will assess these and mitigate the health impacts of the development. The HIA study area should cover all of the Iver parish area and be extended when and if HAL identify land and communities outside of this area that may be impacted by sources of potential impact including construction traffic, air quality and aircraft noise.
2. Mental health is not specially mentioned even though wellbeing is mentioned. HAL need to include mental health as part of this assessment.
3. Baseline: It remains unclear what this assessment will do if there is no current baseline measurement of our communities and at locations which may be affected worsening air quality or aircraft noise for example/. Will HAL undertake a quick baseline measurement or will PINs recommend that baseline measurement is undertaken? BCC has identified four locations in the Ivers requiring baseline assessment (air quality and noise). These are at clusters of community facility locations, including schools, at Richings Park, Iver High Street, Iver Heath School and Langley Park. At least one location in Iver should also have a ANPR vehicle monitoring to identify the split between different roads users. Part of the approach to mental health should be to provide information and an explanation to the community of the current baseline and how this will change in order to reduce anxiety.
4. BCC supports SBDC in its work with other Councils and HAL as a member of the Heathrow Airwatch Partnership and the Heathrow Community Noise Forum. The wider communication of the work of these partnerships/ groups can assist communities to understand the current baseline and direction of travel of the airport.
5. Vulnerable groups: How are HAL going to ensure they have vulnerable representatives from southern Bucks (the Ivers and locations affected by aircraft noise) part of the qualitative assessment? This includes the residents on the Grand Union Canal and the Mansion Lane residential park. BCC would welcome continued involvement to ensure that the level of 'significance' is appropriate (quantitative & qualitative) for vulnerable groups/ members of southern Bucks communities.

## **13. Landscape & visual amenity**

1. BCC is working with the Colne Valley Park on landscape matters. BCC support the approach of Historic England that HAL should assess the historic landscape value of areas proposed for development and mitigation and the reasons why those areas of land have been designated as nationally important. BCC will consider historic landscape character matters in part under the Historic Environment topic. BCC will also consider tranquillity (ANPS 5.213) in Green Belt land and the AONB in assessing the noise impacts on services as part of the Community and Socio Economic topics.
2. With reference to BCC's previous comments and HAL's acknowledgement that the study area is highly likely to widen (Scoping paragraph 13.4.1), BCC will consider the landscape

and visual impacts of the DCO elements within the county when these are confirmed by HAL and the 5km radius (13.4.2) extended to cover a wider area of southern Bucks.

3. With reference to Table 13.3, BCC ask that HAL includes BCC data including that within and supporting the Buckinghamshire Minerals and Waste Core Strategy and emerging Local Plan as well as data historic data already provided to HAL and with the search area appropriately extended to assess new land take options.

#### 14. Land Quality (including Minerals) (Senior Planning Officer)

- VOLUME 1

1. The review of the development plans does not include the emerging Minerals and Waste Local Plan.

- VOLUME 2

2. Comments in relation to Figure 14.7: Minerals safeguarding sites:

The following sites should be included by HAL as part of the revised baseline:

- All Souls Farm quarry at Wexham Park Lane, Wexham, Buckinghamshire SL3 6LA- for the history of the site, red line area please refer to Delegated Report for application no. CM/46/17;
- Park Lodge quarry at Pinewood Road, Iver Heath Buckinghamshire, SL0 ONE- for the history of the site, red line area please refer to Committee Report for application no. CM/34/17; site in restoration phase. As discussed with HAL this site may be suitable for biodiversity offsetting and / or enhancement/ re provision of Parks and informal recreation;
- George Green quarry at Land Adjacent to Uxbridge Road, George Green, Slough SL2 5NH- for the history of the site, red line area please refer to Committee Report for application no. 13/00575/CC;
- Thorney Mill Sidings at Thorney Mill Road, Iver, Buckinghamshire UB7 7EZ- outstanding application CM/19/17. Given direct rail access and links into the construction area (south of the M4 the site has potential for materials stockpiling if serviced directly by rail without HGV movements.

b) Other Matters - Fig 14.7

- North Denham quarry and North Richings Park sites are not Mineral Safeguarded Sites but North Denham North West extension is a Mineral Preferred Area in the draft MWLP for Bucks;
- North Park Richings Park is a site with Planning Permission (CM/51/16)

Site and planning application information can be accessed at <https://publicaccess.buckscc.gov.uk/online-applications/> using the reference numbers.

- VOLUME 3

Appendix 1.2

3. Para 1.2.12 The last sentence appears not to be finished, unsure what comment HAL seeking to be made in relation to 'drive time'.

#### Appendix 4.1

4. Cumulative effects Para 1.5.9. It would be beneficial for HAL to provide some level of certainty and provide a list of existing projects which will be taken into consideration. Also rather than relying on 'professional judgment' only it may be useful to look at other major projects and their assessment which will then allow HAL to estimate expected waste increase. BCC has provided HAL with the principles document developed by on behalf of all the HS2 Phase 1 Councils which should guide this work excepting that the position will change as the DCO progresses and Tier 1 contractors and below are appointed.
5. Significance criteria for waste, Table 1.41 and Table 1.4.2 in appendix 4.1. As Waste Planning Authorities within the South East, BCC and other WPAs have identified, and agreed, significant waste movement threshold from one authority into another. For the South East these are:
  - a) Non Hazardous /HIC - 2,500tpa
  - b) Inert/CDE - 5,000tpa
  - c) Hazardous - 100tpa
6. The amounts identified within table 1.4.1 are significantly above these thresholds and not acceptable to BCC. The addition of up to 2,000,000 tpa, as set out to be minor adverse impact, would if all managed in Bucks would be double the amount of inert waste received in Bucks compared to 2016 figures. While we acknowledge this would not all go to one authority, across the South East Region this is a significant increase to capacity requirements, and not a minor adverse impact.
7. Table 1.4.1 and 1.4.2 each identify a decrease in landfill void space on varying scale based on severity. There is no definition or measurement placed against local or regional scale. BCC's particular concern is with the Non-inert landfill void space. This is a particular issue that WPAs within the South East are working together on. Any net increase in non-inert landfill and a reduction in void space were it on a local or regional scale would be a major adverse impact for authorities within the South East. This is not just a South East issue, the waste management 2016 summary published by the EA [Waste management 2016 summary](#) shows it is a wider issue across England. As a consequence it is vital that schemes of this scale pushes waste up the hierarchy (as set out in our HS2 Principles) and where appropriate look at options for the scheme to manage its own waste before considering offsite disposal.
8. Are HAL proposing that non-inert waste (construction and operation) needs to go to disposal, rather than recycling or recovery? If so this will have an impact on emissions and greenhouse gases implications of the scheme.

#### **15. Major accidents and hazards (Head of Resilience)**

1. BCC understanding of the in scope area is that flights above the new footprint are included in the risk assessment. That is good. We are concerned that the disassociation of this DCO and the Airspace Change would mean this would be a gap in the DCO and overall consent process. This DCO must consider the impact of the higher levels of air traffic and the greater likelihood of an air crash and the impact on the environment of that.
2. What role does the Environment Agency and Public Health England have on this topic for the DCO?

3. The methodology for terminology / risk assessment needs to be aligned to the UK system of civil contingencies as practised currently. Civil Contingencies Act (2004), Regulations, Statutory Guidance, National Risk Register and National Risk Management process need to be applied to ensure consistency across the board and to ensure that the risk appetite etc is to a single national standard and not a Heathrow adopted standard which may be inappropriate for the DCO and/ or other regulatory approval processes.
4. Note that Heathrow (HAL) is a Category 2 Responder under the CCA and therefore has a statutory duty to share information and cooperate – i.e. they are a part of the Local resilience Forum (LRF). With a footprint in Slough – and prospective land take in Bucks – HAL must also be part of the Thames Valley LRF and so must be expected to liaise with the TVLRF as well as any other they are affecting.
5. The CCA is not mentioned in the list of legislation, nor is the statutory guidance of Emergency Planning & Preparedness – which explains the risk management process. As a Category 2 responder, HAL has a duty to be a part of the LRF and contribute information to the LRF's Risk Groups if requested. This must be part of the consultation and ES process.
6. There is a Risk assessment group in each LRF – HAL should work with that group to assess the risks and associated gaps before putting anything out of scope.
7. Major Accident / Disaster terminology is understandable as the title is MA / D, but HAL should be using the terminology and definitions based on CCA and Integrated Emergency Management – the MA definition from COMAH is about an industrial site going wrong, we are talking emergencies:

“An event or situation which threatens serious damage to human welfare in a place in the UK, the environment of a place in the UK, or war or terrorism which threatens serious damage to the security of the UK”.

The threat to human welfare is an emergency only if it involves, causes or may cause:

- Loss of human life,
  - Human illness or injury,
  - Homelessness,
  - Damage to property,
  - Disruption of a supply of money, food, water, energy or fuel,
  - Disruption of a system of communication,
  - Disruption of facilities for transport, or
  - Disruption of services relating to health”
8. Consultees should be advised of the risk appetite of HAL – are they only interested in very high risks or will they also consider high / medium risks.
  9. The risk matrix needs to be consistent with the LRF's CRR and the UK's NRR to ensure commonality and agreed levels of risk.

## 10. Appendix 15.3:

a. What is the study area – consultees should be provided with a reference from within the 2000 odd pages.

b. HAL and consultees need to consider the receptors outside of the study area (assuming it's not very big?) but which may be impacted by the impacts of any hazard / threat / risk caused by an event.

c. Population and human health. This is a list of names. It needs to provide more detail on the component elements of the locations, with particular attention to the vulnerable, who are more likely to be affected in the event of an emergency. HAL should identify hospitals, surgeries, schools, nurseries, care homes, nursing homes, residential homes / shelters etc. This information has been provided to HAL by BCC and is referenced in the response on Community.

## 11. Appendix 15.4:

a. These hazards and threats need to be drawn from the CCA / NRR risk management procedure.

b. HAL to include local threats / hazards identified by local risk managers and the LRF that may impact – e.g. public disorder, heightened likelihood of terrorism, strikes / bad weather impacting on flights with greater numbers of people unable to fly from the airport and stacking up.

## 12. Appendix 15.5:

a. As a principle HAL shouldn't 'scope out' without talking to the LRF risk groups and agreeing the approach.

b. HAL can't scope out security risks if they are going to impact on the environment / people. HAL need to risk assess this and then ensure that control measures are put in place, look at the residual risk and see if this is tolerable. Although unlikely to be any impact that a non-malicious hazard would produce, HAL could arguably take those out via other routes by not looking at airspace change in this document. IF a plane was brought down by terrorism it could land on a built up area causing catastrophic levels of casualties – are HAL saying that HAL and the Secretary of State saying the DCO will not look at that impact because Security will always prevent a bomb being put on a plane. Are LRF and Councils not able to comment on a non-malicious accident because airspace change is outside the DCO scope?

c. Scoping out biosecurity – rationale given for scoping this out is inadequate (and 1.1.7.3 is irrelevant to the consultation).

d. Appears to be confusion between having a risk assessment for the construction process and having an environmental impact assessment. Similarly HAL is incorrect not to scope things like artefacts / rare species travelling through Heathrow as it has no impact on the environment. As an operational matter this needs to be set out based on HAL's own current risk register.

e. 1.1.14. Don't scope out and instead consider them and assess them and then state whether they are covered elsewhere.

f. With an extension of the footprint of development into the Thames Valley, HAL MUST now engages with the Thames Valley Local Resilience Forum. This needs to be part of the DCO ES requirements (as well as a statutory duty).

**13. Table 15.5.2:**

a. Sect 1.2: SARS / Ebola gets in – need to be included.

b. Also mosquitos – not only gets in but could settle in the environment with novel diseases to the UK – HAL needs to monitor mosquito populations in the environment. Suggest discussion with PHE who attend the TVLRF Risk group.

c. Radiological device legally in a plane comes down in the study area – why shouldn't this be in scope? Ditto chemical / biological.

d. Malicious attack – range from environmental protesters to terrorism – this remain in scope.

e. In summary, don't take anything out of scope unless agreed by the LRF risk group – and then assess everything and record control measures in place.

f. Wild fire – large smoke plumes across the area. Not in scope...?

g. Animal disease in vicinity of Heathrow – if a protective zone was covering Heathrow's footprint, then they would need to consider what measures are required. In scope.

h. Space weather – CME / EMP could take out multiple aircraft with catastrophic impacts. Secondary consequences loss of electricity; tertiary consequences loss of fuel pumps, security measures, water pumps etc. Still not in scope?

**14. Table 15.7.1:**

a. Human populations – severe should include loss of life in low numbers; Large should have a greater number.

b. With all these, HAL should cross-reference with the National Risk Register for consistency.

**15. CONCLUSION:**

a. HAL should make the ES consistent with the current practice in the UK for Civil Contingencies planning and preparedness, specifically using Integrated Emergency Management and the national risk management process. If done, then this will follow tried and tested approach and assist in assessment and the agreement of design changes and mitigation.

**16. Noise and vibration**

1. Noting the role of the CAA (paragraph 1.7.3) and prospectively that of ICCAN, BCC will continue to work with our District colleagues on noise issues. Having set out BCC's principles for Airspace Change Process and for the consideration of noise impacts in previous consultation responses, BCC will now take forward these through related sections in the EIA including Health. BCC statutory and service functions i.e. schools, Country Parks will seek to work with HAL to ensure that service users are informed of possible impacts and

have an opportunity to make comments to meaningfully influence HALs design and mitigation decision.

## **17. Traffic and transport** (Transport Strategy Lead Officer)

1. It is difficult to comment properly on the Scoping Report document because the precise nature of the interplay between the Surface Access Strategy, the Transport Assessment and Travel Plan, and the EIA is not specified in enough detail to help a reader understand.
2. BCC's principal concern (shared with HSPG) is that there is insufficient 'red line' information. The commitment to 50% public transport boundary should at least be measured from a point beyond the car parking zones, rather than at the perimeter fence.
3. Discussion about the timing of transport modelling needs to take into account when construction starts. This needs to be realistic and flexible. To provide current traffic data it would reassure us if HAL started now installing automatic traffic counting technology at key locations. Sites could be chosen with HSPG to represent sensitive locations and would also serve to allow comparisons with transport models to be made. The HHASAM model looks impressive but we need precise control points on our network (such as on Iver High Street, Burnham Beeches and M40) so we can check outputs against the BCC Countywide model. BCC is in the process of agreeing these with HAL.
4. Some assumptions (such as walk and cycle speeds of 5&10kph) are mentioned, but with a mode as complex as HASSAM more details of assumptions should already have been provided to modelling experts at HSPG to consider and agree or revise.
5. Accepting that specific schemes are not mentioned by name, HS2 is such a significant project with existing approval and in construction that it deserves consideration even at this stage. A connection to the Chiltern Line at Old Oak Common has particular interest to Buckinghamshire and indeed was referenced by the Secretary of State in his statement to the House of Commons when the draft ANPS was laid before the house.
6. Some mentions of principles or clear statements of intent would have been welcome. For example, bus journey times on the last 5km of their journey to be at least 20% less than journey times car, or similar.
7. Although freight and taxi use will be included in the modelling, there is enough significance in their impact that a special study is needed to include factors such as industry practice and cultural trends. Freight, for example, where it uses small vans in large numbers, and the role and influence of the black cab industry group would not be normally reflected in standard models.
8. Freight consolidation centres do not have a reliable history in the UK, and a special study of this would be required to reassure us about potential long-term use. This should address current practice, lessons from other projects and international best practice.
9. Whilst accepting that it is early days to talk about mitigation; although HAL are doing so with reference to air quality impacts from transport, there is a section on this in the report and it could be made clearer exactly how and when there will be an approach to working with highway authorities to fund, design and build mitigation measures.
10. Para 5.13 of the ANPS talks about reducing community severance. This also applies to non-highway access including bridleways and informal 'desire line' routes. This is important for trips from and within the Colne Valley and should be recognised.

11. It is good that para 17.5.2 mentions 'walkovers' as these are important for the bridleway network and to identify key informal routes (the holes in the fence). BCC would be happy to contribute mapping and knowledge to this study. (see map below) Other parts of the EIR mention user surveys, which could be cross-referenced here.
12. As a key point there should be mention of improvements that start before construction begins. For example, the introduction of controls over drop-offs by non back-loaded taxis, and the introduction of realistic car parking charges for staff could precede full construction. As the draft policy references percentages, the early introduction of measures now to achieve quick wins and start to prove the case for interventions should not weigh against the DCO decision balance but rather enable community and business support for the overall mitigation and compensation package.
13. The engagement table (17.2) slightly exaggerates the outcome of meetings, for example describing one as having 'no comments or queries'. Some meetings have been organised at late notice and had fewer than ten people there, though even that small number have made consistent comments and queries, not least about the location of the red line. BCC is recording meetings and outcomes as part of the DCO engagement process to enable HAL and BCC to reach an agreed Statement of Common Ground. It would be unfortunate if in response to an adequacy of consultation request during DCO acceptance if, BCC or others considered the Consultation Report did not accurately reflect views expressed particularly if this then led to a public misrepresentation of views to residents and business.
14. Whilst acknowledging the political difficulties with TfL and Hillingdon, at least some mention should be made of how their objective technical requirements are being dealt with.
15. BCC is pleased that is recognition that sensitive areas such as Iver will be examined at a potentially lower threshold. HAL has agreed this requires more clarity. Numbers such as 5%, 10% and 30% are mentioned in the report in different paragraphs at different stages.
16. Table 17.3 includes a good section on Construction Traffic which is a concern for us. Specific mention of Iver High Street would be good here, as well as specific mention of off-highway cycle routes as a potential source of severance. Early geographic de scoping of transport impacts could allays community fears and enable HAL to work on more deliverable options.
17. The Iver Relief Road should be specifically mentioned in Table 17.3 as a potential highway improvement.
18. Positive Bus operation improvements could be added to the bus route changes. For example, an extension of the free bus zone. BCC is also supportive of appropriately located bus priority routes and bus only gateways which enable local employees and passengers to choose bus travel. BCC notes that a number of bus gateways already operate and enable efficient local movement of staff on the 'last mile' of the journey.
19. It is noted that consideration of residents has almost no mention in this entire section.
20. Table 17.4 describes how significance will be assessed. Other document sections, such as air quality, are stronger at this – using such things as expert panels. Developing a consensus with HSPG would appear to be desirable aim here.
21. The construction section 17.10 contains good aspirations. BCC would like early input, along with HSPG colleagues, to ensure HGV routes that a feasible and supported by policy are defined. Adherence to the good standards developed by TfL should be mentioned here.

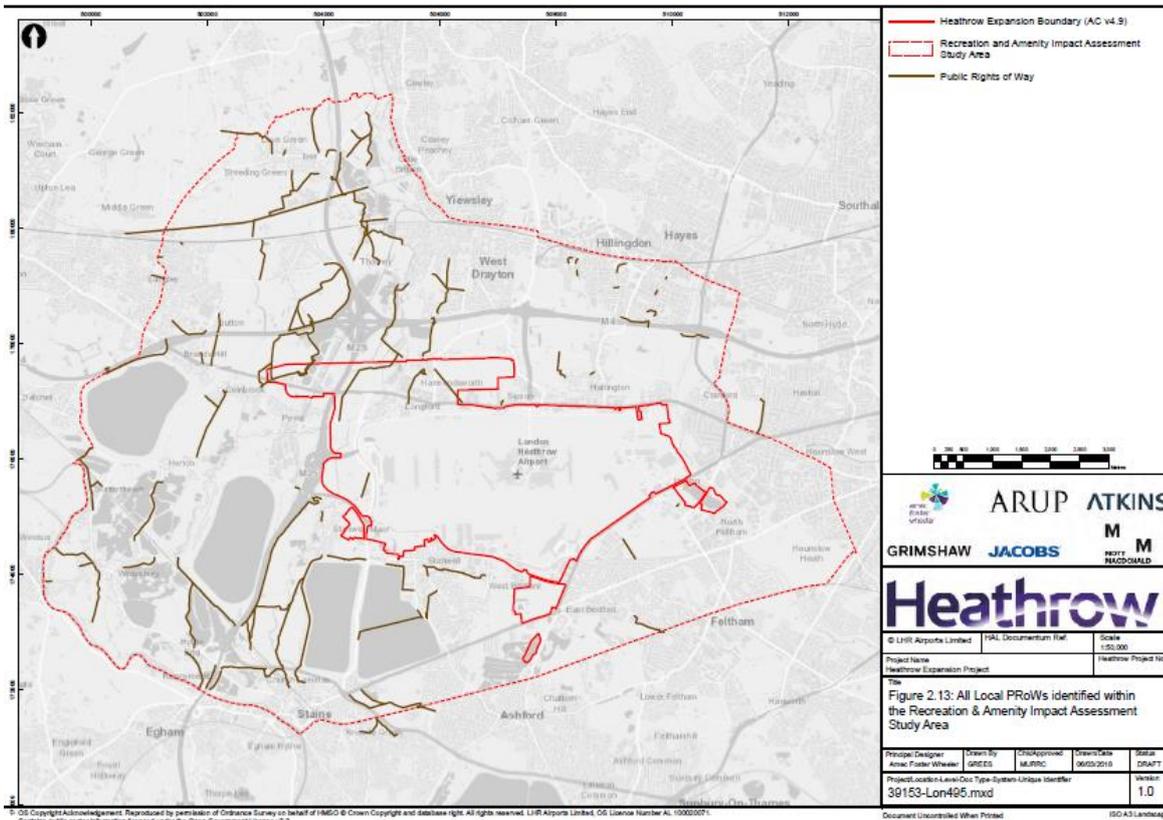
22. At the earliest possible opportunity, the use of freight by rail should have a separate study with numerical targets and delivery dates.
23. There are many references to transport issues in other parts of the document. For example para 5.10.16 mentions that Heathrow is “exploring the potential for ...access charges”. This is not cross-referenced in section 17 (and is not a useful form of phrase). As a significant issue in the recent Silverton DCO, HAL should set out the process for consideration of charging with other ‘carrot & stick’ measures.
24. Although it is a data table Iver is mentioned in Figure 9.1 but not included where it should be in Table 9.4
25. BCC note that boundaries have to be drawn for the study area and BCC would like to see the air quality study area in Fig 5.1 drawn at least 2km to the North of Iver High Street, to include Iver Heath and the A4007 rather than 1km to the South. BCC has explained the reasoning to HAL and HAL acknowledge that the inclusion of further land in southern Buckinghamshire for the project and mitigation will require a change to most, if not all study areas. With reference to Air Quality and Noise, BCC as Public Health body as well as Highway and Transport Authority and service provider recommends baseline air quality and noise monitoring is undertaken by HAL at:
- Iver Village Infant School, Iver High Street (B470)
  - St Leonards Church, Richings Park
  - Iver Heath Infant School, A4007
  - Langley Park Visitor Centre

Baseline air quality monitoring on Iver High Street (see Health comments), should be supplemented by HAL through the installation of ANPR equipment to provide data on the mix of vehicles and so inform decisions on Iver Relief Road based on traffic flows and the source of vehicle emissions.

26. Some sections of the Report, such as 12.10 Health, include a lot of words and good basic principles but lack any kind of highlighting of what would be unique to this project. Examples might include specific mention of contact with GPs, a construction worker health check scheme etc.

**Appendix** – from the appendix (not included in the volume of figures or referenced in the main report)

27. The extract below illustrates a BCC concern that is evident gaps in the PROW network from, to and indeed within the Buckinghamshire network. Some of these are connected by other routes but some are not. Some sections are informally connected (via a hole in the fence) but there is a very high risk that consideration of PROW in one section and cycling in another section presents a risk of the issue of providing coherent routes ‘falling between two stools’.



## 18. Water environment (Strategic Flood Management Team Leader)

1. Legislative and planning context: The BCC Flood Management team comment on issues concerned with Surface Water, ordinary watercourses and Groundwater Flooding. These being a BCC area of responsibility under the Flood and Water Management Act 2010. The EIA needs to take into account the Local Flood Risk Management Strategy of the LLFAs. For BCC this can be found here: <http://www.buckscc.gov.uk/environment/flooding/strategic-flood-management/flood-management-strategy/>
2. It should be noted that for ordinary watercourse any modelling work or discussions around this watercourse need to be held with the Lead Local Flood Authority (LLFA) in addition to the Environment Agency (EA).
3. Figure 3.11: The area of land impacted by the diversion and/or culverting of the watercourses seems quite restricted. Is there a definition of what these impacts are – is it just conveyance? If not then the impacts would be wider (environmentally) and if it is conveyance how can HAL be sure that the impacts are constrained to these locations?
4. Section 3.3.31: How will impacts of these different options be assessed by HAL – water flows, water quality, geomorphology and sediment transport, ecology and impact on flora/fauna, transport and movement of mammals, fish and invertebrates?
5. Table 3.6: The environmental topics relevant to operation should include health as having an open water course as opposed to a culvert can impact on the health and wellbeing of a community.
6. Section 3.3.32: The sites identified for potential flood storage do not show the capacity potential of these sites and therefore it is difficult to judge how many of these sites would be required for flood storage. The section states the overall compensation storage required for

each river, however no estimate has been given for each of the proposed flood storage locations. If the areas are over 10,000m<sup>3</sup>, they will be classed as a reservoir.

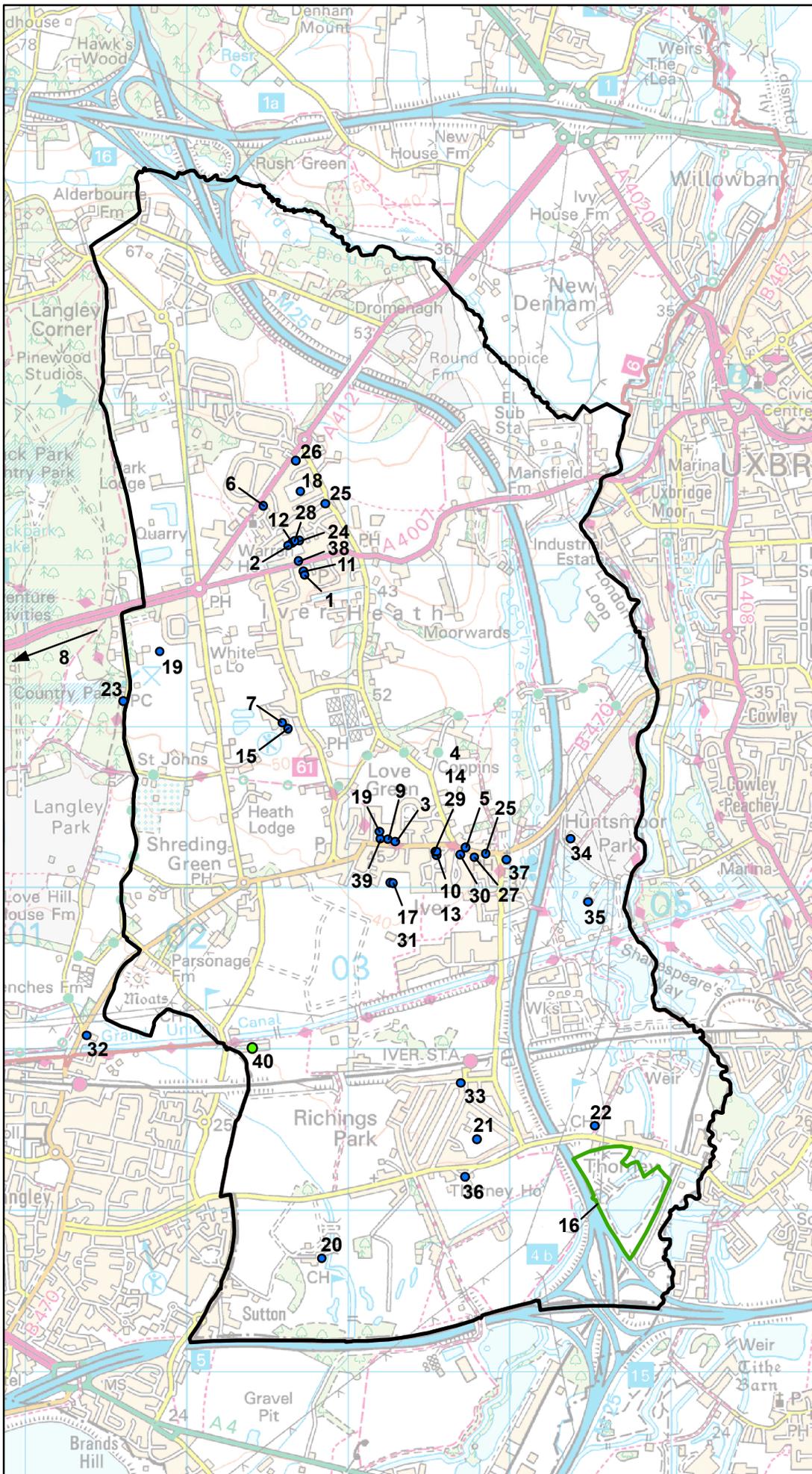
7. Will the compensation areas be in the ground, if so will an assessment on the displacement of groundwater be completed? The location of proposed compensation next to the junction of the M4 and the M25 has been identified as an area with high groundwater levels (JBA groundwater mapping). We are therefore concerned that groundwater will be displaced towards the tunnel for Western Rail Link to Heathrow. This will need to be considered as part of the WRLtH scheme and then by HAL including as part of the Cumulative Impacts Assessment.
8. Section 3.4.8: Are any of the locations for temporary construction or stockpiling in the fluvial or surface water floodplain? If so how would this be dealt with within the construction period?
9. Section 8.2.3 and 18.2.3 Due regard will be given to local policies and Governments 25 year Plan. What will HAL do to consider policy and how will this be undertaken with LLFA?
10. Table 18.2: Whilst Groundwater modelling has been discussed with the Environment Agency the responsibility for Groundwater management lies with the LLFAs so BCC and other LLFA should be involved in these discussions and be given more time (outside the Scoping timeframe) to assess the Groundwater modelling method statement in Appendix 18.2.
11. Table 18.4: Other groundwater data is available from JBA Ltd and ESI?? Local data may be available from local authorities on locations of local flood risk and flood hotspots. Local landowner and resident information can also add to this flood picture.
12. Appendix 18.2 and associated figures 18.7 and 18.8 show the fluvial flood risk but there is no reference to the surface water flood risk mapping or impacts on that existing surface water flood risk
13. Section 18.10.2 – point 3: This is the only mention of Sustainable Drainage in the document. SuDS should be prioritised when managing existing and proposed surface water runoff and given greater prominence in the document in line with national guidance.
14. Appendix 18.4 Flood Risk assessment – method statement: This was not circulated to the Lead Local Flood Authorities for review.
15. Section 2.2.1: Although the impact on the surface water runoff from the new runway is to be assessed there is no recognition of the existing surface water flood risk which will be impacted in a similar way to the fluvial flood risk across the area of the new runway. Compensation areas are being provided for fluvial flood risk but what about the surface water – where does that flood water go which is being displaced by the new runway and area of expansion. Interaction and impacts on ordinary watercourses has not yet been defined – when will this be undertaken by HAL and shared with LLFA?
16. Section 2.3.2: Length of watercourse being shorter is indicated as a good thing, but this is not necessarily so. General principle around replicating natural processes, Sustainable drainage (SuDS) and Natural Flood Management all favour slowing down the flow in part to prevent adverse impacts of increased flows downstream. This should be done closer to the source or by replicating natural processes rather than using structures to play that role.
17. Table 18.4.2 – Buckinghamshire County Council have a Sustainable Drainage Developer Pack on our website
18. BCC requests that HAL provide data (shapefiles) for:

- Local surface water study area boundary
- Wider surface water study area boundary
- Groundwater study area boundary
- Locations of the proposed flood storage areas
- Locations of any monitoring locations (Groundwater and Surface Water) in Buckinghamshire

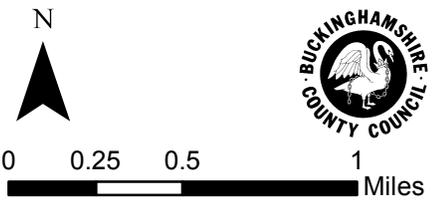
**19.** As the LLFA for the principle area where HAL are considering flood storage areas, BCC requests that HAL clarify the approach and timeline for information, assessment and mitigation design. This may require HAL and BCC to enter into a PPA to ensure resources are available to respond to and assist HAL during the DCO process.

-End-

# Heathrow: Community Service Locations & Facilities in Iver



- Childcare (including nurseries)**
  - 1 - Iver Heath Infant School & Nursery
  - 2 - Easy Days Playgroup
  - 3 - Iver Village Pre-School
  - 4 - Lilliput Pre-School, Iver
  - 5 - Premier Nursery
  - 6 - Your Montessori Pre-School & Day Nursery
  - 7 - Iver Community Childcare CIC
  - 8 - Butterfly Pre-School, George Green
- Schools & Crossing Service**
  - 9 - Iver Village Junior School
  - 10 - Iver Village Infant School
  - 11 - Iver Heath Infant School
  - 12 - Iver Heath Junior School
  - 13 - Iver Village Infant School Nursery
- Other Children's Services & Special Needs Prov.**
  - 14 - The Ivers Children Centre
- Sports & Leisure**
  - 15 - Evreham Sports Centre
  - 16 - Thorney Park Country Park
  - 17 - Iver Recreation Ground
  - 18 - Iver Heath Recreation Ground
  - 19 - Simply Walk (2 sites)
  - 20 - Richings Park Golf Course
  - 21 - Richings Sports Park
  - 22 - Thorney Park Golf Club
  - 23 - Langley Park Visitors Resource Centre
- Libraries**
  - 24 - Iver Heath Community Library
- Healthcare**
  - 25 - The Ivers Practice (2 sites)
  - 26 - Aysgarth Medical Centre
  - 27 - Lloyds Pharmacy
- Community Centres & Village Halls**
  - 28 - Iver Heath New Village Hall
  - 29 - Iver Village Hall
  - 30 - Iver Police Station
  - 31 - Jubilee Pavilion
  - 32 - Langley HWRC
- Community facing businesses**
  - 33 - Richings Park Post Office
  - 34 - Huntsmoor Park Farm
  - 35 - South Lodge
- Places of Worship**
  - 36 - St. Leonard's Church
  - 37 - St. Peter's Church
- Homes**
  - 38 - Maybank House
  - 39 - Sunnyside Nursing Home
- Miscellaneous**
  - 40 - Grand Union Canal Boat Community



## **Heathrow Expansion – Airspace and Future Operations Consultation**

Buckinghamshire County Council (BCC), Chiltern and South Bucks Councils (C&SB) and Buckinghamshire Thames Valley LEP (BTVLEP) welcome the opportunity to comment on Heathrow Airport Limited's (HAL) Airspace Consultation. In view of the current division of responsibilities in a two tier area, such as Buckinghamshire, we seek to continue to work collectively recognising our statutory roles across the county including the districts' role as local planning authority and environmental noise regulatory body. This joint response seeks to ensure Heathrow has a single aligned view from the county's Councils and LEP. We are also working with key partners, not least the Colne Valley Park Community Interest Company (CVP) to consider HAL's proposals, their impact and potential mitigation within Buckinghamshire, on the county's communities, businesses and environment.

We in Buckinghamshire recognise the potential economic benefits that the expansion of Heathrow and the increase in destinations and global connectivity could bring to the county and the wider South East. Equally, as the Planning, Environmental Health, Public Health and business bodies we understand that aircraft noise, and in particular new flightpaths over previously unaffected areas cause not only disturbance but can impact upon the well-being of residents and affect health and productivity through disturbed sleep, for example. Aircraft noise can also impact on our service users, for example, children and staff at schools and the many residents using our local and Country Parks. We also note that an increase in flights, whether it is the proposed initial 5% increase for the two runway airport, or the step change increase in capacity with a three runway airport, would also increase passenger and staff traffic. This in turn could have a significant impact on air quality including in the recently designated Ivers Air Quality Management Area.

As a group representing residents and business in Buckinghamshire we support the expansion of the airport, on the proviso that adverse economic, community and environmental impacts including aircraft noise, air quality and traffic are appropriately mitigated. We recognise the importance therefore in ensuring that HAL consider the impacts - including potential benefits - on our communities, businesses and environment within the geographic area of Buckinghamshire. Collectively we consider that Heathrow should be permitted to expand, including a phased increase in flight numbers, when:

- the airport and Government invest in surface access improvements including rail, road and coach links
- that investment demonstrably delivers capacity which makes it easier for people and goods to access the airport using sustainable links, not increasing congestion on motorways and our local roads and
- the switch to rail, coach and locally active travel modes improves air quality

We refer to this as our ‘triple lock’ to support expansion.

Turning to the consultation materials, we continue to have concerns that residents are worried about flightpaths but feel unable to engage in the issues until flightpath route options (Phase 2a and Phase 3) are consulted on. In particular, whilst the postcode checker in the consultation identifies the corridors that may affect residents it is not possible to compare this to the current situation without looking elsewhere on the HAL website. We welcome confirmation from HAL that the planned consultation for June 2019 will have some indicative flightpaths to enable assessment. The delay though until 2020-22 for the Flight Path options consultation and decision does though cause anxiety about whether the prospective Development Consent Order (DCO) decision to allow expansion in 2021 will have effectively decided the flightpath routes and effects across the county.

In view of the inability to compare current with planned flightpaths, we specifically request that HAL in advance of the June 2019 consultation set out how the three Independent Parallel Approach proposals and the ten of the 18 Expansion Corridors which impact the County comply with the prioritised principle of ‘minimising the number of people’ and communities ‘that are newly overflown’. This principle was prioritised by HAL and signed off by the CAA in 2018 at the first of the three consultation stages.

On the key questions asked in the consultation we consider that:

- HAL should be able to introduce Independent Parallel Approach to improve resilience following approval for both expansion and the new arrival flightpaths. The cap on flight numbers should not be removed - increasing passenger numbers and road borne freight traffic - until new rail and coach/ bus capacity is available and demonstrably improving air quality.
- Our triple lock on expansion and flight numbers should also apply to the expansion corridors and flightpaths ensuring that as transport options and surface access capacity improves, air quality targets are met. This would support a phased release of additional capacity provided by the new third runway.
- The design of flightpaths should remove or minimise the need to overfly communities which are not currently overflown and must avoid noise sensitive locations including Country Parks and Pinewood Studios in the Ivers. The location of services including schools is shown in the Appendix 2 to our consultation response.

We have sought to provide the location information for a variety of sensitive locations which should be safeguarded for the public including important landmarks and other important public areas, the Area of Outstanding Natural Beauty, and the Green Belt.

It should be noted that the changes to the Airspace over Buckinghamshire need to be considered within the wider context of the major upheaval already underway across Buckinghamshire. The list of nationally significant infrastructure projects taking place includes HS2, Crossrail, Western Rail Link to Heathrow, Smart Motorway development, East West Rail, Oxford/Cambridge Expressway and Luton Airport expansion and its associated airspace changes. Buckinghamshire needs to be mindful of the cumulative impact of all these changes to the communities and business in Buckinghamshire.

HAL’s redesign of airspace has the potential to continue the airport’s track record of reducing its noise footprint. Airspace modernisation is supported alongside HAL’s financial incentives for airlines to upgrade fleets to quieter aircraft; which can get higher quicker and so reduce noise near to and further away from the airport. This includes near neighbours/ host communities for expansion closest to the airport in the Ivers and in the Colne Valley Park and wider protected areas of the county such as the Chilterns Area of Outstanding Natural Beauty.

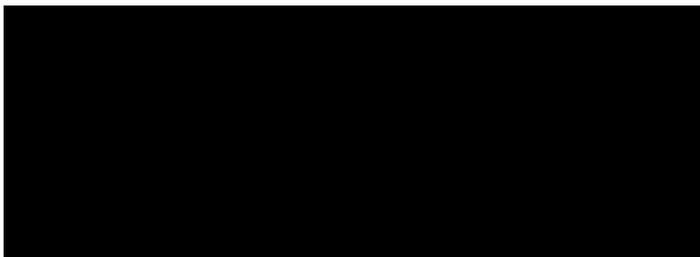
- **New noise impacts**

If new communities, businesses and services are potentially to be to be affected in Buckinghamshire when HAL start to look at actual flightpaths then that impact should be minimised through not overflying previously unaffected locations particularly those which use outdoor space, which cannot be insulated from noise. This should help residents, parents, carers, service providers and businesses to have confidence in the noise assessment and that HAL will keep them informed of monitoring and changes to impacts during the DCO and Airspace processes, construction and then operation. This includes respite from noise for predictable periods which should be applied equally across affected populations.

Whilst supporting airspace modernisation and expansion – subject to mitigation - we remain concerned that the airspace proposals could affect many residents in the south of county. The identification of new locations within the corridors in the consultation such as Marlow, which may get new flightpaths and aircraft below 6000ft, is of very great concern. We are also concerned that increased aircraft noise from Heathrow particularly from the third runway being on the border of the County, could affect the tranquillity and rural experience of visitors and users of Black Park, Langley Park and Thorney Park. The Parks are regularly used by Pinewood and other Studios for filming and indeed those studios use outdoor sets at their sites in and near the Ivers. An increase in noise is likely to jeopardise the use of outdoor sets and the use of the Parks and so increase costs for Pinewood. This would significantly reduce income which supports the park's management and use by one million visitors a year.

We have previously requested HAL fund noise monitoring locations in Dorney, Taplow and at several BCC service locations in the Ivers including two schools and Country Parks to ensure that sufficient data is available for HAL, regulators and for residents and business to understand current noise levels. The monitoring would assist HAL in assessing and communicating how potential changes approved under the DCO and ACP process may impact on health, particularly night time noise, and the use and enjoyment of public space in southern Buckinghamshire and the Colne Valley Park. Baseline monitoring may be required at other noise sensitive locations such as care homes, hospitals and schools & colleges including the National Film and Television School at Beaconsfield.

Our detailed response to the consultation questions is set out in the attached Appendix 1. We look forward to continue working with the CAA, the DCO Examining Authority and HAL to assist in making robust decisions on Airspace and for the DCO. Whilst the previously agreed Airspace Design principles on their face potentially provided a positive basis on which to plan flightpaths the current 'blank page' consultation by HAL needs to be developed using those principles and avoiding new communities and the service locations, vulnerable residents and businesses in Buckinghamshire which could be greatly affected by the introduction of aircraft noise. The sooner that work happens, the sooner that we working with HAL locally can seek to allay understandable concerns about impacts from changes in flightpaths associated with expansion.



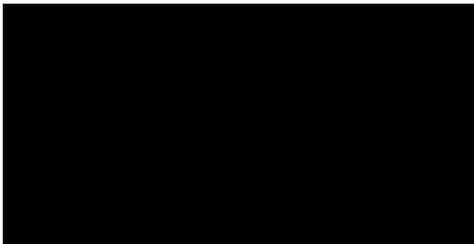
Bill Chapple  
Cabinet for Planning & Environment  
Buckinghamshire County Council



Noel Brown  
Cabinet Member for Community Engagement and Public Health



Deputy Leader, Portfolio Holder for Planning and Economic Development  
for Chiltern and South Bucks District Councils



Andrew M. Smith  
Board Chairman  
Buckinghamshire Thames Valley Local Enterprise Partnership

cc:  
Buckinghamshire's Members of Parliament  
Bucks Planning Group  
Colne Valley Regional Park  
County Councillors  
Caroline Low, DfT

LEP Board Members  
England's Economic Heartlands  
Chilterns AONB  
Iver Member Liaison Group

## Appendix 1

### Questionnaire Response

#### 1a & 1b Noise Objective

The 'Noise Objective' should incorporate the Noise Policy Statement for England 2010 (NPSE). In addition to increased number of noise generating Air Traffic Movements (ATM) from take-off and landing, there will increase noise from the use of runways and from maintenance areas at the airport. In view of the closer proximity of the airport to communities in the Ivers reducing the impact of ground noise also needs to be a priority. This should include noise barriers, bunds and tree planting to reduce the impact of the noise and the visual impact of the airport both its expansion and the increased use of the current two runways.

In view of the ongoing airspace modernisation process we request that Heathrow should explicitly demonstrate how the CAP1711 Airspace Modernisation Strategy published in December 2018 supports the proposed changes and how these will interrelate with proposals for other airports including London Luton.

#### 1c Noise measures

We note that the ANPS identifies noise as the first topic to be considered by the required Health Impact Assessment (HIA). To effectively baseline the HIA and indeed to identify locations which are not overflowed and/ or do not currently have significant levels of aircraft noise we request that Heathrow undertaken baseline monitoring to ensure that the prospective increase in aviation noise or its introduction into tranquil areas with the attendant impacts on physical and mental health, wellbeing and quality of life can be fully assessed. This will include assessment of areas used for outdoor recreation such as Country Parks and the Chilterns AONB used and valued by residents, visitors from London and the wider south east and tourists.

We consider that the new 55dBA 'Lden contour' needs independent verification because it is used in the Heathrow Noise Action Plan and clarity is required on the compensation package that may be undermined by this single metric.

We support the use of technology and innovation to reduce the total adverse impacts to below lower observed adverse effect level (LOAEL) for receptors (45 dB L den, WHO guidelines, 2018). Experience from other airports suggests that the use of improved navigation systems does not necessarily reduce noise impacts but with appropriate monitoring and review could provide one way of better managing them.

Residents in Richings Park are concerned that night time noise from engine testing and which results ground noise will increase with increased aircraft. We request that Heathrow confirm what steps are being taken now to reduce this impact and the plans to remove this source of noise before the new runway becomes operational.

#### 2a & 2b Respite & Alternation

We continue to support the principle that respite should be applied equally across geographic areas. Respite should also be designed to meet the aspirations of the community and how and when householders and businesses use outdoor space, for example. Accordingly, the period of respite may be longer for weekend periods in the summer when more people access outdoor recreation including Country Parks. During the week respite should be targeted to minimise flights and aircraft noise over schools and colleges in the county.

With the introduction of the third runway (most northerly of the three) we would not want to this then lead to more flights and in particular departures as shown in a number of the corridor plans (Departures 6, 7 and 10) in the early morning or evening periods. Runway alternation should

instead look to maximise the use of the existing 2 runways and in so doing follow the current respite approach for areas which are already subject to aircraft noise, albeit in a reduced footprint and impact due to fleet modernisation. This approach coupled with the night time ban would also serve to reduce or remove ground noise from operations which affect communities to the north of the airport.

We support the principle that airspace alternation should also provide respite for communities further away from the airport, although this mitigation proposal should not be at the expense of the airspace principle to minimise the number of people newly overflowed. For example, taken together with the national policy protection provided to the Chilterns AONB, the first step should be to not introduce new flightpaths, then if there is no other option to design the flightpath to get to above 6000ft as soon as possible and only then when it is proposed that communities are affected by new or increased aircraft noise to provide respite on an equal basis.

### **3a- e Directional Preference**

We recognise that the option to change the direction of arriving or departing aircraft provides the opportunity to share the impact of flights on a more equitable basis. We recommend that Heathrow actively engage with each community including the Ivers in Buckinghamshire to establish the community's directional preferences.

### **4a & 4c Nights flights**

Currently noise from aircraft can be heard in the Ivers from 5.30am, when it is understood the more lucrative larger aircraft from the middle-east fly over and land. This is during the early morning hours when background noise levels are lower. This impact may well be worsened if and when the IPA is implemented, albeit for a limited time before the third runway opens, removing the need for the IPA.

Noting that the third runway brings operations closer to the border with Buckinghamshire, we would favour the use of the existing 2 runways for arrivals from as late a time as possible in the morning rather than starting flights earlier on a single runway.

We were encouraged to hear at consultation events that modern international navigation enables aircraft to be much more accurately scheduled to arrive at airports. One benefit of this is the intended removal of the need to stack aircraft including the Bovingdon stack. We support this more active management of flights and ask whether with the potential phased increase in flight numbers that additional spare capacity can be utilised to push back flights until after 6am?

We would like to be clear what the exceptions there could be to the scheduled night time ban. We request that Heathrow undertake, publish and consider sleep disturbance studies in arriving at the proposal for nights flight bans including the option of moving towards the WHO standard for night flights in a phased incremental approach. We considered that revised World Health Organisation (WHO) Guidelines, 2018 for community noise should be referenced in future consultations.

### **5 Other night restrictions**

We support the continued use of the night quota system to continue to drive fleet and airline operational improvements and so reduce the impact of aircraft noise at night. We support both planned future bans on the noisiest of aircraft and higher land charges in the transition period for those aircraft with higher charges at night. Our particular concern with night time operations, outside the proposed scheduled night flight ban are twofold. Firstly, that the aircraft which are delayed should be heavily penalised for arriving within the night time ban period. Moving forward this should provide airlines with the opportunity to reschedule flights to arrive within a day time arrival slot. Secondly, that late or very early aircraft flying over or taking off over tranquil areas introduce a singular noise event which from experience at Luton, for example

causes sleep disturbance and subsequent negative health and well-being effects. In areas with higher levels of background noise and which have become acclimatised to aircraft and other urban noises we understand from Heathrow's noise and health teams that sleep disturbance and health impacts are relatively less for individuals due to the de-sensitisation from noise events.

## 6 Local factors – Expansion

We attach at Appendix 2 a plan showing public service locations in southern Buckinghamshire, which due to their use by more vulnerable groups – children, people accessing medical care, students in a learning environment, for example – that Heathrow should avoid in designing flightpaths. This information will also be provided in GIS format with additional data for Heathrow to consider and take further with the Councils and LEP. These locations are in addition to the principle of not overflying communities that are not currently overflowed.

We note from the arrival and departure corridors shown in the consultation that all of the county, up to a line south of Aylesbury is potentially within an arrival route for the Northern (third runway) and one of six departure routes serving the three runways. We have sought GIS information from HAL to assess how many people in the county may be affected by the noise envelopes which are widely drawn and overlap. The number of residents that may be newly overflowed is not known and may not be known until Heathrow provide proposed flightpaths at the June 2019, in the DCO submission on noise and health for the DCO in 2020/21 and the planned stage 3 Airspace consultation in 2022. This creates uncertainty and unease particularly for residents fearing that their tranquil environment will be destroyed and business that rely on the quiet noise environment to function and attract investment. Sensitive locations will also include tourist/ visitor hotspots including Cliveden & Hughenden.

As an example, in reviewing the specifics, particularly the 'Envelopes' postcode checker shows that the Departures – 10 Northern runway envelope will significantly affect southern Bucks around Farnham Royal and Stoke Poges. The envelope 'funnel' is narrow at this point and at its lowest aircraft could be 1,000ft in concentrated flight paths. The tight turning circle (as low as 2000ft) over Beaconsfield, Gerrards Cross and the Chalfonts is of serious concern to residents and business.

We summarise below some of the communities which would be affected for each of the arrival (A) and departure (D) using the simplified assessment that:

- up to 3000ft there is a significant impact from noise
- from 3000 to 6000ft there is some impact from noise and
- above 6000ft the impact from aircraft noise is likely to be limited

### Arrivals

#### A1 and A2

As shown these arrival corridors may have a limited impact on communities in north Bucks. Our concern is how does this interact with Luton and will this mean aircraft landing or departing Luton will be forced to lower altitudes for longer over north Bucks?

#### A7

Some to significant impact on Marlow, as up to 47ATM per hour at 3000ft and up to 32 flights per hour (above 65dB). Concern that Marlow schools may be significantly impacted if flights at or near the 3000ft level. Further work required to identify if health or care service users are affected. Some impact on Wycombe, with 47 flights but only 1 above 65dB as at higher altitude. Although an arrival corridor, would the sharp turn shown increase the impact from noise as opposed to continuous descent with a less sharp turn? Concern also that this easterly arrival corridor route may be used more often should Heathrow introduce a 50:50 split.

#### A8.

Significant impact on Dorney. Some to significant impact on Marlow and Beaconsfield. Concern again on impact on schools and the National Film and TV School in Beaconsfield. Further work required to consider Marlow Community Hospital and local Care Homes. Vulnerable service users also at Childrens' Centres and Libraries. Assessment required of vulnerable tenants (RSL). Concern that cumulative impact when combined with higher altitude departure aircraft below 6000ft.

### **Departures**

#### D5.

Significant impact on Dorney and Taplow as aircraft may be as low as 2000ft. If below 3000ft then aircraft will also be adding to air quality issues within the AQMA for the M4. Concern that aircraft noise and air quality will affect schools in Dorney and Taplow. Although this area of Bucks may only have one departure flight path (with two more being further south) the frequency of aircraft at up to 17 flights per hour and all over 65dB may significantly impact students as well as the wider community.

#### D6.

Significant impact on Stoke Poges, from aircraft at 1500ft. All 17 flights per hour are above 65dB. Cumulative impact with other new runway departures in easterly operations (D7). The low altitude of aircraft may also worsen the air quality position in the M40 AQMA. Significant number of schools in well populated area. Communities from Burnham to Beaconsfield would have significant impact from three flightpaths (17ATM per hour/ all above 65dB) as low as 2000ft spread over this area of southern Bucks. Further out communities from Marlow to the Chalfonts would have the same three flightpaths (17ATM) as low as 3000ft. Large number of schools significantly affected. Some impact further out (north west and north) for the larger populations centres of High Wycombe and Amersham. To avoid population centres flightpath concentrations may result in 'noise sewers' particularly as a westerly departure route this would be used 50 to 70% of the time. Flightpaths could cross the Chilterns AONB at between 2000 and 4000ft significantly affecting the basis for designating and protection of the AONB.

#### D7.

Some impact on Gerrards Cross, Ivers and Colne Valley. Above 3000ft and 17 flights per hour (all above 65dB) Impacts on schools and Country Parks and Pinewood. The prospective impact from aircraft if near the 3000ft level rather than upper altitude range (up to 12,000ft) would make this easterly operations departure corridor/ single flightpath route for the new (northern) runway unacceptable. If taken forward as an option at the consultation in June without a worse- case scenario fixing altitudes above 6000ft would in all likely lead to an objection to expansion from BCC as operator of the Country Parks. Aircraft at or about 3,000ft would also require the Councils' consideration of support for a Colne Valley Park objection as the flightpath could compromise the biodiversity and access benefits proposed as part of expansion.

#### D8 and D9

Although over 6000ft the cumulative impact of multiple departure flights across corridors may have some impact on the Ivers communities. This cumulative impact would require assessment in the DCO application.

#### D10.

Potential significant impact on Stoke Poges as aircraft at 1000 to 6000ft (17ATM per hour). Wide range of altitude bands makes it difficult to identify effects as worst case scenario means aircraft at lowest levels of 2000ft over Gerrards Cross, Beaconsfield and Chalfonts, 3000ft at Denham and 4000ft over the Ivers. Impacts on schools and on possible future growth locations. Flight paths on the inside of the inside of the turn may impact on Country Parks and Pinewood. Work required by Heathrow to identify minimum heights for worst case scenario and remove option for flightpath over/ affecting the Ivers.

- Expertise

It should be noted that the Councils and LEP do not employ an aircraft noise expert and/ or a consultant with expertise in the health effects of noise. Either collectively with other Councils or in our own statutory roles Buckinghamshire will be seeking either technical support from the CAA/ NATS/ ICCAN or funding from Heathrow to ensure that we, residents and business are fully informed on the impacts from the planned airspace changes and as part of the consideration of noise and health impacts in the DCO.

## 7 Local factors – Independent Parallel Approach (IPA)

The map at Appendix 2 also shows the location of services to be avoided for the IPA.

### Questions & comments

- It is not clear whether the DCO will allow Heathrow to immediately increase the ATMs or whether a further CAA approval for 25,000ATM is required?
- How does the ANPS support the need case for the IPA?
- As the IPA routes are not only to be used between 6 and 7am for arrivals how can Heathrow provide a mechanism which will minimise their use at other times of day?
- How will the maximum 6 per hour on the departure runway in mixed mode be controlled?
- If new communities are overflown in IPA will they then be outside of the 'new communities' protection principle endorsed by the CAA for the expansion airspace changes?

We summarise below some of the communities which would be affected using our simplified assessment:

#### A1.

Some to significant impact on Ivers and Denham as aircraft between 3000 & 4000ft (up to 25 ATM per hour between 6 & 7am) and then up to 6 ATM per hour. Cumulative impact with A2 and A3 proposals with aircraft at higher altitudes. Impact on Ivers' schools which currently aren't significantly affected by 2 runway operations. Concern at impact on Colne Valley Reginal Park use.

#### A3.

Some to limited impact on Iver and Stoke Poges (6000-7000ft) as wide corridors shown. Concern that this may led to noise sewers from a particular stack and given the early time of day of arrivals. A resident/ community may possibly suffer from a flight every 2 minutes depending on the use of the stacks. How will the noise quota system operate for IPA to incentivise quieter aircraft?

## 8 Other airspace comments

None

## 9 Other comments

On Air Quality and its links through the triple lock to a phased increased ATM, one of our technical concerns relates to the number of HGVs required before roads were scoped into the Air Quality Assessment. This has been reduced significantly and we have significant concerns that Heathrow is now using the figures from the EPUK/IAQM planning guidance in certain areas.

## 10 Consultation feedback

## Questions & comments

- The consultation is confusing for our communities. Why did Heathrow decide to put the IPA CAP1616, new runway CAP1616 and also how this will be used in DCO considerations into the one consultation?
- With reference to the postcode checker, for example, the figures for “Number of these flights above 65 decibels”, is misleading and may be describing a worst case. This measure is based on “N65” CAP1588 says “The findings included that LAeq,16h was still deemed to be the most appropriate noise indicator to correlate with annoyance. In terms of supplementary metrics to help residents understand noise exposure, it was found that N65 was the most suitable, describing the number of aircraft noise events over 65 dB LAm<sub>ax</sub>.” Does Heathrow consider that other metrics would be better particularly given the need to explain a complex subject so that residents can understand what they are being asked to comment on?
- How does Heathrow propose to consider the ANG 2017 altitude based priorities?
- We understand Heathrow are being careful not to describe actual flight paths but will provide “indicative” information in the PIER. Please advise us how these will be developed and when we will be able to input into this detailed design process?

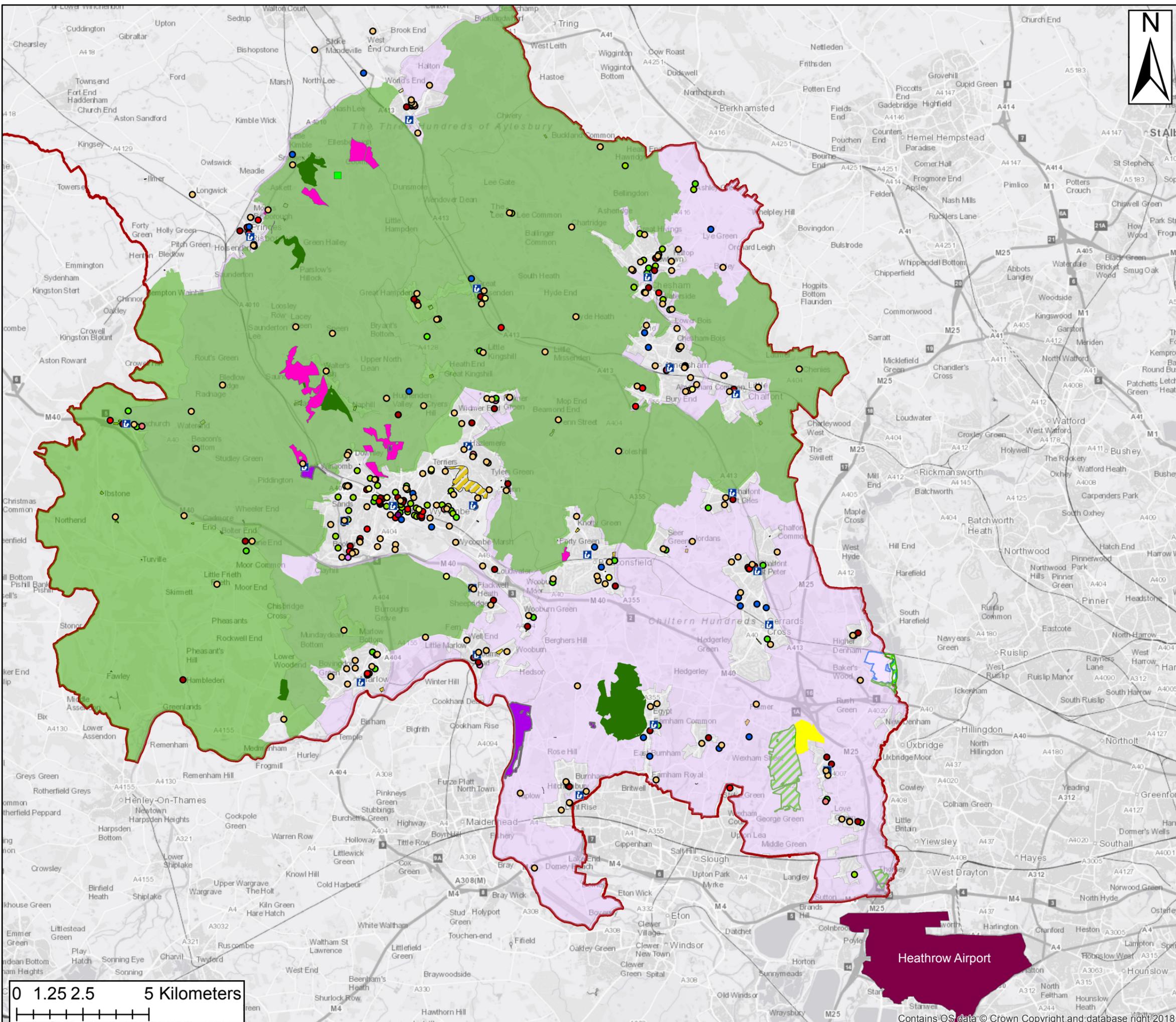
Consultation is extremely challenging in that there is complex material on the consultation website which is difficult for the public to use and understand, despite being able to insert a residential postcode into the system to see the impact of proposed corridors (not flightpaths) on property locations. The highly technical nature of this subject matter will certainly limit the ability of the public to engage in a meaningful, considered way. Although we recognise the value in collecting postcode data to inform the final outcome there is a risk that if communities in southern Buckinghamshire do not respond it will be assumed that the proposals are acceptable. We submit that it is therefore even more important that the CAA provide technical support &/or Heathrow provide resources to assist Councils and the LEP in our roles to inform and represent residents and businesses.

We regret that the airspace consultation is being undertaken separately from the Heathrow expansion proposals being developed, given they are ultimately inextricably linked. Our hope is that the further round of consultation in June 2019 will provide more detail on airspace and noise and health effects so that the DCO and airspace assessments and decisions inform each other and importantly that this is clearly explained by Heathrow and then by decision makers. Noting that the ANPS - should it pass through the current legal challenges unchanged - will remove the question of need for a new runway at Heathrow from consideration in the DCO process we would ask that Heathrow and decision makers clearly set out how that need and its potential phased release will be considered and mitigation and compensation secured by the DCO, Airspace change process and funded via the decisions of the CAA on the economic regulation of the airport.

# BCC Service Locations

Produced by  
Strategic Planning and Infrastructure

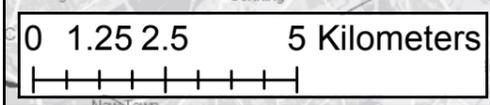
- Schools
- The NFTS
- Colleges
- Independent Schools
- Universities
- 📖 Libraries
- Childrens Centres
- Adult Learning Centres
- Public Health
- GP Surgeries
- Places of Worship
- Chequers
- Youth Clubs
- Sports Hall
- Youth Facilities
- National Trust Limited Access
- National Trust Land Access
- Special Area of Conservation
- Chilterns AONB
- Pinewood Studios
- Green Belt
- Country Parks
- Village Greens
- Buckinghamshire Golf Club
- Illustrative boundary
- Boundaries - Bucks County



Scale: 1:134.148



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Date: 15 March 2019

Submitted via email to:

[HeathrowWesternHub@planninginspectorate.gov.uk](mailto:HeathrowWesternHub@planninginspectorate.gov.uk)

**Cadent Gas Limited**  
Ashbrook Court, Prologis Park  
Central Boulevard  
Coventry CV7 8PE  
[cadentgas.com](http://cadentgas.com)



**REF: HEATHROW WESTERN HUB – EIA SCOPING CONSULTATION**

I refer to your email dated 15<sup>th</sup> February 2019 regarding the above proposed DCO. Cadent has reviewed the Scoping Report provided and wishes to make the following comments:

In respect of existing Cadent infrastructure, Cadent will require appropriate protection for retained apparatus including compliance with relevant standards for works proposed within close proximity of its apparatus,

**Cadent Infrastructure within or in close proximity to the development**

Cadent has identified the following apparatus within the vicinity of the proposed works:

- High pressure and Intermediate (above 2 bar) Gas Pipelines and associated equipment
- Low or Medium pressure (below 2 bar) gas pipes and associated equipment. (As a result it is highly likely that there are also gas services and associated apparatus in the vicinity, these are not shown on plans but their presence should be anticipated)
- Above Ground Installations (AGIs/Governors)

*Note: No liability of any kind whatsoever is accepted by Cadent Gas Limited or their agents, servants or contractors for any error or omission.*

**Diversions/Relocation of Apparatus:**

**Where diversions of apparatus are required to facilitate the scheme, Cadent will require adequate notice and discussions should be started at the earliest opportunity. Please be aware that diversions for high pressure apparatus can take in excess of two years to plan and procure materials.**

**Where diversions of apparatus are required to facilitate the scheme, Cadent will require the party requesting the diversion works to obtain any necessary land, planning permissions and other consents to enable the diversion works to be carried out. Details of these consents should be agreed in writing with Cadent before any applications are made. Cadent requires a minimum of C4/Conceptual Design study to have been carried out to establish an appropriate diversion route ahead of any application being made to ensure that appropriate rights are included within the Order.**

**Where diversions sit outside the highway boundary the party requesting the diversion will be responsible for obtaining at their cost and granting to Cadent the necessary land rights, on Cadent's standard terms, to allow the construction, maintenance and access of the diverted apparatus. As such adequate land rights must be granted to Cadent (e.g. following the exercise of compulsory powers to acquire such rights included within the DCO) to enable works to proceed, to Cadent's satisfaction. Cadent's approval to the land rights powers included in the DCO prior to submission is strongly recommended to avoid later substantive objection to the DCO. Land rights will be required to be obtained prior to construction and commissioning of any diverted apparatus, in order to avoid any delays to the project's timescales. A diversion agreement may be required addressing responsibility for works, timescales, expenses and indemnity.**



## Protection/Protective Provisions:

Where the Promoter intends to acquire land, extinguish rights, or interfere with any of Cadent's apparatus, Cadent will require appropriate protection for retained apparatus and further discussion on the impact to its apparatus and rights including adequate Protective Provisions. Operations within Cadent's existing easement strips are not permitted without approval and will necessitate a Deed of Consent or Crossing Agreement being put in place. Any proposals for work in the vicinity for Cadent's existing apparatus will require approval by Plant Protection under the Protective Provisions/Asset Protection Agreement and early discussions are advised.

### Key Considerations:

- Cadent has a Deed of Grant of Easement for each pipeline, which prevents the erection of permanent / temporary buildings/structures, change to existing ground levels or storage of materials etc within the easement strip.
- Please be aware that written permission is required before any works commence within the Cadent easement strip and a Crossing Agreement may be required if any apparatus needs to cross the Cadent easement strip
- The below guidance is not exhaustive and all works in the vicinity of Cadent's asset shall be subject to review and approval from Cadent's plant protection team in advance of commencement of works on site.

### General Notes on Pipeline Safety:

- You should be aware of the Health and Safety Executives guidance document HS(G) 47 "Avoiding Danger from Underground Services", and Cadent's specification for Safe Working in the Vicinity of Cadent High Pressure gas pipelines and associated installations - requirements for third parties GD/SP/SSW22. Digsafe leaflet Excavating Safely - Avoiding injury when working near gas pipes. There will be additional requirements dictated by Cadent's plant protection team.
- Cadent will also need to ensure that our pipelines remain accessible throughout and after completion of the works .
- The actual depth and position must be confirmed on site by trial hole investigation under the supervision of a Cadent representative. Ground cover above our pipelines should not be reduced or increased.
- If any excavations are planned within 3 metres of Cadent High Pressure Pipeline or, within 10 metres of an AGI (Above Ground Installation), or if any embankment or dredging works are proposed then the actual position and depth of the pipeline must be established on site in the presence of a Cadent representative. A safe working method agreed prior to any work taking place in order to minimise the risk of damage and ensure the final depth of cover does not affect the integrity of the pipeline.
- Below are some examples of work types that have specific restrictions when being undertaken in the vicinity of gas assets therefore consultation with Cadent's Plant Protection team is essential:
  - Demolition
  - Blasting
  - Piling and boring
  - Deep mining
  - Surface mineral extraction
  - Landfilling
  - Trenchless Techniques (e.g. HDD, pipe splitting, tunnelling etc.)

- 
- Wind turbine installation
  - Solar farm installation
  - Tree planting schemes

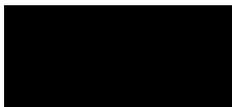
Pipeline Crossings:

- Where existing roads cannot be used, construction traffic should ONLY cross the pipeline at agreed locations.
- The pipeline shall be protected, at the crossing points, by temporary rafts constructed at ground level. The third party shall review ground conditions, vehicle types and crossing frequencies to determine the type and construction of the raft required.
- The type of raft shall be agreed with Cadent prior to installation.
- No protective measures including the installation of concrete slab protection shall be installed over or near to the Cadent pipeline without the prior permission of Cadent.
- Cadent will need to agree the material, the dimensions and method of installation of the proposed protective measure.
- The method of installation shall be confirmed through the submission of a formal written method statement from the contractor to Cadent.
- A Cadent representative shall monitor any works within close proximity to the pipeline.

New Service Crossing:

- New services may cross the pipeline at perpendicular angle to the pipeline i.e. 90 degrees.
- Where a new service is to cross over the pipeline a clearance distance of 0.6 metres between the crown of the pipeline and underside of the service should be maintained. If this cannot be achieved the service shall cross below the pipeline with a clearance distance of 0.6 metres.
- A new service should not be laid parallel within an easement strip
- A Cadent representative shall approve and supervise any new service crossing of a pipeline.
- An exposed pipeline should be suitable supported and removed prior to backfilling
- An exposed pipeline should be protected by matting and suitable timber cladding
- For pipe construction involving deep excavation (<1.5m) in the vicinity of grey iron mains, the model consultative procedure will apply therefore an integrity assessment must be conducted to confirm if diversion is required

Yours Faithfully



**Vicky Cashman**

**Consents Officer**

Land & Property Services

[Vicky.Cashman@cadentgas.com](mailto:Vicky.Cashman@cadentgas.com); 

**Cadent Gas Limited**

Registered Office Ashbrook Court, Prologis Park  
Central Boulevard, Coventry CV7 8PE  
Registered in England and Wales No.10080864

**National Gas Emergency Service**  
**0800 111 999\* (24hrs)**

\*Calls will be recorded and may be monitored

5000419 (01/13)

Page 3 of 4



## **Guidance**

To download a copy of the HSE Guidance HS(G)47, please use the following link:

<http://www.hse.gov.uk/pubns/books/hsg47.htm>

Dial Before You Dig Pipelines Guidance:

<https://cadentgas.com/Digging-safely/Dial-before-you-dig>

Essential Guidance document:

[https://cadentgas.com/getattachment/digging-safely/Promo-work-safely-library/Essential\\_Guidance.pdf](https://cadentgas.com/getattachment/digging-safely/Promo-work-safely-library/Essential_Guidance.pdf)

Excavating Safely in the vicinity of gas pipes guidance (Credit card):

[https://cadentgas.com/getattachment/digging-safely/Promo-work-safely-library/Excavating\\_Safely\\_Leaflet\\_Gas-1.pdf](https://cadentgas.com/getattachment/digging-safely/Promo-work-safely-library/Excavating_Safely_Leaflet_Gas-1.pdf)

Copies of all the Guidance Documents can also be downloaded from the Cadent website:

<https://cadentgas.com/Digging-safely/Work-safely-library>

The Planning Inspectorate  
The Planning Inspectorate  
Temple Quay House

Temple Quay  
Bristol  
BS1 6PN

Plant Protection  
Cadent  
Block 1; Floor 1  
Brick Kiln Street  
Hinckley  
LE10 0NA  
E-mail: [plantprotection@cadentgas.com](mailto:plantprotection@cadentgas.com)  
Telephone: +44 (0)800 688588

**National Gas Emergency Number:**  
**0800 111 999\***

**National Grid Electricity Emergency Number:**  
**0800 40 40 90\***

\* Available 24 hours, 7 days/week.  
Calls may be recorded and monitored.

[www.cadentgas.com](http://www.cadentgas.com)

**Date:** 20/02/2019

**Our Ref:** NL\_TW\_Z4\_3NWP\_015984

**Your Ref:** TR020004\_ 31095887 (cjb)

**RE: Formal Planning Application, TW6 3FB, Heathrow Airport, South West Road, London**

Thank you for your enquiry which was received on 15/02/2019.  
Please note this response and any attached map(s) are valid for 28 days.

An assessment has been carried out with respect to Cadent Gas Limited, National Grid Electricity Transmission plc's and National Grid Gas Transmission plc's apparatus. Please note it does not cover the items listed in the section "Your Responsibilities and Obligations", including gas service pipes and related apparatus.

For details of Network areas please see the Cadent website (<http://cadentgas.com/Digging-safely/Dial-before-you-dig>) or the enclosed documentation.

## Are My Works Affected?

**Searches based on your enquiry have identified that there is apparatus in the vicinity of your enquiry which may be affected by the activities specified.**

**Can you please inform Plant Protection, as soon as possible, the decision your authority is likely to make regarding this application.**

If the application is refused for any other reason than the presence of apparatus, we will not take any further action.

Please let us know whether Plant Protection can provide you with technical or other information that may be of assistance to you in the determination of the application.

**As your proposed activity is in close proximity to National Grid's Transmission assets we have referred your enquiry/consultation to our Asset Protection team for further detailed assessment. We request that you do not commence work or take further action with regards to your proposal until you hear from us. We will endeavour to contact you within 21 days from the date of this response. Please contact us at [assetprotection@nationalgrid.com](mailto:assetprotection@nationalgrid.com) if you have not had a response within this time frame.**

Due to the presence of Cadent and/or National Grid apparatus in proximity to the specified area, the contractor should contact Plant Protection before any works are carried out to ensure the apparatus is not affected by any of the proposed works.

## Your Responsibilities and Obligations

The "Assessment" Section below outlines the detailed requirements that must be followed when planning or undertaking your scheduled activities at this location.

It is your responsibility to ensure that the information you have submitted is accurate and that all relevant documents including links are provided to all persons (either direct labour or contractors) working for you near Cadent and/or National Grid's apparatus, e.g. as contained within the Construction (Design and Management) Regulations.

This assessment solely relates to Cadent Gas Limited, National Grid Electricity Transmission plc (NGET) and National Grid Gas Transmission plc (NGGT) and apparatus. This assessment does **NOT** include:

- Cadent and/or National Grid's legal interest (easements or wayleaves) in the land which restricts activity in proximity to Cadent and/or National Grid's assets in private land. You must obtain details of any such restrictions from the landowner in the first instance and if in doubt contact Plant Protection.
- Gas service pipes and related apparatus
- Recently installed apparatus
- Apparatus owned by other organisations, e.g. other gas distribution operators, local electricity companies, other utilities, etc.

It is **YOUR** responsibility to take into account whether the items listed above may be present and if they could be affected by your proposed activities. Further "Essential Guidance" in respect of these items can be found on either the [National Grid](#) or [Cadent](#) website.

This communication does not constitute any formal agreement or consent for any proposed development work; either generally or with regard to Cadent and/or National Grid's easements or wayleaves nor any planning or building regulations applications.

Cadent Gas Limited, NGGT and NGET or their agents, servants or contractors do not accept any liability for any losses arising under or in connection with this information. This limit on liability applies to all and any claims in contract, tort (including negligence), misrepresentation (excluding fraudulent misrepresentation), breach of statutory duty or otherwise. This limit on liability does not exclude or restrict liability where prohibited by the law nor does it supersede the express terms of any related agreements.

If you require further assistance please contact the Plant Protection team via e-mail ([click here](#)) or via the contact details at the top of this response.

Yours faithfully

Plant Protection Team

# ASSESSMENT

## Affected Apparatus

The apparatus that has been identified as being in the vicinity of your proposed works is:

- High or Intermediate pressure (above 2 bar) Gas Pipelines and associated equipment
- Low or Medium pressure (below 2 bar) gas pipes and associated equipment. (As a result it is highly likely that there are gas services and associated apparatus in the vicinity)
- Electricity Transmission underground cables and associated equipment
- Above ground gas sites and equipment

As your proposal is in proximity to apparatus, we have referred your enquiry / consultation to the following department(s) for further assessment:

- Land and Development Asset Protection Team (High Pressure Gas Transmission and Electricity Transmission Apparatus)
- Cadent Pipelines Team

**We request that you take no further action with regards to your proposal until you hear from the above. We will contact you within 28 working days from the date of this response. Please contact us if you have not had a response within this timeframe.**

## Requirements

**BEFORE carrying out any work you must:**

- **Ensure that no works are undertaken in the vicinity of our gas pipelines and that no heavy plant, machinery or vehicles cross the route of the pipeline until detailed consultation has taken place.**
- **Refer to the attached cable profile drawings (if any) which provide details about the location of National Grid's high voltage underground cables.**
- **Note the presence of an Above Ground Installation (AGI) in proximity to your site. You must ensure that you have been contacted by Cadent and/or National Grid prior to undertaking any works within 10m of this site.**
- Carefully read these requirements including the attached guidance documents and maps showing the location of apparatus.
- Contact the landowner and ensure any proposed works in private land do not infringe Cadent and/or National Grid's legal rights (i.e. easements or wayleaves). If the works are in the road or footpath the relevant local authority should be contacted.
- Ensure that all persons, including direct labour and contractors, working for you on or near Cadent and/or National Grid's apparatus follow the requirements of the HSE Guidance Notes HSG47 - 'Avoiding Danger from Underground Services' and GS6 – 'Avoidance of danger from overhead electric power lines'. This guidance can be downloaded free of charge at <http://www.hse.gov.uk>
- In line with the above guidance, verify and establish the actual position of mains, pipes, cables, services and other apparatus on site before any activities are undertaken.

# GUIDANCE

## **High Pressure Gas Pipelines Guidance:**

If working in the vicinity of a high pressure gas pipeline the following document must be followed: 'Specification for Safe Working in the Vicinity of Cadent and/or National Grid High Pressure Gas Pipelines and Associated Installations - Requirements for Third Parties' (SSW22). This can be obtained from: <http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=33968>

## **Dial Before You Dig Pipelines Guidance:**

<http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=33969>

## **Working Near National Grid Electricity Transmission equipment:**

If you are carrying out any work in proximity to an overhead line or any excavation that may be near an underground cable then please consult National Grid Technical Guidance Note 287 that can be found at [https://www.nationalgrid.com/sites/default/files/documents/8589935533-TGN%20287\\_Third%20party%20guidance%20for%20working%20near%20NGET%20equipment.pdf](https://www.nationalgrid.com/sites/default/files/documents/8589935533-TGN%20287_Third%20party%20guidance%20for%20working%20near%20NGET%20equipment.pdf) Further guidance related to underground cables can also be found at <https://www.nationalgrid.com/sites/default/files/documents/8589936512-Excavating%20Safety%20Leaflet%20Electricity.pdf>

## **Excavating Safely - Avoiding injury when working near gas pipes:**

[http://www.nationalgrid.com/NR/rdonlyres/2D2EEA97-B213-459C-9A26-18361C6E0B0D/25249/Digsafe\\_leaflet3e2finalamends061207.pdf](http://www.nationalgrid.com/NR/rdonlyres/2D2EEA97-B213-459C-9A26-18361C6E0B0D/25249/Digsafe_leaflet3e2finalamends061207.pdf)

## **Standard Guidance**

### **Essential Guidance document:**

<http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=8589934982>

### **General Guidance document:**

<http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=35103>

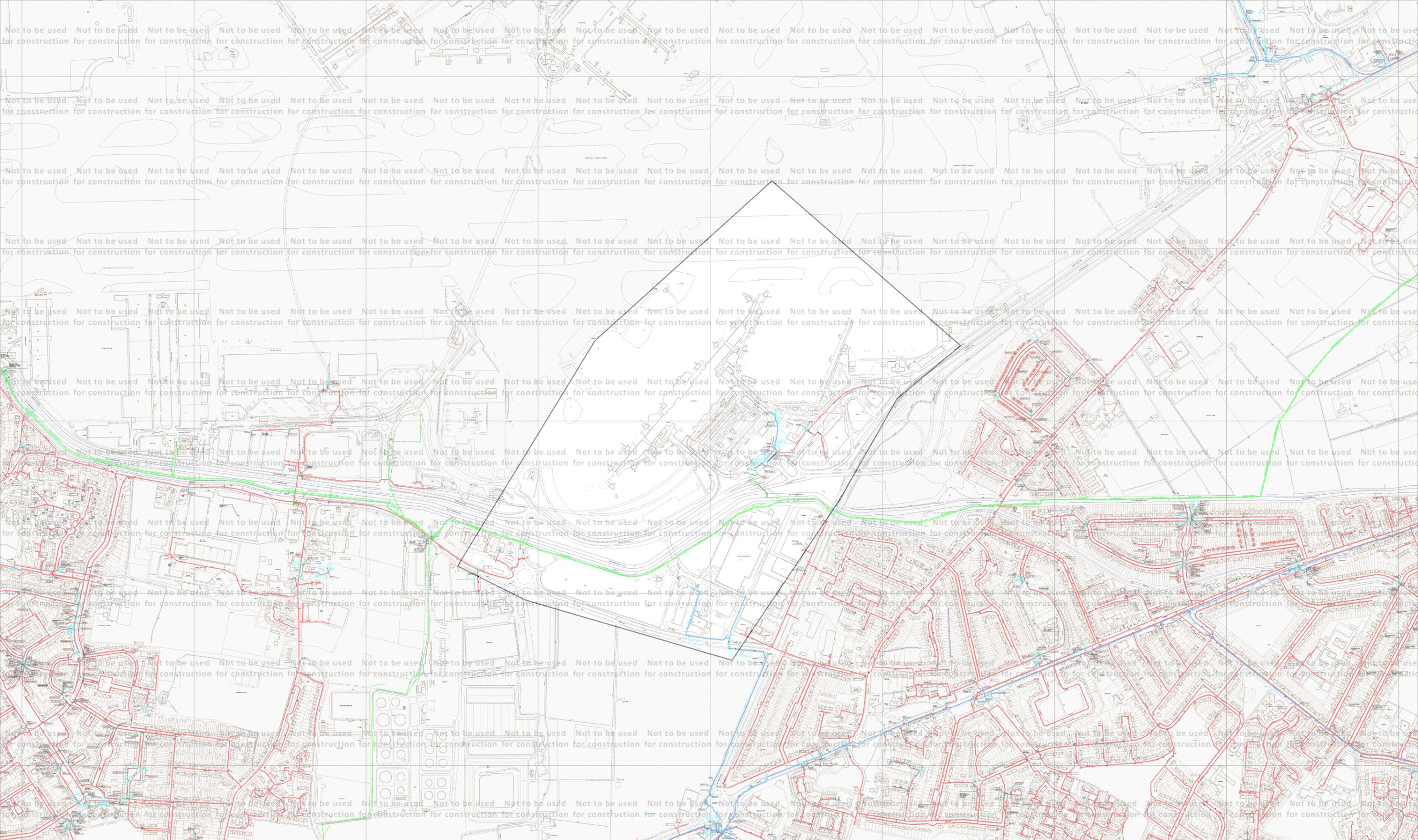
### **Excavating Safely in the vicinity of gas pipes guidance (Credit card):**

<http://www.nationalgrid.com/NR/rdonlyres/A3D37677-6641-476C-9DDA-E89949052829/44257/ExcavatingSafelyCreditCard.pdf>

### **Excavating Safely in the vicinity of electricity cables guidance (Credit card):**

<http://www.nationalgrid.com/NR/rdonlyres/35DDEC6D-D754-4BA5-AF3C-D607D05A25C2/44858/ExcavatingSafelyCreditCardelectricitycables.pdf>

Copies of all the Guidance Documents can also be downloaded from the [National Grid](#) and [Cadent](#) websites.



ID: NL_TW_Z4_3NWP_015984		View extent: 4120m, 2440m		<b>Do not proceed without further consultation</b>		Map 1 of 2 (GAS)			
USER: Carly.Bower				<p>This plan shows those pipes owned by Cadent Gas Limited in its role as a Licensed Gas Transporter (GT). Gas pipes owned by other GTs, or otherwise privately owned, may be present in this area. Information with regard to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc., are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Cadent Gas Limited or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue.</p>		MAPS Plot Server Version 1.11.0			
DATE: 20/02/2019									
DATA DATE: 19/02/2019		<p>Some examples of Plant Items:</p>							
REF: TR020004_31095887 (cjb)		MAP REF: TQ0774		CENTRE: 507997, 174502					



ID: NL_TW_Z4_3NWP_015984		View extent: 4120m, 2440m		<b>Do not proceed without further consultation</b>		<p>This plan shows those cables owned by National Grid Electricity Transmission plc in its role as a Licensed Electricity Transporter (ET). Electricity cables owned by other ETs, or otherwise privately owned, may be present in this area. Information with regard to such cables should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Ancillary equipment such as cooling systems and communication cables are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by National Grid Electricity Transmission plc or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of cables and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near electricity apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue.</p>		Map 2 of 2 (ELECTRIC)	
USER: Carly Bower		<p>Underground cables <span style="color: green;">—</span></p> <p>Overhead lines <span style="color: red;">—</span></p>						MAPS Plot Server Version 1.11.0	
DATE: 20/02/2019		<p>0m <span style="display: inline-block; width: 100px; border-bottom: 1px solid black;"></span> 200m</p> <p>Approximate scale 1:10000 on A3 Colour Landscape</p>				<p>Requested by: The Planning Inspectorate</p> <p>This plan is reproduced from or based on the OS map by National Grid Electricity Transmission plc, with the sanction of the controller of HM Stationery Office. Crown Copyright Reserved. Ordnance Survey Licence number 100024241</p>			
DATA DATE: 20/08/2018									
REF: TR020004_31095887 (cjb)									
MAP REF: TQ0774									
CENTRE: 507997, 174502									

# ENQUIRY SUMMARY

## Received Date

15/02/2019

## Your Reference

TR020004\_ 31095887 (cjb)

## Location

Centre Point: 507997, 174502

X Extent: 1465

Y Extent: 1395

Postcode: TW6 3FB

Location Description: TW6 3FB, Heathrow Airport, South West Road, London

## Map Options

Paper Size: A3

Orientation: LANDSCAPE

Requested Scale: 10000

Actual Scale: 1:10000 (GAS), 1:10000 (ELECTRIC)

Real World Extents: 4120m x 2440m (GAS), 4120m x 2440m (ELECTRIC)

## Recipients

pprsteam@cadentgas.com

## Enquirer Details

Organisation Name: The Planning Inspectorate

Contact Name: The Planning Inspectorate

Email Address: HeathrowWesternHub@planninginspectorate.gov.uk

Telephone: 0303 444 5000

Address: Temple Quay House,, Temple Quay, Bristol, BS1 6PN

## Description of Works

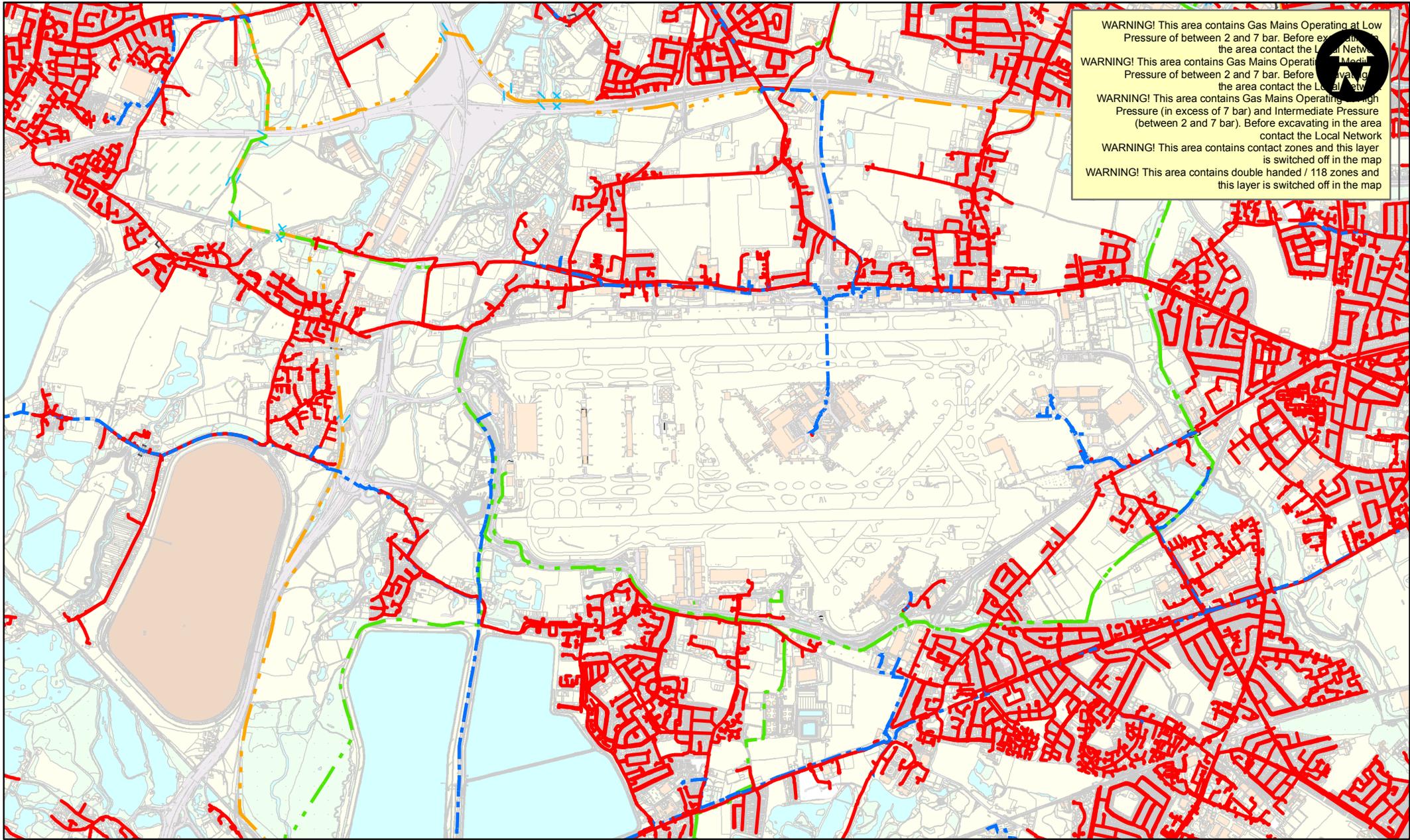
PA. a Scoping Opinion. DB

## Enquiry Type

Formal Planning Application

## Development Types

Development Type: Other



WARNING! This area contains Gas Mains Operating at Low Pressure of between 2 and 7 bar. Before excavating in the area contact the Local Network

WARNING! This area contains Gas Mains Operating at Medium Pressure of between 2 and 7 bar. Before excavating in the area contact the Local Network

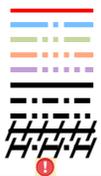
WARNING! This area contains Gas Mains Operating at High Pressure (in excess of 7 bar) and Intermediate Pressure (between 2 and 7 bar). Before excavating in the area contact the Local Network

WARNING! This area contains contact zones and this layer is switched off in the map

WARNING! This area contains double handed / 118 zones and this layer is switched off in the map

SCALE: 1:1,250 @ A4  
 USER ID: Carly.Bower  
 DATE: 20-Feb-2019 15:15:00  
 INTERNAL USE ONLY  
 MAP REF: 506558, 175874  
 CENTRE:

L/P GAS MAIN  
 M/P GAS MAIN  
 I/P GAS MAIN  
 H/P GAS MAIN  
 N/HIP GAS MAIN  
 PROPOSED PIPE - LP  
 PROPOSED PIPE - MP  
 PROPOSED PIPE - IP  
 ABANDON - LP  
 ABANDON - MP  
 Out Of Standard Service



SCHEME: <NG GDFO Scheme Name>  
 DESIGN: <NG GDFO Design Number>  
 REVISION: <NG GDFO Revision>

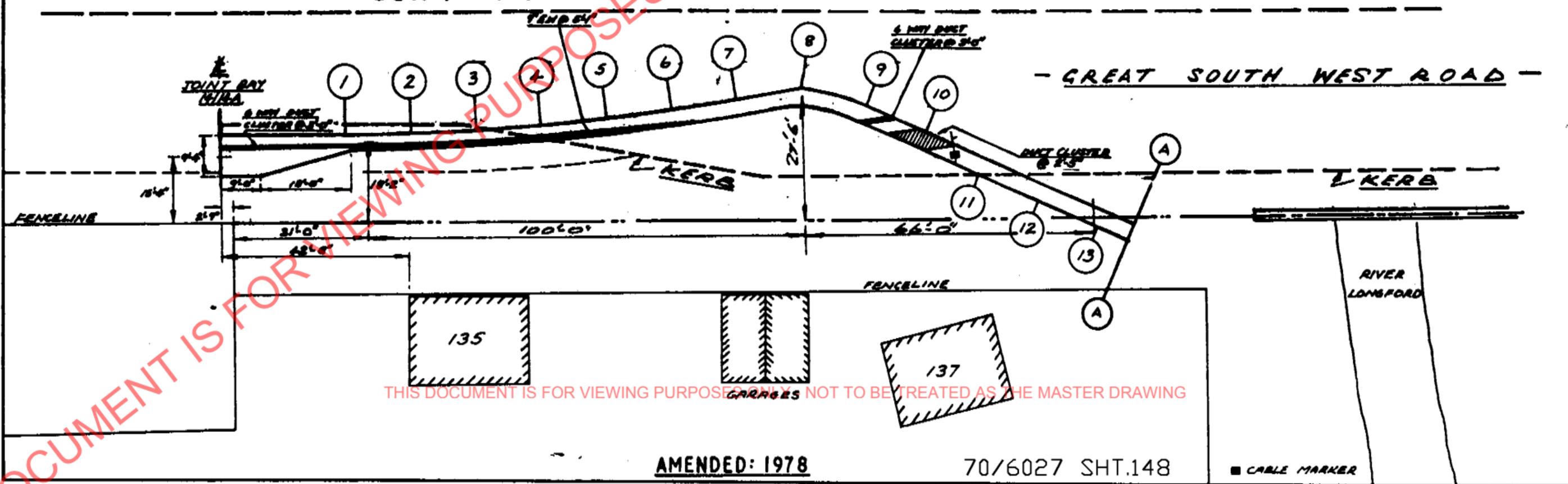
This plan shows those pipes owned by Cadent in its role as a Licensed Gas Transporter (GT). Gas pipes owned by other GTs, or otherwise privately owned, may be present in this area. Information with regard to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc., are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Cadent Gas Limited or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of mains, pipes, services and any other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue.

Some examples of Plant Items:  
 Valve Syphon Depth of Cover Change of Dia Change of Material

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CENTRAL RESERVATION



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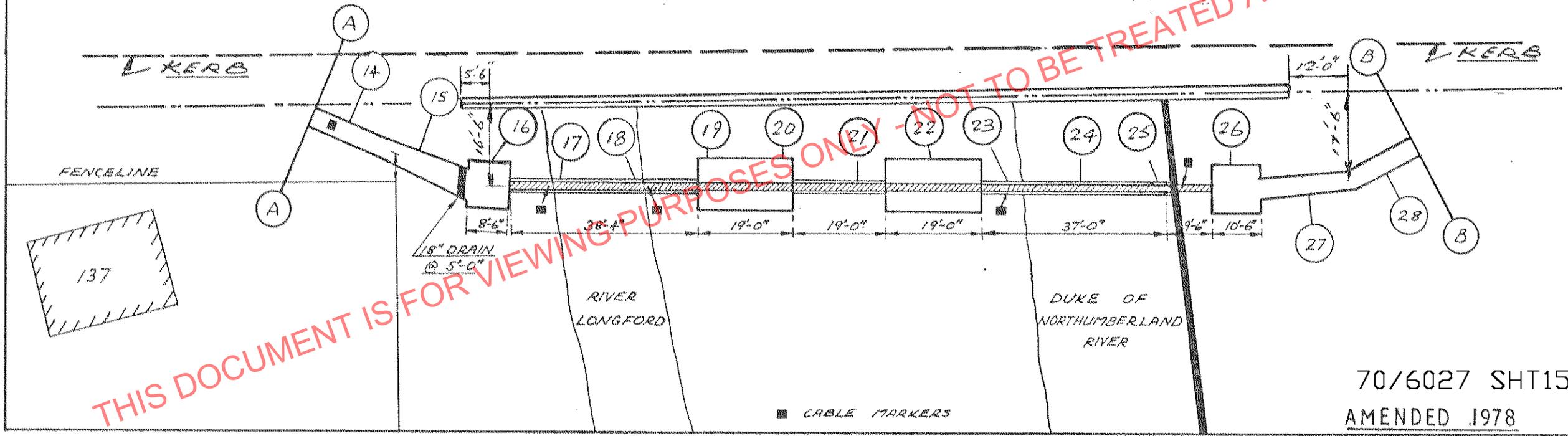
AMENDED: 1978

70/6027 SHT.148

■ CABLE MARKER

CENTRAL RESERVATION

GREAT SOUTH WEST ROAD



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FARM LAND.

70/6027 SHT150  
AMENDED 1978

REV. 1	DATE: MARCH 2008 SITE SCAN OF M.U.P.
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AMENDED: 1976/77 - C.258.

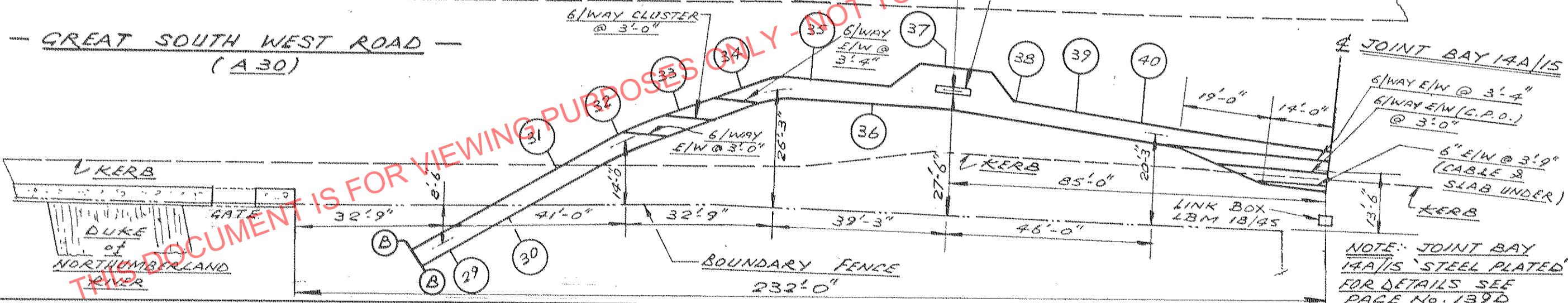
AMENDED: SEPT. 1981 CONTRACT: SWR/TRANS./EALING-LALEHAM/ED/C.688

AMENDED: SEPT. 1988, CONTRACT: ED 18220 - LINK BOX REPLACEMENT

70/6027 SH1148

CENTRAL RESERVATION

GREAT SOUTH WEST ROAD (A30)



EXTENDED FERRULE TYPE REPAIR JOINT  
ON YELLOW PHASE CABLE  
JOINER: G. PHILLIPS  
DATE: 5-9-77. WEATHER:- DRY  
DRG. No. E. 95309-D1: J.I. 344B

JOINT BAY 14A/15  
6/WAY E/W @ 3'-4"  
6/WAY E/W (C.P.O.) @ 3'-0"  
6" E/W @ 3'-9" (CABLE 2 SLAB UNDER)

NOTE: JOINT BAY 14A/15 'STEEL PLATED' FOR DETAILS SEE PAGE No. 139D

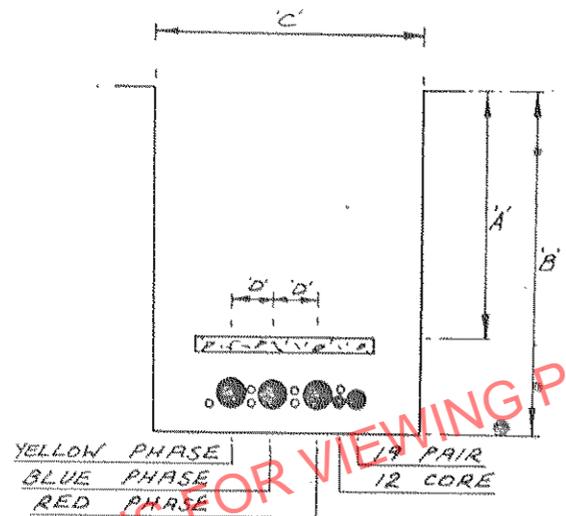
THIS DOCUMENT IS FOR VIEWING PURPOSES ONLY - NOT TO BE TREATED AS THE MASTER DRAWING

CROSS SECTION	1	2	3	4	5	6	7	8	9	10
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'B'	4'-8"	5'-1"	6'-2"	6'-11"	7'-6"	6'-9"	5'-5"	6'-8"	6'-2"	6'-6"

CROSS SECTION	11	12	13	14	15	16	17	18	19	20
'A'	5'-5"	8'-0"	8'-9"	10'-9"	8'-8"	8'-6"	D U C T S			
'B'	6'-5"	9'-0"	9'-9"	11'-9"	9'-8"	11'-9"				

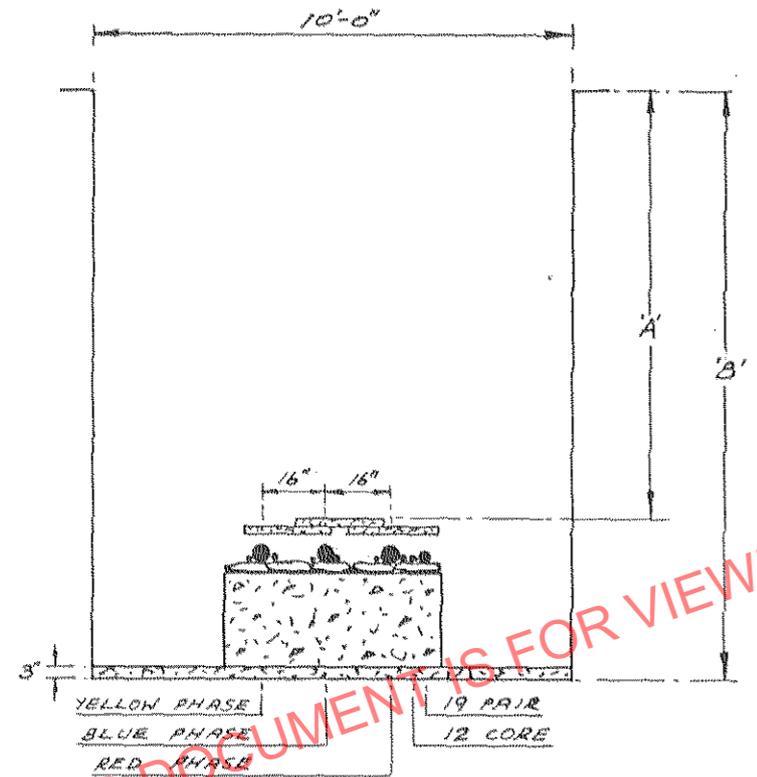
CROSS SECTION	21	22	23	24	25	26	27	28	29	30
'A'	D U C T S					9'-0"	6'-6"	6'-6"	7'-0"	7'-0"
'B'						12'-3"	7'-6"	7'-6"	8'-0"	8'-0"

CROSS SECTION	31	32	33	34	35	36	37	38	39	40
'A'	6'-10"	6'-6"	5'-7"	5'-3"	3'-5"	2'-11"	3'-3"	3'-5"	4'-3"	5'-0"
'B'	7'-10"	7'-6"	6'-7"	6'-3"	4'-5"	3'-11"	4'-3"	4'-5"	5'-3"	6'-0"

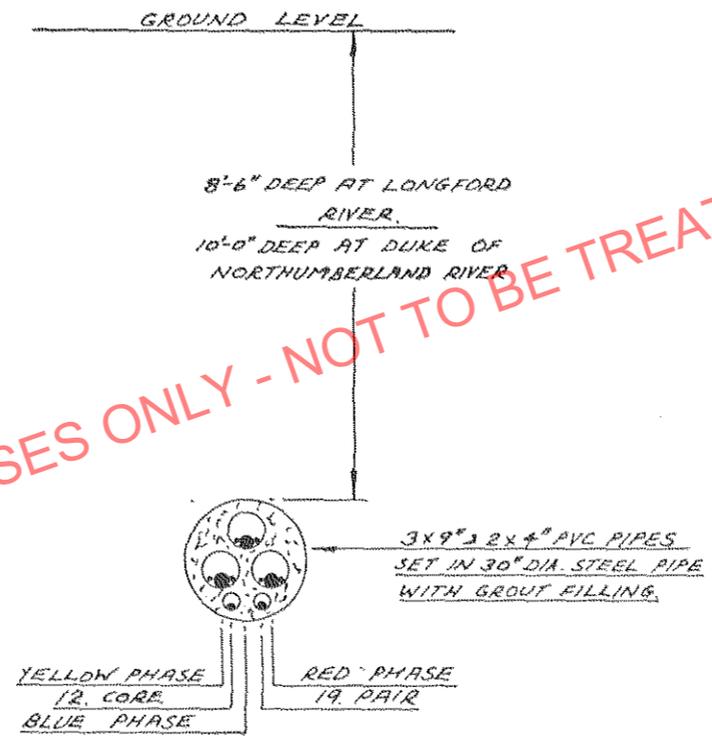


CROSS SECTIONS	1-11 & 32-40	12-15 & 27-31.
'C'	2'-9"	4'-0"
'D'	5 1/2"	16"

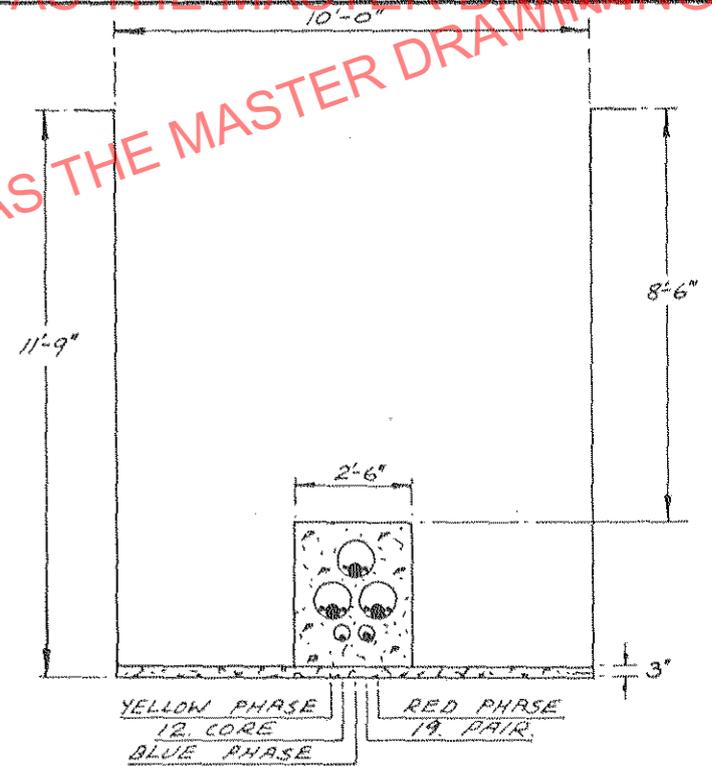
70/6027 SHT151



CROSS SECTION Nos. 16 & 26.



CROSS SECTION Nos. 17 & 18, 21, 23-25



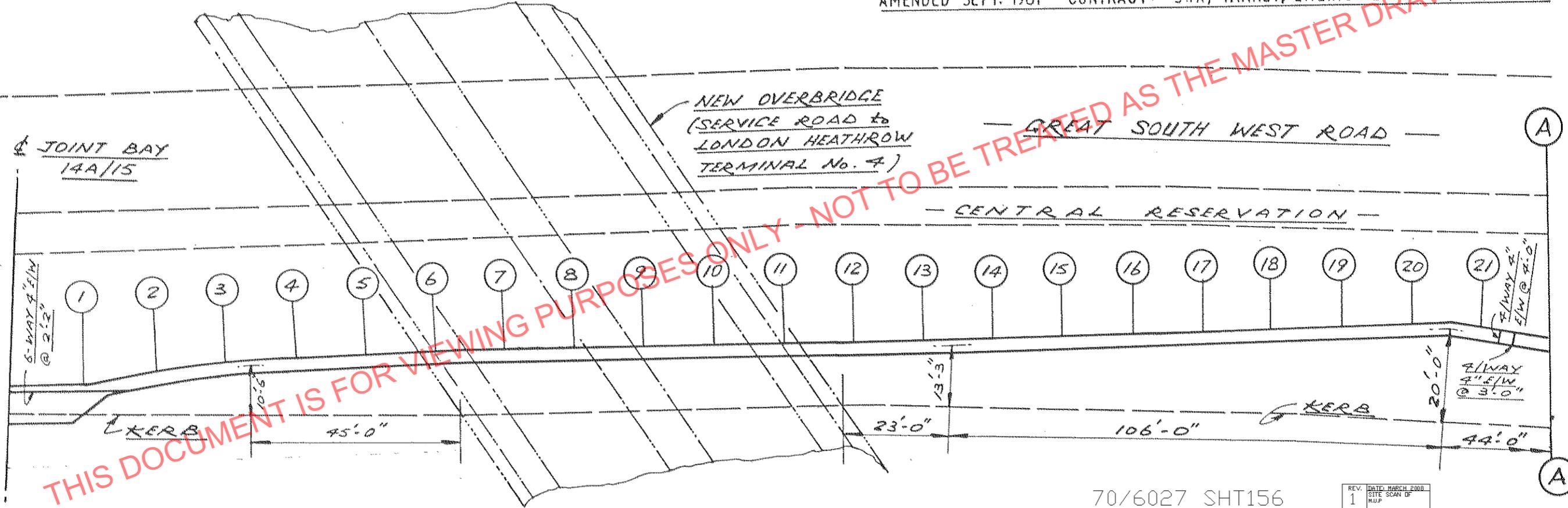
CROSS SECTION Nos. 19 & 20, 22.

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REV. 1	DATE: MARCH 2008 SITE SCAN OF M.U.P.
--------	---

DRAWN BY: RXP CHECKED BY: SECTION No. 15 SCALE: 24'-0" TO 1" CROSS SECTIONS SPACED EVERY 15'-0" SEE ALLING

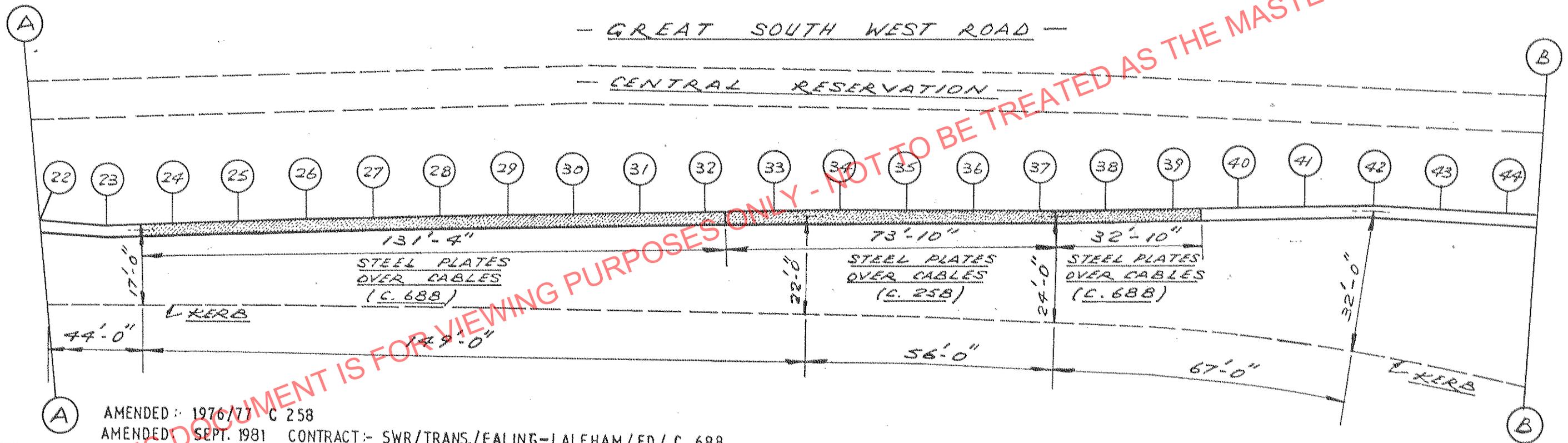
AMENDED SEPT. 1981 CONTRACT: SWR/TRANS./EALING-LALEHAM/ED/C.688



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70/6027 SHT156

REV.	DATE	DESCRIPTION
1	MARCH 2008	SITE SCAN OF MUP



AMENDED: 1976/77 C 258  
AMENDED: SEPT. 1981 CONTRACT:- SWR/TRANS./EALING-LALEHAM/ED/ C. 688

REV. 1 DATE: MARCH 2008 SITE SCAN OF W.D.P.

7076027 SHT157

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— GREAT SOUTH WEST ROAD —

— CENTRAL RESERVATION —

12" E/W @ 1'-9"

45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67

8" E/W @ 2'-9"

4'-6"

74'-6"

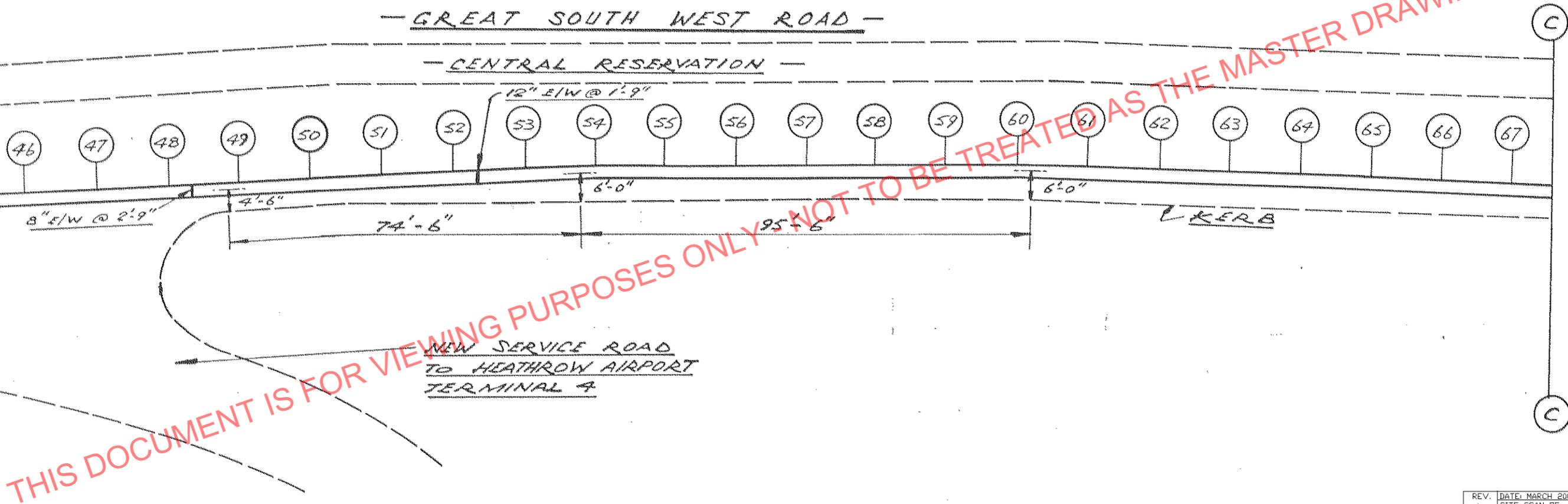
6'-0"

95'-6"

6'-0"

↳ KERB

NEW SERVICE ROAD  
TO HEATHROW AIRPORT  
TERMINAL 4



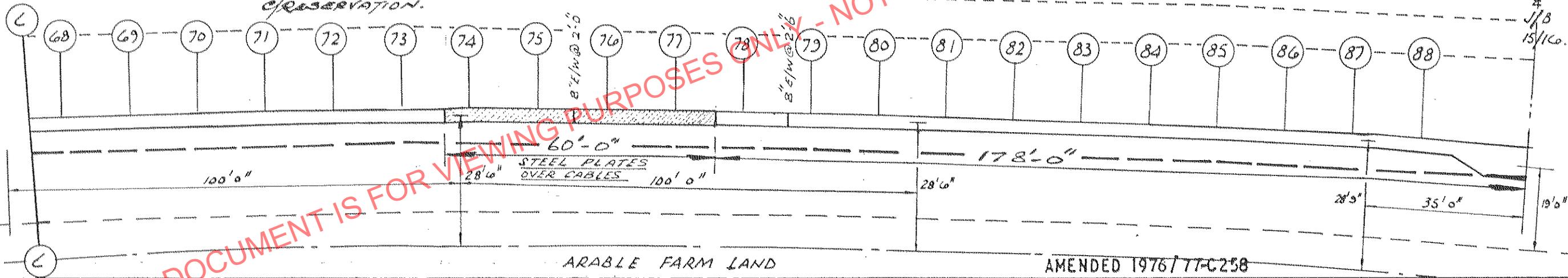
THIS DOCUMENT IS FOR VIEWING PURPOSES ONLY - NOT TO BE TREATED AS THE MASTER DRAWING

DRAWN BY R.C.P. (CHECKED BY IS) SECTION NO. 15 SCALE 24'-0" TO 1" CROSS SECTIONS SPACED EVERY 150' FALLING PAGE NO. 143  
LONDON AIRPORT

AIRCRAFT SUPPLY DEPT.  
(NOT POSITIONED TO SCALE)

GREAT SOUTH WEST ROAD

RESERVATION.



THIS DOCUMENT IS FOR VIEWING PURPOSES ONLY - NOT TO BE TREATED AS THE MASTER DRAWING

AMENDED 1976/77-C258

70/6027 SHT154

REV. 1	DATE: MARCH 2008 SITE SCAN OF M.U.P.
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DRAWN BY *LP* CHECKED BY SECTION NO. 13 SCALE - 1/2" = 1' 0" CROSS SECTION FACING EALING PAGE NO. 144

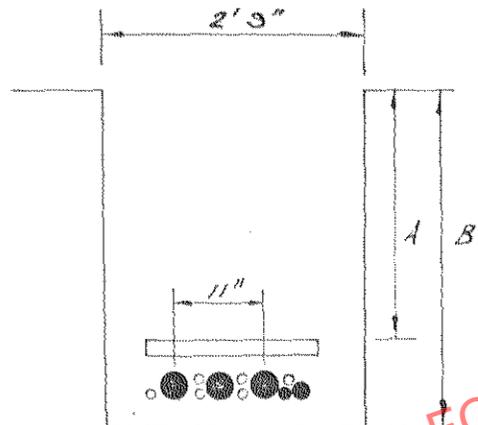
CROSS SECTION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
A	5'-9"	5'-0"	4'-3"	4'-0"	4'-0"	3'-9"	3'-9"	3'-9"	3'-9"	3'-6"	3'-6"	3'-6"	3'-6"	3'-7"	3'-8"	3'-9"	3'-9"	3'-9"	3'-9"	3'-9"
B	6'-9"	6'-0"	5'-3"	5'-0"	5'-0"	4'-9"	4'-9"	4'-9"	4'-9"	4'-6"	4'-6"	4'-6"	4'-6"	4'-7"	4'-8"	4'-9"	4'-9"	4'-9"	4'-9"	4'-9"

CROSS SECTION	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
A	3'-8"	3'-7"	3'-6"	SEE CROSS SECTIONS on PAGE No. 144A																4'-2"
B	4'-8"	4'-7"	4'-6"	SEE CROSS SECTIONS on PAGE No. 144A																5'-2"

CROSS SECTION	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
A	4'-5"	3'-10"	3'-8"	3'-6"	3'-6"	3'-5"	3'-4"	3'-3"	3'-3"	3'-3"	3'-3"	3'-3"	3'-3"	3'-4"	3'-5"	3'-5"	3'-6"	3'-6"	3'-6"	3'-6"
B	5'-0"	4'-10"	4'-8"	4'-6"	4'-6"	4'-5"	4'-4"	4'-3"	4'-3"	4'-3"	4'-3"	4'-3"	4'-3"	4'-4"	4'-5"	4'-5"	4'-6"	4'-6"	4'-6"	4'-6"

CROSS SECTION	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
A	3'-6"	3'-6"	3'-6"	3'-6"	3'-6"	3'-6"	3'-6"	3'-6"	3'-6"	3'-6"	3'-5"	3'-5"	3'-5"	SEE CROSS SECTIONS on PAGE No. 144A				3'-8"	3'-5"	3'-4"
B	4'-6"	4'-6"	4'-6"	4'-6"	4'-6"	4'-6"	4'-6"	4'-6"	4'-6"	4'-6"	4'-5"	4'-5"	4'-5"	SEE CROSS SECTIONS on PAGE No. 144A				4'-6"	4'-5"	4'-4"

CROSS SECTION	81	82	83	84	85	86	87	88
A	3'-4"	3'-4"	3'-4"	3'-6"	3'-6"	3'-8"	3'-8"	4'-8"
B	4'-4"	4'-4"	4'-4"	4'-6"	4'-6"	4'-8"	4'-8"	5'-8"



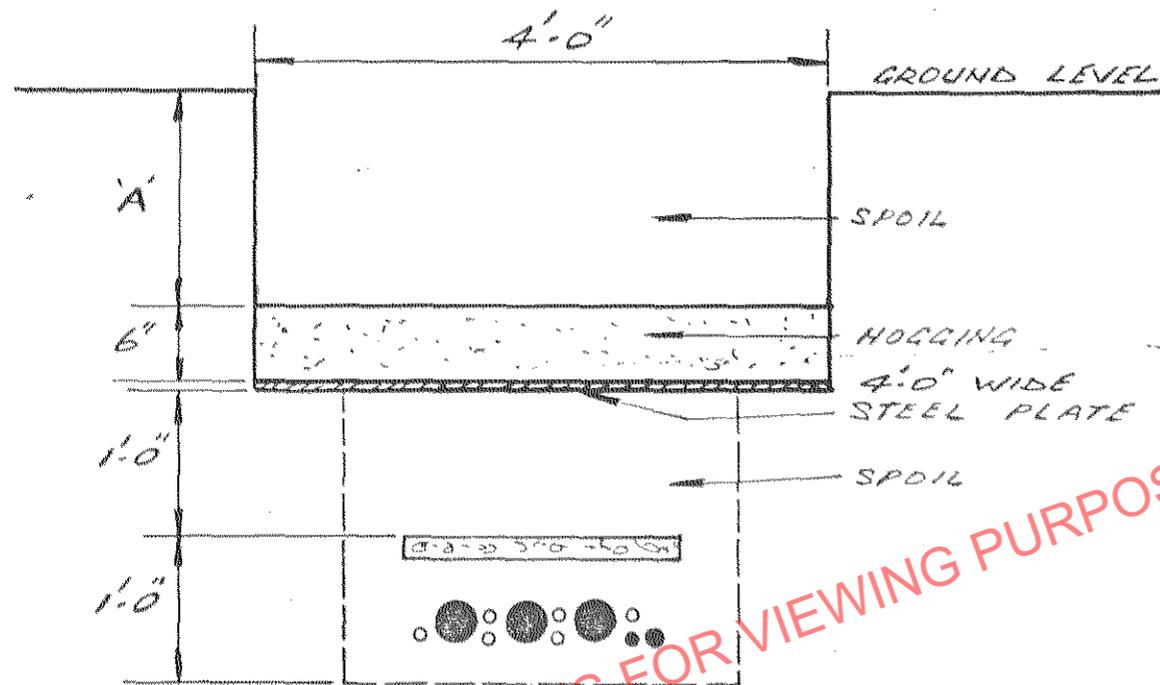
CROSS SECTIONS: 1-23

40-73

78-88

70/6027 SHT158

AMENDED 1976/77-C.258



CROSS SECTION	24	25	26	27	28	29	30	31	32	33	34	35
'A'	2'-0"	1'-11"	1'-10"	1'-9"	1'-9"	1'-9"	1'-9"	1'-9"	1'-9"	1'-9"	1'-10"	1'-10"
CROSS SECTION	36	37	38	39								
'A'	1'-11"	1'-11"	2'-2"	2'-5"								

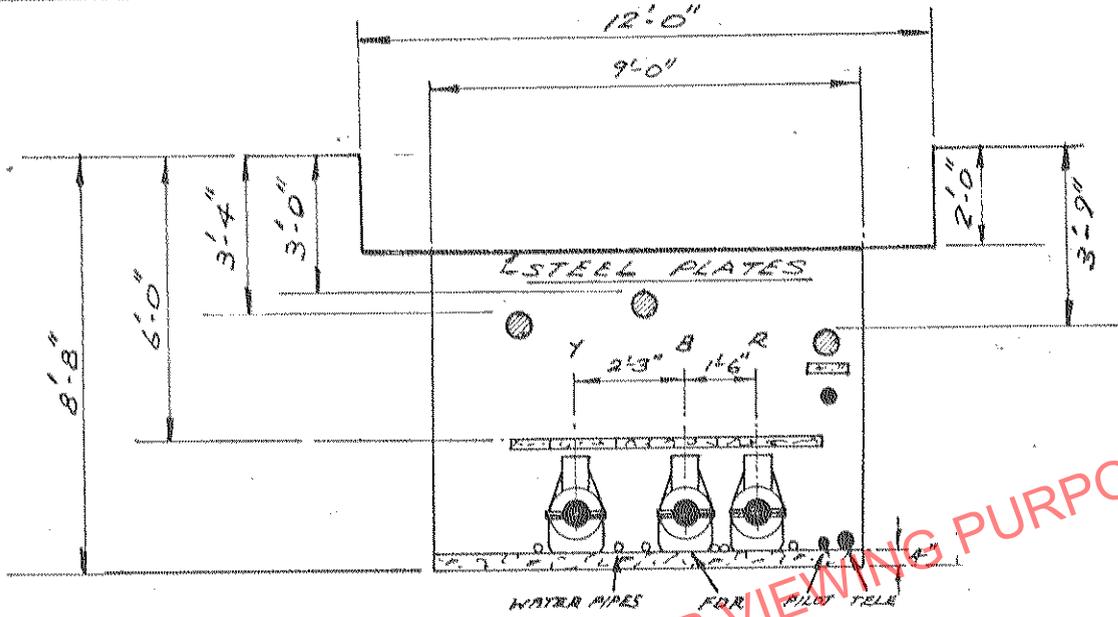
CROSS SECTION	74	75	76	77
'A'	1'-11"	2'-0"	2'-1"	2'-1"

NOTE: DEPTHS SHOWN ARE FROM GROUND LEVELS EXISTING AT DATES OF INSTALLATION OF STEEL PLATES

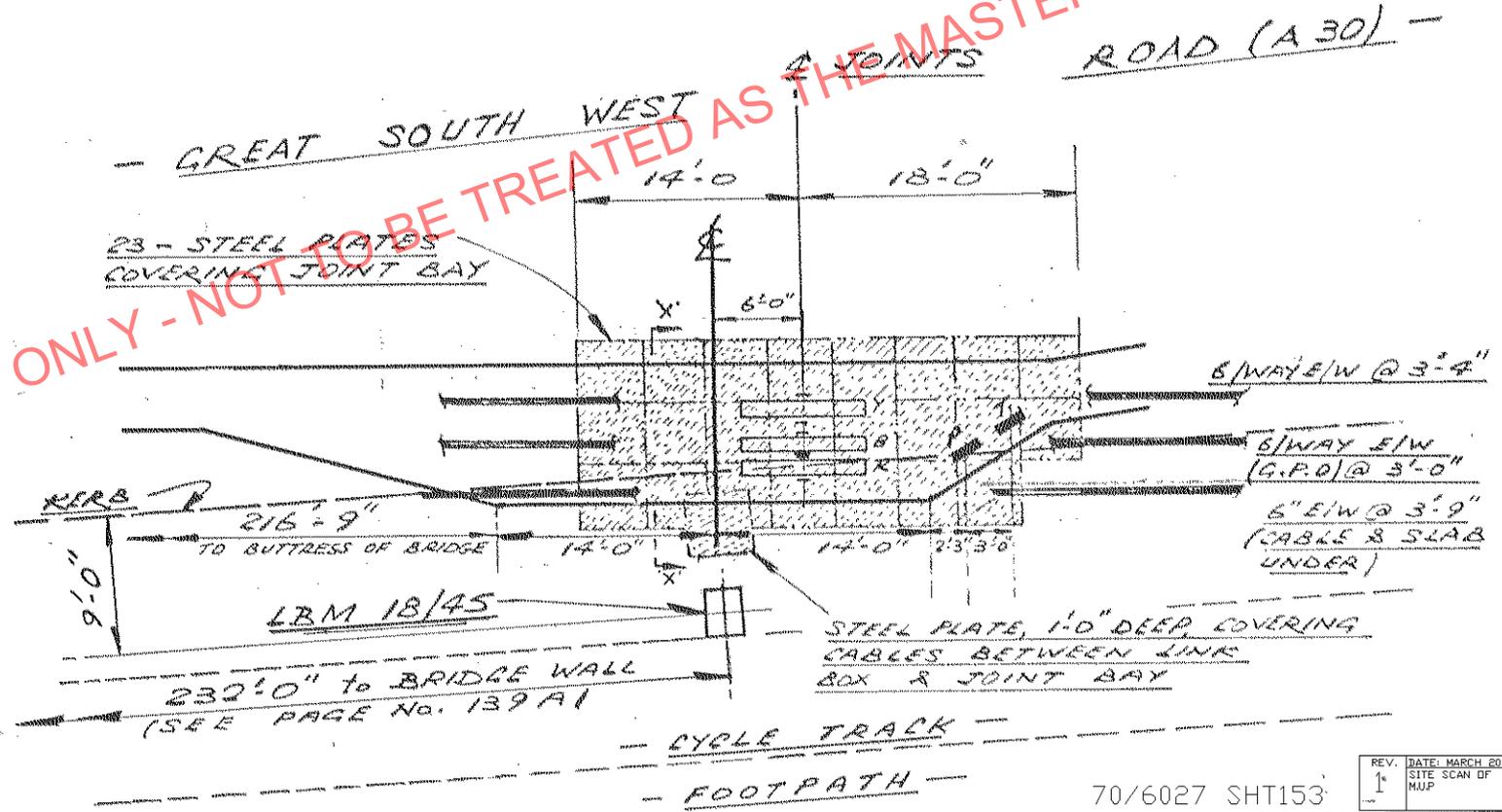
CROSS SECTIONS 24 - 39

74 - 77

DRAWN BY P.W. CHECKED BY [ ] SCALES: - 1" = 12'-0" & 1" = 4'-0" JOINT BAY 14A/15. - NOT TO BE TREATED AS THE MASTER DRAWING - EALING - PAGE No. 139D.



CROSS SECTION ON X-X  
 FACING EALING  
 SCALE: 1" = 4'-0"



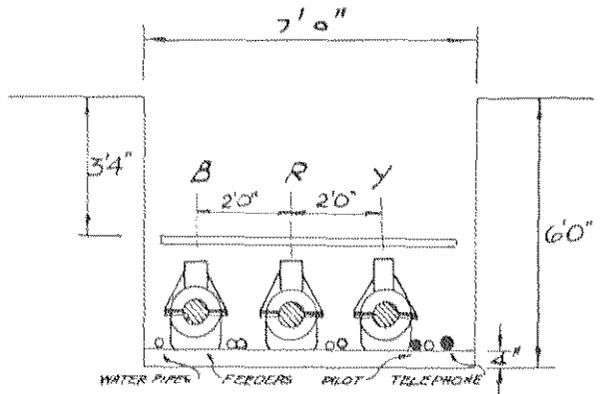
AMENDED SEPT 1988. CONTRACT: ED 18220 - LINK BOX REPLACEMENT  
 AMENDED SEPT. 1981 CONTRACT: SWR/TRANS/EALING-LALEHAM/ED/C. 688

70/6027 SHT153

REV.	DATE	DESCRIPTION
1	MARCH 2008	SITE SCAN OF MAP

DRAWN BY *AKP* CHECKED BY *IST* SECTION NO. *15110* SCALE: *AS SHOWN* JOINT BAY *15110* SEALING PAGE NO. *145*

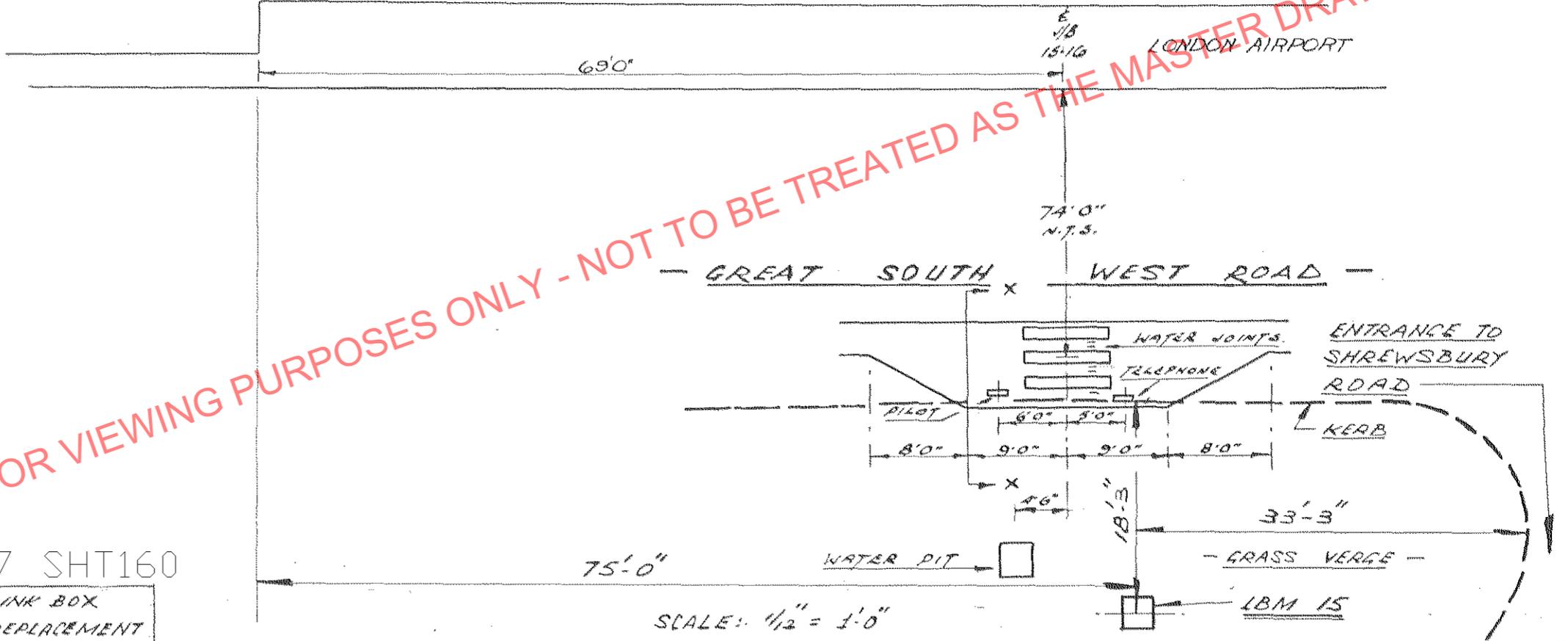
AIRCRAFT SUPPLY DEPT.



70/6027 SHT160

REV. 3	DATE: MARCH 2008
	SITE SCAN OF M.U.P.

REV. 1	DATE: 1978	REV. 2	DATE: OCT. 1988	LINK BOX REPLACEMENT
			CONTRACT: ED 18220	



THIS DOCUMENT IS FOR VIEWING PURPOSES ONLY - NOT TO BE TREATED AS THE MASTER DRAWING

Your Ref TR020004\_ 31095887

Our Ref

Major Casework Directorate  
Temple Quay House  
2 The Square  
Bristol, BS1 6PN

Thursday 14<sup>th</sup> March 2019

### **Heathrow Western Hub EIA Scoping Opinion Consultation**

Dear Sir/Madam,

Thank you for your letter dated 15 February 2019, seeking the comments of the Canal & River Trust on the above public consultation.

The Canal & River Trust (the Trust) is the guardian of 2,000 miles of historic waterways across England and Wales. We are among the largest charities in the UK. Our vision is that “living waterways transform places and enrich lives”.

S42 of the Planning Act 2008 requires that applicants must consult with “such persons as may be prescribed” in relation to proposed applications. Such persons are identified in S3 and Schedule 1 of the Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009. The Trust is defined as a person that must be consulted where the application is “likely to have an impact on inland waterways or land adjacent to inland waterways”. Consequently, the Trust is a prescribed consultee under in relations to these proposals. Furthermore, S49 requires that applicants must have regard to any relevant response that the Trust provides.

Additionally, if the acquisition of land or rights over it are sought for the purposes of the application, it is important to note that the Trust is a statutory undertaker for the purposes of Section 127 of the Planning Act 2008.

The Trust is the owner and navigation authority of the Slough Arm of the Grand Union Canal (the Canal) which is located approximately 5km north of Heathrow Airport. Within this location, the Slough Arm of the Grand Union Canal serves a range of functions, including the provision of residential moorings, recreational use (by boaters, anglers and users of the towpath) and serves an ecological purpose as a habitat for

#### **London and South East**

Canal & River Trust The Toll House Delamere Terrace Little Venice  
London W2 6ND  
T 0303 040 4040 E [canalrivertrust.org.uk/contact-us](http://canalrivertrust.org.uk/contact-us)

Patron: H.R.H. The Prince of Wales. Canal & River Trust, a charitable company limited by guarantee registered in England and Wales with company number 7807276 and registered charity number 1146792. registered office address First Floor North, Station House, 500 Elder Gate, Milton Keynes MK9 1BB

protected species. All of these functions confirm this stretch of the Canal to be a sensitive receptor to the proposed development.

We have reviewed the Heathrow Western Hub EIA Scoping Report (Revision P03, February 2019) and have the following comments to make:

1. General comments

The land identified as being 'considered for associated works' covers a section of the Slough Arm, near to the junction with the Grand Union Canal. At this stage, requisite detail has not yet been provided regarding whether this land would be required for surface access, drainage and green infrastructure changes, construction facilities or accommodating displaced uses. Pending further detail to enable the assessment of the proposed development, it is important to note that the Trust requires the development not to:

- a. adversely affect the integrity of the waterway structure or the quality of the water;
- b. result in unauthorised discharges (and run off) or encroachment;
- c. detrimentally affect the landscape, heritage, ecological quality and character of the waterways;
- d. disrupt the use of the waterways by boaters;
- e. prevent the waterways potential being fully unlocked or otherwise discourage the use of the waterway network

Where there are canal / reservoir structures such as bridges, locks, aqueducts, weirs, culverts, sluices, feeder channels (in proximity to the site and associated works, which are used in the operation of the canal and/or there is a presence of cuttings and/or embankments), development should not adversely affect these structures.

Our waterways can be used as assets in place making and place shaping, by contributing to the creation of sustainable communities. As such, we require any development to interact positively with the waterway, by minimising the ecological impacts and optimising the benefits such a location can generate for all parts of the community.

Additionally, the Trust will seek to ensure that its position is protected by the inclusion of Protective Provisions within the Development Consent Order and looks forward to discussing their inclusion with Arora Holdings Ltd in due course.

2. Environmental Impact Assessment (EIA) Scoping

Without having a better understanding of the specifics of the works which have been proposed on, in, over, under or near the Slough Arm, the Trust is not in a position where it can properly advise on which matters should be scoped in or out of the proposed Environmental Statement. We, therefore recommend that a precautionary approach should be taken and suggest that there should be a full EIA should be completed in relation to any proposed work in the area around the Slough Arm and the mainline of the Grand Union Canal. This is necessary to protect the canals, the environment and our users.

We are surprised that there is no reference to the Slough Arm or the Grand Union Canal in the 'water' chapter of the Scoping Report and suggest that these should be added.

The habitats which are present in that location are towpath grassland, hedgerows, woodlands and the aquatic environment (which can be separately assessed in terms of their impact on the marginal soft bank and canal channel). It is considered that the full EIA should investigate the impact to all of our related habitats in this area once the scope of works is decided.

### 3. Improvements to our network

The potential development area covers part of the Slough Arm and it is considered that any specific developments here should actively support canal improvements, habitat enhancement and improvements to sustainable and active travel connectivity (including towpath and access improvements, wayfinding and improving links to public transport connections). There may also be opportunity to transport freight via water for construction materials and construction waste, reducing congestion, carbon emissions and poor air quality generated by construction vehicles.

It is anticipated that the increase in the number of journeys to the airport generated by the expansion of the new terminals, will be substantial, which will result in a significant impact on the local transport network and infrastructure around the surrounding communities. A Surface Access Strategy should be provided and aim to limit the number of individual journeys made to the airport, by supporting the provision of public transport and improving/developing the network of walking and cycling routes. Access to the airport on foot or cycling should be built into the proposals. This will ensure that sustainable and non-polluting alternatives are available for passengers and employees, many of whom live locally. It would also support the local community, by reducing negative impacts on the local environment (including air quality, congestion and noise) and providing active travel modes for the local community as well as airport customers and employees. Together, such provisions should result in promoting better health and wellbeing.

Canal & River Trust's Grand Union Canal Quietway route from Paddington to West Drayton is part-way through delivery and it is intended that the canal towpath will become an integral part of the cycling network in West London. It will provide connectivity to Heathrow and the wider area via the rail network serving West Drayton, Hayes & Harlington and Central London. The Slough Arm further links Slough, Langley and Iver and the Grand Union Canal beyond West Drayton links Brunel University and Uxbridge. Development of this scale at Heathrow should support the local community through infrastructure and environmental improvements, including supporting the delivery of towpath and access improvements to expand the walking and cycling network serving the airport and its local community. The canal will become increasingly important as a green space, therefore resources to improve recreation and wellbeing should be allocated to support improvements to the canal.

Corporate towpath adoptions should also be encouraged to support and preserve the canal environment for the local community and its future generations.

### 4. Comments as landowner

The Trust considers that it would be appropriate for Arora Holdings Ltd to enter into discussions regarding any land interests affecting this matter, before the Application is formally submitted. While the information provided thus far does not appear to require any compulsory acquisition of Trust land or rights over Trust land, it is important to note that the Trust would resist any proposed compulsory purchase to facilitate the development. Instead, it wishes to discuss the matter in more detail with Arora Holdings Ltd prior to submission of the application, including where appropriate, discussing the terms of a Commercial Agreement between the Trust and Arora Holdings Ltd. Please contact Brian Casey, Head of Estates [REDACTED] or [Brian.Casey@canalrivertrust.org.uk](mailto:Brian.Casey@canalrivertrust.org.uk) to discuss any Commercial Agreement.

To ensure that any necessary consents are obtained and that the works will comply with the Canal & River Trust "Code of Practice for Works affecting the Trust", Arora Holdings Ltd will be required to sign up to the Trust's current Code of Practice. As such, it should contact Mr Osi Ivowi, Regional Manager (South), Infrastructure Services Team on 01908 302591 or [Osi.Ivowi@canalrivertrust.org.uk](mailto:Osi.Ivowi@canalrivertrust.org.uk) at the earliest opportunity, to discuss the scope of any proposed works in relation to the land identified for 'associated works' in, on, over, under or near our network.

If you have any queries please contact me, my details are below.

Yours sincerely

Tessa Craig  
Area Planner



[Tessa.Craig@canalrivertrust.org.uk](mailto:Tessa.Craig@canalrivertrust.org.uk)

**From:** [Planning](#)  
**To:** [Heathrow Western Hub](#)  
**Subject:** RE: TR020004 – Heathrow Western Hub – EIA Scoping Notification and Consultation / Reg 11 Notification  
**Date:** 14 March 2019 12:23:11  
**Attachments:** [image002.png](#)

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Dear Sir/ Madam,

Thank you for consulting the Chilterns Conservation Board on the EIA Scoping for the Heathrow Western Hub.

Our comments are as follows:

1. The project should be assessed against whether it achieves Environmental Net Gain, in the light of the Government's 25 Year Environment Plan and the Draft Environmental (Principles and Governance) Bill.
2. Since this is an airport development, the lack of inclusion of aircraft emissions (including take-off and landing) from the scope of the primary assessment of air quality assessment seems surprising and questionable. Aircraft emissions are being separated off and relegated to a consideration as part of cumulative effects.
3. Cumulative effects as set out in para 4.6.6 the initial list of 'other development' has been drawn too closely. It only proposes to look at other NSIPs, major developments schemes over 100 homes (when the definition in the NPPF for major housing is development where 10 or more homes will be provided or the site has an area of 0.5 hectares or more) in a selected list of nearby local authorities, and industrial and warehousing schemes within 5km. The scope should consider a wider area. This should include parts of the Chilterns AONB, where for example, increased traffic along the M40 and M25 which cut through the AONB could have an effect on air quality, noise and habitats. Other major projects like HS2 and the Ox-Cam expressway and growth corridor are all putting pressure on the Chilterns AONB and should be scoped into the assessment of cumulative effects.
4. The Chilterns Beechwood Special Area of Conservation and the Aston Rowant Special Area of Conservation are both close to motorways and major roads likely to experience increased traffic from the expansion of Heathrow. Air pollution and effects on sensitive habitats and protected sites of national and international importance must be carefully addressed through Environmental Impact Assessment and Habitat Regulations Assessment. All SACs in the Chilterns AONB have already breached their critical loads for air pollution. For example, see <http://publications.naturalengland.org.uk/publication/4808896162037760> from Natural England, Supplementary Advice for Chiltern Beechwoods SAC, Nov 2018: "The supporting habitat of this feature is considered sensitive to changes in air quality and is currently exceeding the critical load for nitrogen (October 2018). This habitat type is considered sensitive to changes in air quality. Exceedance of these critical values for air pollutants may modify the chemical status of its substrate, accelerating or damaging plant growth, altering its vegetation structure and composition and causing the loss of sensitive typical species associated with it.

5. The 5km proposed study area for landscape and visual considerations is too narrow. Might Heathrow be visible enough from the Chilterns Hills or locations considered to be in the setting of the Chilterns AONB?
  
6. Please ensure that night time views as well as daytime views are included in the Landscape and Visual Impacts Assessment in order to identify and address any increase in light pollution. This will help safeguard dark night skies and the experience bright stars from the Chilterns AONB.
  
7. Impacts on Chilterns chalk streams should be assessed, with careful scrutiny of where additional water supply for the Western Hub will come from. Chalk streams are an internationally rare habitat that are suffering from over-abstraction which is decreasing water levels in the streams and shortening their functional length.

The Chilterns AONB is nationally protected as one of the finest areas of countryside in the UK. Public bodies and statutory undertakers have a statutory duty of regard to the purpose of conserving and enhancing the natural beauty of the AONB (Section 85 of [CroW Act](#)).

Going forward the Chilterns Conservation Board would like to be involved as stakeholders and consultees in the Heathrow work please, in order to advise on whether the plans conserve and enhance the Chilterns AONB, and to ensure that the EIA and HRA include consideration of the Chilterns AONB. For info, the Chilterns Conservation Board is the statutory independent corporate body for the Chilterns Area of Outstanding Natural Beauty, set up by Parliamentary Order under the provisions of Section 86 of the Countryside and Rights of Way (CROW) Act 2000. The Chilterns Conservation Board is a statutory consultee for National Policy Statement consultations, a prescribed consultee for major infrastructure projects that affect the Chilterns AONB and an interested party for examinations in connection with Nationally Significant Infrastructure Projects that may affect the Chilterns AONB (as set out in the Infrastructure Planning (National Policy Statement Consultation) Regulations (2009), the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations (2009) and the Infrastructure Planning (Interested Parties) Regulations (2010).

The Chilterns Conservation Board would like to stay involved in the Heathrow Western Hub NSIP to ensure the following are fully addressed:

- noise and effects on tranquillity from overflying the Chilterns AONB
- air pollution and effects on sensitive habitats in the Chilterns including protected sites of national and international importance
- cumulative impacts from the combined changes in flightpaths from Luton and Heathrow - it is important that in any redesign of flightpaths there is careful design to avoid harm to the tranquillity of the AONB, and take all opportunities to reduce noise over the AONB (eg Bovingdon stack)
- people walking, cycling, riding or volunteering in the AONB are likely to be outdoors and seeking tranquillity, so are sensitive to noise disturbance and the sight of aircraft flying

overhead.

- identifying opportunities for AONB mitigation and enhancement.

If I can be of further assistance please do not hesitate to get in touch.

Kind regards,

Lucy

**Lucy Murfett MRTPI**  
**Planning Officer**  
**Chilterns Conservation Board**  
**01844 355507**  
[planning@chilternsaonb.org](mailto:planning@chilternsaonb.org)



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**Areas of Outstanding Natural Beauty are some of the most beautiful and cherished landscapes in Britain. They need to be cared for, now and in the future.**

\*\*\*\*Disclaimer\*\*\*\*

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**From:** Heathrow Western Hub <[HeathrowWesternHub@planninginspectorate.gov.uk](mailto:HeathrowWesternHub@planninginspectorate.gov.uk)>

**Sent:** 15 February 2019 14:41

**To:** Planning <[Planning@chilternsaonb.org](mailto:Planning@chilternsaonb.org)>

**Subject:** TR020004 – Heathrow Western Hub – EIA Scoping Notification and Consultation / Reg 11 Notification

Dear Sir/Madam

Please see attached correspondence on the proposed Heathrow Western Hub.

Please note the deadline for consultation responses is 15/03/2019 and is a statutory requirement that cannot be extended.

Kind regards

Major Casework Directorate  
The Planning Inspectorate, Temple Quay House, Temple Quay, Bristol, BS1 6PN

Twitter: @PINSgov

Helpline: 0303 444 5000

Email: [HeathrowWesternHub@planninginspectorate.gov.uk](mailto:HeathrowWesternHub@planninginspectorate.gov.uk)

Web: <http://infrastructure.planninginspectorate.gov.uk> (National Infrastructure Planning website)

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# Civil Aviation Authority's response to Arora Holdings Limited's Environmental Impact Assessment Scoping Report

15 March 2019

## Introduction

1. The CAA is the UK's specialist aviation regulator. We work so that:
  - the aviation industry meets the highest safety standards. We regulate the safety of airport design against UK, European and international safety criteria;
  - consumers have choice, value for money, are protected and treated fairly when they fly. We regulate the prices that Heathrow Airport Limited ("HAL") can charge for operating from Heathrow airport. This includes incentivising the efficiency of HAL's costs. Following the designation of the Airports National Policy Statement (ANPS) we have extended the scope of our approach to include the costs of expanding the airport;
  - airspace is well managed. We make decisions on proposals to change airspace design, against the background of Directions and environmental guidance from the Secretary of State; and
  - the aviation industry manages security risks effectively.
2. We also provide environmental advice to the government, and, on a commercial basis, to third parties, including information about the noise effects of aviation operations.
3. It is for government to determine environmental policy and for the CAA, where required, to apply that policy when making its regulatory decisions.
4. We welcome the opportunity to respond to Arora Holdings Limited's (Arora) Environmental Impact Assessment (EIA) scoping report in our capacity as a prescribed statutory consultee in the planning process.
5. By way of general introductory comment, in paragraphs 7 to 26 we provide a high-level overview of our regulatory roles and how they relate to the Development Consent Order (DCO) process together with some background information on the CAA's engagement with Arora to date. In paragraphs 27 -32 we explain how we approached our consideration of Arora's EIA scoping report. In paragraphs 33 – 61 we provide such comments as we have at this stage on those chapters of Arora's EIA scoping report that relate to the CAA's regulatory roles.
6. For further information about the CAA's responsibilities or on any of our comments in this paper, please contact us at [DCO.Coordination@caa.co.uk](mailto:DCO.Coordination@caa.co.uk).

## The DCO and CAA's Regulatory Processes

7. In addition to obtaining DCO approval, the operation of a third runway will require a number of regulatory approvals from the CAA. The CAA's regulatory approval processes will continue throughout the planning and construction phases. The environmental statement that will form part of Arora's DCO application will contain topics which are relevant to the CAA's regulatory processes. Although we have not seen any detailed proposals made by Arora, their DCO application appears to rely on HAL submitting a DCO application and successfully obtaining development consent. Accordingly, we have commented on matters wider than terminal capacity, and this is due to the difficulty in dealing discretely with an application which has a significant number of critical

dependencies with the application to be made by HAL on which Arora's application appears to be predicated. The three most significant regulatory areas are as follows.

### **Economic Regulation**

8. The CAA is the economic regulator of Heathrow Airport Limited (HAL), in accordance with its duties as set out in the Civil Aviation Act 2012 ("CAA12"). The CAA's primary duty is to carry out its functions "*in a manner which it considers will further the interests of users of air transport services regarding the range, availability, continuity, cost and quality of airport operation services*". The other matters to which we must have regard are set out in s.1(3) of the Act.
9. The CAA considers that capacity expansion is important to further the interests of air transport users. In line with the ANPS requirements, user's interests will be best served if expansion is cost-efficient, and sustainable, and seeks to minimise costs to users over its lifetime.
10. Arora Group is not currently an airport operator, nor is it economically regulated by the CAA. If Arora's DCO application were to be successful, and were it likely that Arora would become an airport operator, the CAA would need to undertake significant work to identify whether a regulatory regime for Arora would be required and, if so, develop a regulatory regime accordingly.
11. As outlined above, we have reviewed Arora's EIA scoping report through the lens of our statutory consultee role under the planning process. As such, we have not commented on the credibility or maturity of Arora's proposals. For further information on our approach to engagement with Arora, please see our published economic regulation consultations, available online.<sup>1</sup> We most recently set out our views in October 2018 and will update these in March 2019. The CAA is currently engaging with Arora to understand its developing proposals, and we intend to assess the maturity of Arora's plans shortly. The CAA considers that it is not in the interests of consumers to undertake work to develop a possible regulatory framework for Arora in advance of a better understanding of its intended capacity expansion proposals.
12. In its scoping statement, Arora has set out "TIN Principles" which it considered that the CAA set out in its Technical Information Note<sup>2</sup> in August 2018 (the "Note"). On a point of detail, the CAA is very clear, and was clear in the Note, that the Note was not intended to set out any principles about how the CAA will undertake its work, but rather that it set out indicative and preliminary descriptions of the way the CAA12 regime operates and the sorts of arrangements that could be accommodated within it.
13. That Note also made clear that the comments made in it were subject to significant caveats. The scoping statement also states that the CAA had set out (in CAP1722<sup>3</sup>) how the "TIN Principles" would be accommodated in the regulatory regime. This was not the aim of the consultation referred to (CAP 1722). Rather, CAP 1722 discussed the issues surrounding how the CAA would decide whether to carry out significant work to consider the economic regulation of proposals brought forward by the Arora Group, should it be successful in obtaining a DCO. This should not be confused with carrying out substantive work to determine whether the regulatory regime would apply to Arora's proposals, or

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<sup>1</sup> <https://www.caa.co.uk/Commercial-industry/Airports/Economic-regulation/Licensing-and-price-control/Heathrow-price-control-review-H7/>

<sup>2</sup> [https://www.caa.co.uk/uploadedFiles/CAA/Content/Accordion/Standard\\_Content/Commercial/Airports/Files/TechnicalInformationNote-HeathrowCapacityExpansion.pdf](https://www.caa.co.uk/uploadedFiles/CAA/Content/Accordion/Standard_Content/Commercial/Airports/Files/TechnicalInformationNote-HeathrowCapacityExpansion.pdf)

<sup>3</sup> <http://publicapps.caa.co.uk/docs/33/CAP1722%20Economic%20regulation%20of%20capacity%20expansion%20at%20Heathrow%20policy%20update%20and%20consultation.pdf>

how the regulatory regime could be accommodated within the regime of regulation provided by CAA12. This work will only commence should Arora be able to demonstrate that its plans are credible in the light of the tests set out in CAP 1722.

14. If, at some future date, the CAA were to determine that Arora should be economically regulated by the CAA, pursuant to CAA 12 (as outlined in the Note), we would be required to have regard to the need to secure that any company within the Arora Group of companies that would be licensed under CAA12 can take reasonable measures to reduce, control or mitigate the adverse environmental effects of the airport and associated facilities. In doing so, we would seek to make appropriate allowances for the efficient costs of environmental mitigations and seek to put in place incentives to minimise these costs, including so that capacity expansion does not become unaffordable for airport users.
15. Accordingly, any assessment that we might undertake on the cost efficiency of Arora's environmental mitigations would fall to be considered in the context of the CAA's primary duty to airport users as specified in s.1(1) of the Act.<sup>4</sup>

### **Safety Regulation**

16. The CAA has a number of safety oversight responsibilities in the UK. The CAA oversees the safety of aircraft and air navigation, the control of air traffic, air traffic services personnel, the licensing of aerodromes and air crew. In recent years, the European Commission, the European Aviation Safety Agency (EASA) and International Civil Aviation Organisation have played an increasingly significant role.
17. The CAA is the national supervisory authority for the certification of air navigation services (ANS) providers covering the requirements of Regulation (EU) No. 1035/2011. Those requirements include technical and operational competence and capability, specific requirements for the provision of air traffic services, meteorological services, aeronautical information services and communication, navigation or surveillance services.
18. The CAA is also the designated competent authority for the licencing of aerodromes under Regulation (EU) No. 139/2014. The licensing process ensures continuous oversight of safety standards at civil aerodromes. Since this regulation came into force in 2014, Heathrow Airport's aerodrome licence has been converted to an EASA compliant licence.
19. Safety assurance of proposed changes can only be provided if the proposer submits to the approving authority a fully detailed concept of operations for how it intends to achieve an acceptable level of safety.
20. It might not be possible to issue some approvals without trialling the operation first. In such circumstances, permission to operate a trial may sometimes be given so that the operator can demonstrate that the concept works as intended (potentially with further mitigating action required to ensure the concept meets all requirements).
21. It is not clear what, if any, safety approvals Arora intends to seek from the CAA. If Arora applies to the CAA for any safety approvals it will need to demonstrate compliance with the applicable regulatory requirements.

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<sup>4</sup> In this context, we interpret cost efficiency broadly to include that there is a clear statutory driver on Arora to incur the costs, that Arora has identified the most efficient option and that its costs of delivering such options are efficient.

## **Airspace Change**

22. The CAA is responsible for making decisions on proposals to change airspace design. As part of that decision-making role, we take into account a range of factors including safety, efficiency and guidance on environmental objectives from the Secretary of State. The evidence we use to consider those factors, and how it should be prepared, is set out in our regulatory process 'Airspace Design: Guidance on the regulatory process for changing airspace design including community engagement requirements' (CAP1616).
23. As set out in the ANPS, we expect any airspace changes associated with the new runway proposals to follow the CAA's airspace change process as set out in our guidance in CAP1616. Our guidance specifies the evidence we need from the organisation sponsoring an airspace change, including the relevant environmental data and the methodologies for producing it. The process and evidence are iterative, and HAL is not yet at the stage of designing flightpaths to support their proposals. This means that some assumptions will need to be made in due course for the purposes of HAL's EIA.
24. It is not clear what, if any, airspace change proposals Arora is intending to make. If it does make an airspace change proposal it will need to do so in compliance with the detailed CAP 1616 process and associated guidance.
25. The Arora scoping report excludes methodologies related to the assessment of the North-West runway, indicating that these will remain as covered by HAL's EIA. Whilst the total number of ATMs and passengers are indicated to remain the same, the Arora scoping report does not confirm that the use of the runways will remain the same as for the HAL DCO proposal. The Arora proposal alters the layout of taxiways and aircraft parking stands, which may have an effect on the use of the runways that may have consequential effects on aircraft noise and emissions that are scoped out of Arora's EIA. It does not seem appropriate to entirely scope out the effects on aircraft noise and emissions of Arora's DCO application without further explanation and justification for doing so.
26. The HAL DCO proposes that the landing thresholds for the two existing runways are displaced inward to mitigate landing noise. Landing thresholds require obstacle free protection areas around them for the glidepath antennae. It is not clear that Arora's proposed ground infrastructure will be compatible with HAL's proposed displaced landing thresholds and thus whether Arora can scope out aircraft noise and rely on the aircraft noise assessment in HAL's EIA. The CAA does not have sufficient information about Arora's proposals to determine whether it is reasonable for Arora to scope out aircraft noise in this way.

### **CAA's response to Arora's EIA Scoping Report**

27. The CAA notes from Arora's scoping report that its proposed development "does not include works to construct the new Northwest Runway (or any air traffic associated with it)". It is not clear to the CAA the exact scope of Arora's proposed development, but it appears that it will be reliant on the successful development of a new Northwest Runway by HAL. Any proposal to operate a third runway will require a number of regulatory approvals from the CAA in order to become operational.
28. The CAA's regulatory processes will, to a significant extent, run in parallel with HAL's DCO process but will not conclude until after HAL's DCO application has been submitted. We understand from the Planning Inspectorate's website that Arora has not yet provided a timetable for its proposed DCO application. The CAA may be asked by the Planning Inspectorate ("PINS") and the Secretary of State to provide an interim opinion regarding the viability of Arora's scheme. As the success of Arora's proposed development appears to be closely linked to HAL's scheme, the CAA would consider, in these circumstances, the progress of HAL's regulatory approval applications.
29. Where relevant, it would seem prudent for Arora's EIA scope and methodology to be consistent with the requirements of the CAA's regulatory processes in order to avoid duplication and aid clarity for stakeholders. Where this is not possible, we suggest that Arora explains its choice of methodology with great care and sets out the difference between the methodology used for EIA purposes and that to be used for the purposes of any submissions seeking CAA approval.
30. We have considered Arora's EIA scoping report on that basis, and we are using this response to inform PINS of the information we consider should be provided in Arora's environmental statement. We have in particular considered Arora's proposed scope and methodology to assess and mitigate the environmental effects of expansion. We have only commented on relevant chapters/EIA topics.
31. Our response below contains comments on those chapters of Arora's EIA Scoping Report that relate to our regulatory roles. In respect of airspace change, CAP 1616 and CAP 1616a<sup>5</sup> provide the relevant methodologies for use in environmental assessments to assist those preparing airspace change proposals. To facilitate consistency between Arora's EIA and our approach to assessing the environmental impacts of airspace change proposals, we comment in detail on the relevant chapters of the EIA.
32. Our economic regulation powers relate to furthering the interests of consumers in development of the airport infrastructure, as provided for in CAA12. Capacity expansion is a bespoke project which will have a range of environmental impacts and the scope of these will only become clear as Arora's plans crystallise through the planning process. In these circumstances, it is not practicable or appropriate for us to set out standard methods for the assessment of plans that remain under development and, rather than comment on the detail of Arora's EIA scope and methodology, we have set out our general approach above.

### **Chapter 7 Carbon and Greenhouse Gases:**

33. Regarding paragraph 7.4.7, We note that this item should refer to both sections 7.4.6 and 7.4.5 and include both direct and indirect emissions.

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<sup>5</sup> CAP 1616a is CAA publication 'Airspace Design: Environmental requirements technical annex'

34. Regarding paragraph 7.7.8, this should clarify whether the operational use of terminal, taxiways and extra emissions from further flood defences and river diversions not present in the HAL EIA will be included in Arora's EIA.

## **Chapter 8 – Climate Change**

35. Regarding Table 8.1 under "Airports National Policy Statement" (p.119) it is noted that any Airspace change proposal relating to Heathrow expansion should be consistent with the ANPS.

36. Regarding Table 8.1 under "Policy" (p.119/120) The Kyoto Protocol and Paris Agreements should be considered and, if appropriate, referenced alongside the other policy documents.

37. Regarding paragraph 8.3.2 (p. 121) other key stakeholders from an aviation perspective should include the Royal Borough of Richmond-upon Thames as they and other boroughs are very active in relation to the proposed expansion of Heathrow. Arora should also consider consulting with the members of the Major Airports (EGLL, EGKK etc) action/consultative committees.

38. Regarding paragraph 8.5.1 under "Baseline Conditions" (p.122) it is noted that the CAP1616 process requires local air quality assessment to be carried out for changes to routes. In the vicinity of AQMAs, Climate Change may result in increased incidence of Temperature Inversions and, as a result of the co-location of industrial areas and airports, it is likely that the incidence of Low Visibility Procedures will increase, as may the incidences of temperature inversions and Fog.

39. Regarding paragraph 8.5.4 – (p.123) we note in relation to the statement "These could be exacerbated by climate change related effects" that low visibility operations that are triggered by fog events cause low visibility procedures to be enforced. Low visibility procedures require a reduced Flow Rate to be adopted for aircraft approaching the airport (known as Air Traffic Flow Measures (or ATFM)). This is due to the fact that Heathrow is currently operating at 98% Capacity.

40. Regarding Table 8.2 (p.124) on line "Airport Operations and infrastructure" under "effects" heading: we note that reducing the number of days causing snow disruption would be a positive influence as a reduction in the number of snow events would similarly reduce the requirement for flow measures to be initiated by ATC, increasing airport capacity and thus reducing the likelihood of the airport influencing local air quality to the point of impacting on AQMAs. In the same box of table 8.2, in relation to the sentence "storms may increase in frequency and magnitude which could damage airport infrastructure" we note Storm cells and Cumulonimbus Clouds which cause the diversion of flights by ATC thus increased frequency of their occurrence are likely to increase the need for air traffic to be diverted. Diverted flights burn "extra" fuel and produce additional emissions.

41. Regarding paragraph 8.7 (p.125) "Approach to Assessment" we note that the CAP 1616 process requires climate change impacts to be carried out via assessment of changes to CO<sub>2</sub> which should be completed as part of the Options appraisal process using WebTAG. CAP1616 requires impacts including climate change impacts such as changes to CO<sub>2</sub> and fuel burn to be assessed as part of the options appraisal process using the WEBTAG tool, in line with the requirements of the Governments Green book. The relative priority of the impacts is dictated by the altitude-based priorities again as set out in CAP1616 and the Air Navigation Guidance 2017. Annual totals must be calculated in addition to changes on a per flight basis.

42. Regarding the “Additional baseline data collection” (p.125) we note that for air traffic assessment changes, as part of the CAP 1616 airspace change process, the baseline is required to consider a “do nothing scenario”.
43. Regarding “Assessment Years” (p.126) we note that the CAP1616 process requires assessment of changes that impact on procedures at and above 7,000ft, changes must be calculated for the actual change on the date of the change on a per flight basis and as an annual total using WebTAG.
44. Regarding “Assessment methodology – In-combination Climate Change Impact Assessment” (p.126) we note that the process for the assessment of environmental impacts in airspace change scenarios considers CO2 as an indicator of changes to climate changing gases.
45. Regarding “Stage I In combination Climate Change Impact Assessment” (p.126) we note that CAP1616 requires Air Quality to be assessed for changes that impact on AQMAs and there is likely to be a change in aviation emissions below 1,000ft. Operationally Air Traffic Flow Management (ATFM) will be employed by Air Navigation Service Providers as an automatic response to incidences of low visibility. Each individual airport has its own criteria as published in MATs Part 2 and ATFM pursuant to Commission Regulation 255/2010. A Reduced number of Slots are Co-ordinated by Airports Coordination Limited during periods of low visibility.
46. Regarding paragraph 8.7.10 (p.126) The Assessment will clearly define the ‘emerging baseline’ – Changes are required to be assessed for Local air quality and Climate Change Emissions (As CO2) under CAP1616 against a “Do Nothing” baseline, for the situation pre and immediately Post the change. Assessments will be required to produce an annual average and a per movement change.
47. Regarding table 8.3 under “Fog” (p. 128) we note the initiation of low visibility procedures (and Air Traffic Flow Measures in the Air traffic scenario) is dictated by the requirements of MATS part 2 for individual airports.

## **Chapter 9 – Community**

48. As a general observation this chapter uses the terms engagement and consultation interchangeably. It should be clear to communities when they will be consulted as consultation is a distinct form of engagement which raises specific expectations of those being consulted in relation to the methodology applied and of how the product of consultation will be conscientiously taken into account.
49. Further, we believe stakeholders would benefit from greater clarity around what engagement work has been done to date and what Arora’s engagement plans are for the future in this section.

## **Chapter 10 Economics and employment:**

50. Regarding paragraph 10.2.2 (p.154) in addition to the documents listed, the requirements of CAP1616 should be taken into account to form a framework for detailed assessment post-scoping. It is further recommended that CAP1616 should be read in conjunction with The Green Book: Appraisal and Evaluation in Central Government, and relevant sections of the Department of Transport's Transport analysis guidance: WebTAG. The Green Book and WebTAG are considered to be best practice in appraisals for economics and employment.

51. Regarding Table 10.4 under “Operation” (p.164) we note that if a Proposed Development/airspace change leads to changes in operational costs, these should be monetised.
52. Regarding Table 10.4 under “Potential for wider economic effects” (p.164) we note the Applicant should provide a quantified assessment for potential economic effects if possible. It is not always possible or proportionate to quantify costs and benefits. The frameworks set out in CAP1616, the Green Book and WebTAG are designed to be applied flexibly to match the circumstances of the proposed Development.
53. Regarding Table 10.4 under “Environmental change” (p.164) Arora should consider carrying out a qualitative assessment for the environmental change. CAA recognises that environmental assessment can be difficult to monetise without extensive modelling. However, more quantification and thus monetisation is expected for larger proposals where environmental change is a key concern. Additional guidance can be found in WebTAG A3.
54. Regarding paragraph 10.7.5 (p.166) we note that a high level of assessment of other costs and benefits associated with the Proposed Development should also be included.
55. Regarding “Assessment methodology” (p.168) the assessment methodology should consider the requirements of CAP1616, The Green Book, and relevant sections of the Department for Transport's Transport analysis guidance: WebTAG.
56. Regarding “cumulative effects” (p.171), we note that for clarity and in line with CAP 1616, the Applicant should consider assessing costs and benefits of the proposed development incrementally against the baseline. In other words, the Applicant should assess the additional benefit or cost of the option, not the absolute (total) benefit or cost. Table E2 of CAP1616 contains a list of potential costs/benefits that may arise in the assessment of airspace change. The applicant should endeavour to understand all of the potential cost and benefits that may be relevant for their proposed development.

### **Chapter 13 – Landscape and Visual Amenity**

57. Regarding Table 13.5 under “Operational use – overhead aircraft” the CAA does not agree with the justification provided for scoping out the effects on residential visual amenity, particularly the reference to low flying rules. Further information should be provided by Arora to explain in detail why it considers its justification for scoping out this aspect is appropriate.

### **Chapter 16 Noise and Vibration:**

58. Regarding paragraph 16.4.6, this should confirm that Arora’s EIA will consider the full range of noise sources, i.e. road, rail and aircraft ground operations where these are not covered in the HAL EIA.
59. Regarding paragraph 16.7.19, we would like further clarity on the source of the aircraft ground noise data indicated in 16.7.19.
60. Regarding paragraph 16.7.37, the proposed scope needs to go further than simply identifying likely significant adverse effects and consider the proposed mitigations as per the EIA regulations – i.e. cross-reference to the mitigation principles set out in Chapter 4.
61. Regarding paragraph 16.8, we note that the proposed mitigations should be specified in more details and be specific about if mitigation is for during daytime, night time or both. With respect to the elements proposed to be scoped out due to inclusion in the HAL EIA,

e.g. aircraft noise, it is not clear if the Arora EIA proposes to accept all the mitigations that will be proposed by HAL, for example noise insulation, night-time restrictions etc.

Civil Aviation Authority

15 March 2019

## **Kalie Jagpal**

Assistant Safeguarding Officer  
Estates – Safeguarding

## **Defence Infrastructure Organisation**

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Building 49, DIO Sutton Coldfield, Kingston Road, B75 7RL

**Tel:** 0121 311 3674 | **Email:** [Kalie.Jagpal326@mod.gov.uk](mailto:Kalie.Jagpal326@mod.gov.uk)

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Read DIO's blog: <https://insidedio.blog.gov.uk/>



**From:** [Jagpal, Kalie Mrs \(DIO SEE-EPS SG2a2\)](#)  
**To:** [Heathrow Western Hub](#)  
**Subject:** Ref- TR020004\_31095887 Heathrow Western Hub (Proposed Development)  
**Date:** 06 March 2019 13:03:27

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Good Morning,

DIO Ref-10045270

Planning Inspectorate Ref: TR020004\_31095887

Grid Reference: 504215,177092  
503895,175437  
504767,175058  
505338,175389  
505344,176682

Proposal: Application by Arora Holdings Limited (the Applicant) for an Order granting Development Consent for the Heathrow Western Hub (the Proposed Development)

Scoping consultation and notification of the Applicant's contact details and duty to make available information to the Applicant if requested

Thank you for consulting the MOD on the above Scoping Opinion, as a statutory consultee we would like to be consulted on this proposed development. The proposed development occupies the statutory technical height 91.4M, and birdstrike safeguarding zones for RAF Northolt surrounding the aerodrome.

### **Aerodrome Technical Heights**

-

The proposed development site occupies the statutory height and technical safeguarding zones that ensure air traffic approaches and the line of sight of navigational aids and transmitters/receivers are not impeded. The airspace above and around aerodromes is safeguarded to maintain an assured, obstacle free environment for aircraft manoeuvre. This development site sits beneath the approach and take off climb for RAF Northolt . The approach and take off surfaces need to be kept free of obstruction from tall structures to ensure that aircraft transiting to and from or circuiting the aerodrome can do so safely .

### **Birdstrike**

Within this zone, the principal concern of the MOD is that the creation of new habitats may attract and support populations of large and, or, flocking birds close to the aerodrome.

-

We would like to be informed of any cranes that may be used and any structures such as the proposed 87m second control tower. We also require information on any SUD schemes and attenuation ponds.

Kind Regards

Planning Inspectorate  
3D Eagle Wing  
Temple Quay House  
2 The Square  
Bristol  
BS1 6PN

**Our ref:** NE/2019/129868/01-L01  
**Your ref:** TR020004  
**Date:** 15 March 2019

Dear Sir/Madam

**Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (The EIA Regulations) – Regulations 10 and 11**

**Application by Arora Holdings Limited (the Applicant) for an Order granting Development Consent for the Heathrow Western Hub (the Proposed Development)**

**Scoping consultation and notification of the Applicant's contact details and duty to make available information to the Applicant if requested**

**Heathrow Airport Hounslow, Middlesex, TW6 1QT**

Thank you for consulting us regarding our opinion as to the information to be provided in the Environmental Statement (ES) relating the proposed expansion of Heathrow airport.

We have reviewed the Environmental Impact Assessment (EIA) Scoping report comprising Volume 1 – Main text and appendices and Volume 2 – Figures with regards to our remit.

The Environment Agency vision is to create great places for living that bring communities together and improve physical and mental wellbeing. We have a key role in delivering and enabling infrastructure which helps to protect people and the environment. We are a delivery body, and regulator on a range of flood and coastal erosion risk, environmental, and energy infrastructure; the competent body for the Water Framework Directive (WFD); and an advisor on climate change resilience and spatial planning.

We are a statutory consultee under the Planning Act 2008 upon submission by the Applicant of the application for a Development Consent Order (DCO) for the Expansion of Heathrow Airport (Third Runaway).

The Airport National Policy Statement encourages early engagement and close cooperation with us during the DCO pre-application phase. It is mentioned as being

Cont/d..

essential to ensure the range of environmental issues and their interactions with the development are taken into account so that better and at pace outcomes and opportunities are achieved with greater certainty during the DCO process.

We are disappointed that the Applicant has not engaged meaningfully with us to date. We have had no discussions with the Applicant to help us understand the development proposed or to discuss the scope of the EIA. The stakeholder consultation summary in sections of the EIA is misleading as it indicates incorrectly that there has been preliminary meaningful engagement. We have not provided the Applicant with any feedback on the scope of assessment for any environmental topic. This is specifically a concern for chapters and disciplines for which we have/are likely to have a remit related to the development proposed:

- 6 Biodiversity
- 8 Climate Change
- 14 Land Quality and Waste
- 18 Water

We have provided the main points of our response below and provided detailed comments as Appendix 1.

### **Environment Agency Position**

When considering the Proposed Development in itself, we broadly agree that the following environmental topics should be included and carefully assessed in the EIA and/or the Preliminary Environmental Information Report (PEIR): Biodiversity, Climate change, Land quality and Waste, and Water. We are unable to assess the potential environmental impacts of the development, or agree to the assessments made with respects to the summary of potentially significant effects considered for each receptor, without better understanding the applicant's baseline and understanding more details about the development proposed.

We note that the Heathrow Western Hub proposed development and its components will need to be integrated with the Heathrow Airport Limited (HAL) proposal, which will be subject to a separate DCO application. The submitted scoping report states that the potential environmental impacts associated with the HAL DCO project will be considered in the Cumulative Environmental Assessment (CEA) and not in the Environmental Statement (ES) for this development.

We believe that the interaction between certain components of the development and the HAL proposal cannot be left for consideration only in the CEA. For example, the alignment between the two proposals in delivering mitigation, compliance and betterment in terms of environmental net gain, biodiversity and Water Framework Directive (WFD) is fundamental to scoping the EIA. This is because adjustments in one scheme could incur in non-compliance for the other. Although there is the expression by the applicant that the WFD needs associated with this proposal will integrate seamlessly with that of the wider development, it is currently very difficult to see how this can be achieved with the information provided in the applicant's submission.

The scoping report also states that the proposed development will rely on any mitigation measures for river diversions developed and proposed by HAL. We are concerned that any details of river realignment optioneering and their impacts have not been assessed by the Applicant and included within this scoping report. We are greatly concerned with the applicant's optioneering which includes placing rivers in an aqueduct over the M25.

We are unable to comment in detail due to the high level of the scoping report but based on high level assessment, we do not consider this to be an acceptable solution. We would likely raise objections in principle to any scheme that proposed this as a component of the scheme.

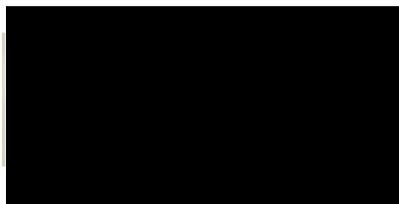
Climate change and increased flood risk should be a significant consideration of the development and we are concerned that the Water chapter primarily references the 2016 flood risk assessment guidance rather than UKCP18 guidance which are the latest projections for climate change.

The National Policy Statement states that biodiversity net-gain should be achieved. Since publication of the National Policy Statement the Government has published the 25 Year Environment Plan which states that development should achieve environmental net-gain. It is our view that the EIA scoping report would have been improved if it had included the applicant's environmental net gain strategy or statements explaining when this strategy will be consulted on in relation to the submission of the Development Consent Order for Examination. It will be important to agree metrics, method(s) and spatial areas in relation to the development. Waterbodies should be included as linear features in their entirety to ensure scope for waterbody wide mitigation, compensation and enhancement measures to achieve environmental net-gain.

Collection of monitoring data prior to development to establish an accurate baseline will be important. As will monitoring of impacts during and post-construction. This will be the only way to assess whether the proposed mitigation, compensation and enhancement measures have been successful and will be key to establishing whether a component of the development has had a significant environmental impact or not. We encourage the applicant to commence discussions with us on their proposed monitoring regime for the project at the earliest opportunity.

Our comments above and included in appendix 1 are based on our available records and the information as submitted to us. We thank you for consulting us on this scoping opinion and welcome you to review our detailed comments. If you have any queries please feel free to contact me at [phillip.petrou@environment-agency.gov.uk](mailto:phillip.petrou@environment-agency.gov.uk)

Yours faithfully



Phillip Petrou

**Account Manager - Aviation Expansion  
Environment Agency**

Att:

**Appendix 1 – Detailed comments**

End

Chapter	Paragraph/table	Environment Agency Comments
<b>Chapter 3 The proposed development</b>	Paragraph 3.6.29	Please note that 25 Year Plan is a Government Plan and not the Environment Agency's.
<b>Chapter 6 Biodiversity</b>		<p>It is acknowledged that biological receptors are considered within this chapter. However, no regard is given to the Fish, Macrophyte, Diatom or Macro-invertebrate populations (other than “rare and notable aquatic...invertebrate species” (Paragraph 6.7.22; Page 94) for which there will be an “assess[ment] of habitat suitability” (Paragraph 6.7.22; Page 94)). These are key elements of the WFD classification process; a deterioration in one of these individual elements could result in a deterioration of the respective water bodies. Therefore, the impact on these individual elements needs to be considered.</p> <p>Whilst it is acknowledged that the ‘deterioration in a water body is considered’ within Table 18.12 of Chapter 18 Water, it is only done so as part of the ‘water resources’ section, which does also consider the deterioration of ‘water quality’. However, full consideration has not been given to these ecological aspects of the WFD classification process mentioned above.</p>
<b>Chapter 7 Carbon and Greenhouse gases</b>		<p>Due to most of the proposed development area being within the Lower Thames Gravels WFD Groundwater body we would have concerns with the installation of Ground Source Heating and Cooling (GSHC) systems and in particular with shallow closed-loop schemes as groundwater is particularly sensitive in this location.</p> <p>The Environment Agency Good Practice Guide relating to the installation and operation of open and closed loop GSHC systems can be found on the Ground Source Heat Pump Association website at:  <a href="http://www.gshp.org.uk/pdf/EA_GSHC_Good_Practice_Guide.pdf">http://www.gshp.org.uk/pdf/EA_GSHC_Good_Practice_Guide.pdf</a>.</p>

<b>Chapter 14 Land and Waste</b>	Paragraph 14.4.5	The principal sources of data should also include current EPR regulated sites (landfills, installations and other waste facilities etc)
	Table 14.2 - Summary of geological conditions underlying the study area.	The Lambeth Group (Secondary A) should be included in the bedrock section.
	Paragraph 14.5.3	Please note the Langley Silt is classified as unproductive strata and in most cases there will be a superficial gravel aquifer below it at a very shallow depth.
		Please also note that the superficial aquifers across the study area are part of the Lower Thames Gravels WFD groundwater body (GB40603G000300)
Paragraph 14.5.6	<p>SPZ zones should be defined (SPZ national dataset user guide Version 2.0.2 26th June 2014) as follows:</p> <ul style="list-style-type: none"> <li>• Zone 1 (Inner Protection Zone) - This zone is defined by a travel time of 50-days or less from any point within the zone at, or below, the water table. Additionally, the zone has as a minimum a 50-metre radius. It is based principally on biological decay criteria and is designed to protect against the transmission of toxic chemicals and water-borne disease. In geological settings where a confining layer is present, this is indicated as Zone 1(c).</li> <li>• Zone 2 (Outer Protection Zone) - This zone is defined by the 400-day travel time from a point below the water table. Additionally this zone has a minimum radius of 250 or 500 metres, depending on the size of the abstraction. The travel time is derived from consideration of the minimum time required to provide delay, dilution and attenuation of slowly degrading pollutants. In geological settings where a confining layer is present, this is indicated as Zone 2(c).</li> <li>• Zone 3 (Total catchment) - This zone is defined as the total area needed to support the abstraction or discharge from the protected groundwater source. In geological settings where a confining layer is present, this is indicated as Zone 3(c).</li> </ul>	

		Please note in addition to the groundwater abstractions protected by the modelled SPZs, there are other licenced groundwater abstractions in the study area. There may also be abstractions that are below the volume that requires a licence and some of these might be used for potable supply. All potable abstractions will have the default SPZ zones around them but these will not appear on the SPZ maps. The local authority would have the records for any private potable supplies.
	Paragraph 14.5.20	Within the study area, a scour hollow/buried hollow was identified to the southwest of the M4/M25 junction (TQ0410077900) (Banks et. al., 2014, Anomalous buried hollows in London: development of a hazard susceptibility map, <i>Quarterly Journal of Engineering Geology and Hydrogeology</i> ). Please note there may be other similar features that have not yet been identified.
	Table 14.5 Proposed data and sources for Preliminary Contaminated Land Risk Assessment	<p>The current groundwater vulnerability maps data can be found here <a href="https://data.gov.uk/dataset/ed5d127b-a2fe-47d6-a966-7c363c4d3c4c/groundwater-vulnerability-maps-2017">https://data.gov.uk/dataset/ed5d127b-a2fe-47d6-a966-7c363c4d3c4c/groundwater-vulnerability-maps-2017</a> and not on the Magic website.</p> <p>WFD groundwater and surface water bodies should be included here. The WFD groundwater bodies are also Drinking Water Protected Areas. The maps can be found here <a href="https://data.gov.uk/dataset/2a74cf2e-560a-4408-a762-cad0e06c9d3f/wfd-groundwater-bodies-cycle-2">https://data.gov.uk/dataset/2a74cf2e-560a-4408-a762-cad0e06c9d3f/wfd-groundwater-bodies-cycle-2</a>.</p>
	Table 14.7 Receptor sensitivity criteria	<p>The use of generic sensitivity criteria for this proposal should be clarified.</p> <p>Most of the area of the proposed development lies on a Principal aquifer in the river terrace gravels and the water table in this aquifer is typically around 3m below ground level. Therefore Principal aquifers should be considered to have 'High Sensitivity' and not 'Medium Sensitivity' as is stated in the table.</p> <p>Public and private potable abstractions should not be classified as high sensitivity receptors</p> <p>The Principal Aquifer in the river terrace gravels is also a WFD groundwater body (Lower Thames Gravels) and is also a Drinking Water Protected area. All groundwater WFD water bodies should be included in this list including the concealed GwBs in the Chalk.</p>

<b>Chapter 18 Water Environment</b>	Table 18.1 Policy and Legislation relevant to the health assessment	The Directive 2006/118/EC 'On the protection of groundwater against pollution and deterioration' commonly referred to as the Groundwater Daughter Directive should be included within this table.
	Paragraph 18.4.7	It is noted within this paragraph that "the assessment of potential scheme implications on WFD compliance will be considered separately to the main Environmental Impact Assessment" (EIA). WFD Compliance should be considered in-line with the EIA, given one may inform the other. Additionally, an aspect WFD compliance currently forms an assessment of a High impact, detailed within Table 18.12. Therefore, it is already being used to inform the EIA and should be an iterative process.
	Paragraph 18.5.6	Whilst water quality has been considered and described briefly within the baseline conditions, there has been no provision of information around the baseline conditions of the biological quality or geomorphology of these water courses; suggesting this has not been considered (please also see our comments on Chapter 6 – Biodiversity).
	Table 18.4 Hydrogeological characteristics of the study area	As stated in the report, the Langley Silt is unproductive strata. However it should be noted that the Langley Silt is generally very thin and beneath most of the outcrop are river terrace deposits which are a Principal aquifer and in the Lower Thames Gravels aquifer.
		Please note the hydraulic conductivity in the river terrace gravels is generally high. (see paragraph 18.5.20)
	Paragraph 18.5.18	It should be noted that the Chalk aquifer beneath the area is also designated as Drinking Water Protected Area and a WFD groundwater body.
	Paragraph 18.5.19	The flow of water from the bedrock aquifers to the overlying Pleistocene river terrace deposits, through the London Clay aquitard, needs to be quantified.
	Paragraph 18.5.21	The Lower Thames Gravels WFD groundwater body is as stated, at Good status. However, it is not unaffected by chemical contamination and the groundwater quality trend test is upwards.
Table 18.5 WFD water bodies in the study area	The WFD groundwater bodies in the confined Chalk need to be included in this table.	

	Paragraph 18.5.29	Please note the Chertsey and Datchet SPZs are within 4km of the existing airport.
	Table 18.6 Water receptors	<p>Please note that tributaries may be independently designated as WFD water bodies (ie. Yeading Brook (WBID: GB106039023051)), and therefore will need to be considered separately with regard to WFD principles.</p> <p><u>Surface Water Transfers</u> Please note The Duke of Northumberland’s River is designated as two water bodies under WFD: the Upper Duke of Northumberland’s River (WBID: GB806100108) and Lower Duke of Northumberland’s River (WBID: GB806100095). These two water bodies are likely to be impacted by the development quite differently, given one is upstream of the development whilst the other splits off the River Crane downstream, and therefore should be separated out as individual receptors.</p> <p><u>Lakes &amp; Reservoirs</u> The series of WFD designated lakes within the Lower Colne are also public water supply assets and, as a result, could be considered as part of the Water Supply Infrastructure receptor. This is particularly pertinent as the assumption is that all these reservoirs are in hydrological continuity with the Pleistocene gravel aquifers (as detailed in Paragraph 18.6.4; Page 340). Whilst this may be true of lakes, it is considered unlikely for some of the public water supply reservoirs, which are anticipated to be concrete lined. These will therefore respond in a different way and to different pressures. It is recommended that both Affinity Water and Thames Water are approached to understand the local configuration of their assets in this area and that Lakes and Reservoirs are considered as separate ‘Receptors’.</p>
	Table 18.7 Potential likely significant effects on water resources and flood risk –	<ul style="list-style-type: none"> <li>• The Lower Thames Gravels needs to be included as receptors with likely impact on WFD status and Catchment water balance within the “Realignment or modification of existing surface watercourses and provision of flood storage” activity during construction.</li> <li>• The risk of flooding and impact on licensed abstractions need to be included within the “Changes to Land use” activity.</li> </ul>

	Construction Phase	<ul style="list-style-type: none"> <li>The impact on licensed abstractions and designated sites needs to be included within the “Ground disturbance during construction”, “Use of construction materials”, “Use of construction machinery and Construction drainage and dewatering” activities.</li> </ul> <p>Additionally, increased sediment supply to the water environment is highlighted as the effect from ground disturbance during construction. However, it should also be highlighted here that disturbance of ground could cause historic landfill contaminated groundwater to become liberated, which could affect both ground and surface waters.</p> <p>There is reference to ‘Water Use’ as an activity in both the Construction and Operational phases of the development. Whilst the ‘Water Supply Infrastructure’ has been identified as a sensitive receptor, the details provided around the ‘Existing water supply and foul drainage networks’ (Paragraphs 18.5.31 to 18.5.33; Page 339) focus on specific pipe lines. There has been no consideration of the resource <u>availability</u> or <u>impact</u> of additional water use in this area, or on the identified receptors.</p> <p>The <a href="#">Colne and London Abstraction Licensing Strategies</a> are relevant for this site, which indicate that abstraction is restricted around the development. Additionally, this is the supply area of Affinity Water, which is classified as an area of ‘Serious’ Water Stress by the Environment Agency. ‘Serious’ water stress is identified as an area where the current or future demand for household water is, or is likely to be, a high proportion of the effective rainfall which is available to meet that demand. The Environment Agency’s document <a href="#">‘Water Stressed Areas – final classification’</a> 2013 can be viewed using the link or by visiting GOV.UK.</p> <p>Given the sensitive nature and pressure on water availability in this area, the impact of increased water use, both during construction and operation should be considered. This requirement needs to be managed to reflect the valuable nature of this resource. Additionally, it is expected that the commitments set out in <a href="#">Heathrow 2.0</a>, and specifically Goal 10.2 detailed in the ‘Heathrow 2.0 – Our Plan for Sustainable Growth’ report will still be met, despite this development.</p>
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		<p>There is consideration of the impact of changes in hydrological regime on flood risk. However, no consideration has been made to the impact of changes in the hydrological regime on the resilience of these water courses in instances of low flows or prolonged dry weather. This does need to be considered, particularly in light of anticipated changes in weather patterns due to climate change.</p>
		<p>Changes to catchment water balance and WFD status in individual catchments that have been changed by the development need to be addressed within the Operation Phase.</p>
	<p>Table 18.9 Proposed analysis to inform the assessment</p>	<p>There is no inclusion of biological assessments. We would expect to see further survey information on biological supporting elements within the EIA.</p>
		<p>Detailed Geological &amp; Soils data from BGS; and Private/Domestic Abstraction data from Local Authorities need to be included within Desk-based assessments of archive data.</p>
		<p>Accretion profile surveys need to be included within the Surface water hydrology monitoring. These surveys would need to be agreed with us.</p>
		<p>As part of the groundwater level monitoring the following assessments need to be included:</p> <ul style="list-style-type: none"> <li>• Shallow and deep groundwater monitoring locations, preferably with loggers installed for sub-daily monitoring;</li> <li>• groundwater modelling to understand the impact on licensed abstractions and catchment water balances;</li> <li>• 3D geology model to take advantage of the detailed ground investigations planned, and to enhance conceptual understanding of the probable impact of the development on the water resources.</li> </ul>

		<p>As part of the Surface water hydrological monitoring it is stated that “<i>A network of continuous (i.e. 15 min) gauging stations will be installed...</i>” Additional information such as timescales, locations, number of sites, data to be collected, permissions required need to be provided. Please note that in order to obtain and use meaningful data from a ‘gauging station’, it needs to be ‘rated’ or even if it is simply a ‘rated section’ with a logger (a step down from a gauging station) a minimum of 5 years’ worth of logged and gauged data is required.</p> <p>Within this table there is a distinct lack of inclusion of ecological data. Whilst the ‘desk-based assessment’ does include “detailed water body information sheets” (Page 349), it is unclear what these actually consist of. This is not a standard term/format for which WFD data is provided. The provision of ecological data to include Macro-invertebrate, Macrophyte, Diatom and Fish would be required to inform the baseline assessment. Without understanding the current established communities, it is not possible to quantify the impact of the development and therefore fully assess risk. This is likely to require the applicant to undertake specific monitoring.</p> <p>There is reference to the “biological...character of surface waters” (Paragraph 18.7.6; Page 351) within one of the key groups for assessment. However, it is concerning to note no previous mention of them within this chapter. In addition, the term ‘character’ lacks clear definition. This does need to be rectified to ensure an appropriate consideration of the impacts on biological receptors.</p> <p>There is an intention to complete monthly surface water quality monitoring to inform the impacts of the development. There is failure to identify the duration of this monthly monitoring. We would require 3 years’ (or 36 samples) of data to form the baseline for any water quality modelling work which will be submitted as part of, or to inform, the Environmental Statement. Additionally, it is expected that the monitoring will include all determinants which form part of the Physico-chemical element of the WFD classification.</p>
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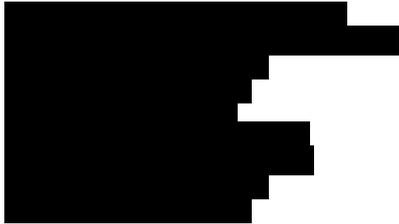
		It is understood that the Hydraulic Modelling will be used to inform the “flood risk assessment, flow conveyance, hydrology and geomorphology within affected receptors”. However, it is also expected that this will inform part of the WFD Compliance Assessment, given the proposed intention to link the modelling to hydrology and geomorphology. In addition, this is likely to support consideration of the ‘Hydrological Regime’ WFD supporting element.
	Paragraph 18.7.10	Bespoke impact assessments should be carried out.
	Table 18.10 Definitions of sensitivity for water resources and flood risk receptors	WFD groundwater bodies need to be included within High sensitivity receptors.
	Table 18.11 Definitions of value for water resources and flood risk receptors	Principal aquifers, groundwater bodies and industrial abstractions in critical industrial/agricultural establishments need to be included within high value receptors
		Secondary aquifers need to be included within medium value receptors
		Absence of abstractions should not be included within low value receptors
	Paragraph 18.7.12	<p>Whilst reference is made to the “deterioration in water body status or prevention of future achieving status objectives” (Table 18.12; Page 354), the principles of WFD form no further part in informing the ‘magnitude of effects’. This is of concern as:</p> <ul style="list-style-type: none"> <li>• ‘no deterioration’ also requires no deterioration to individual elements which then form the water body classification, including any deterioration to Poor or Bad status for physico-chemical elements. This is regardless of whether a deterioration in these elements would result in a status class change for the water body.</li> <li>• if any of these elements are at their lowest class standard, no further deterioration of these elements is allowed.</li> </ul>

		These principals are applicable for all WFD designated water bodies, and do need to be considered.
Table 18.12 Definitions of impact magnitude for water resources and flood risk receptors		The terms majority and minority of the receptors lack clear definition.
		It is noted that a 'Medium' impact would include a "medium-term (1-5 years) effects on water quality or availability" (Table 18.12; Page 354). The variance of 1-5 years is quite large, and no regard has been given of the associated impacts that deteriorated water quality would have on the supported ecological community. This is of particular concern as the ecological community can have a delayed recovery which may extend the duration of deterioration. This time-frame is considered a contradiction of the opening statement regarding a 'Medium' impact, identified as "Considerable, permanent / irreversible changes over the majority of the receptor" (Table 18.12; Page 354).
		While in this table a 'low' impact is considered to be "Discernible, temporary (throughout project duration) change" and the impact on water resources is defined as "Short-term (<1 year) or local effects of water quality or availability", the project duration is likely to be greater than a year, as detailed in Paragraph 18.7.15. Therefore these two criteria are contradicting and need to be clarified.
Paragraph 18.7.13 and Table 18.13 Significance of impact matrix		Paragraph 18.7.13 states that the "potential significance of an impact is a function of the sensitivity and value of the receptor and the magnitude of the effect". However, within Table 18.13 no regard appears to have been given for the 'value of the receptor'.
Paragraph 18.7.16		The assessment of construction impact must be underpinned by field surveys.
		It is noted that the "impacts of operational activities post-2035 will be assessed with reference to future baseline conditions", to include the "predicted improvements in the status of surface and groundwater bodies following the implementation of the measures outlined in the Thames RBMP" (Paragraph 18.7.16; Page356 – 357). Whilst we welcome the acknowledgement of assessing the impact of the development against a future baseline, this baseline should be Good Ecological Status/Potential for each water body by 2021 or, in some cases, 2027. This is the

		<p>objective for each water body, unless an alternative is considered appropriate, and should therefore form the baseline</p>
		<p>The “Re-alignment or modification of existing surface watercourses” is identified as a ‘potential impact’ during construction within Tables 18.7, 18.8 and 18.15. According to Paragraph 18.7.16 “Construction impacts will be assessed according to the current baseline”. The re-alignment or modification of these water courses will impact them beyond the construction timeframe. It will be a permanent change to these watercourses and, as a result, the impact should be assessed according to the future baseline.</p>
	18.9 – Supporting Assessments	<p>The construction related activities have a tendency to change the environment and could cause additional risk of groundwater flooding from the Superficial deposits aquifer and as such this needs to be assessed.</p>
	Section 18.8 Approach to Mitigation	<p>There is no reference to mitigation towards geomorphological or habitat changes as a result of the development within this Section. This needs to form part of the expected mitigation for this development.</p> <p>The applicant should note that the Thames RBMP is in the process of being updated, with the revision due for publication in 2021. The applicant should ensure that their assessment is updated accordingly. Additionally, the measures detailed within the Thames RBMP are a subset of the measures which are required to help these water bodies achieve Good Ecological Status/Potential. A full list can be provided as part of a Freedom of Information request, and should form part of the assessment of mitigation options.</p>
	WFD Compliance section	<p>Throughout the WFD Compliance section, there is no reference to the evidence required to demonstrate compliance with the requirements of WFD. Given the previously highlighted lack of regard for biological receptors within Chapter 18: Water, and a lack of reference within Chapter 6: Biodiversity, it is not considered to be addressed elsewhere. Without an understanding of the current baseline and the provision of evidence, there can be no accurate consideration of whether the</p>

		proposals are in accordance of the objectives of the Water Framework Directive. This needs to be considered as part of the scoping for this development.
	Paragraph 18.9.15 and 18.9.16	Paragraph 18.9.15 states that Stage 2 “considers potential non-temporary impacts...for each water body and each activity”. And Paragraph 18.9.16 indicates that the “assessment considers the potential for each activity planned as part of the proposed activity to affect each quality element in turn”. Please note that these two intentions will need to be integrated together to ensure that each quality element, within each water body, will be considered independently. This is important as the impacts can vary between water body and quality element.
	Paragraph 18.9.19	This paragraph references “priority substances”, stating that “the process requires the assessment to consider whether the activity is likely to cause the quality element to achieve good chemical status”. Good Chemical Status is reached when a water body complies with the Environmental Quality Standards for all the priority substances and other pollutants listed in Annex I of the Environmental Quality Standards Directive <sup>1</sup> . Therefore, the assessment should consider if the activity is likely to cause the quality element (priority substances and others) to deteriorate the status of an element.
	Paragraph 18.9.20	Please note an Article 4.7 derogation of the WFD for groundwater quality could only apply if it as a result of an alteration to the levels of the groundwater. It cannot be used to justify a deterioration or failure to reach good status as a consequence of the direct input of pollution from the proposed development. It can apply where a change in quality is an indirect result of the alteration in groundwater level.

<sup>1</sup> “Priority Substances under the Water Framework Directive”. *European Commission*, 8 June 2016, [http://ec.europa.eu/environment/water/water-dangersub/pri\\_substances.htm](http://ec.europa.eu/environment/water/water-dangersub/pri_substances.htm). Last accessed: 5 March 2019.

**From:** [ESP Utilities Group Ltd](#)  
**To:** [Heathrow Western Hub](#)  
**Subject:** Your Reference: TR02004 - Heathrow Western Hub Our Reference: PE137710. Plant Affected Notice from ES Pipelines  
**Date:** 22 February 2019 13:36:46  
**Attachments:** 

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Heathrow Expansion Team  
The Planning Inspectorate

22 February 2019

Our Reference: PE137710  
Your Reference: TR02004 - Heathrow Western Hub

**Heathrow Airport, London**

Dear Sir/Madam,

Further to your enquiry received on 27/12/2018, I can confirm that ESP Utilities Group Ltd may be affected by the proposed works in the area of Heathrow Airport, London. ESP Utilities Group Ltd has a number of gas and electricity networks in the area in question (Reference **ESN021329**, **ESN014490**, **PPS14182**, **ESPE1023**, **ESPE0954** and **ESPE0567**) at grid reference E507778, N176957 and security of supply is vitally important.

Project drawing as laid extracts for these sites are enclosed (not to scale) for your information which show the approximate location of the ESP Utilities Group Ltd network close to the area of interest off Heathrow Airport, London.

As your plans for the proposed work develop you are required to keep ESP Utilities Group Ltd regularly updated about the extent and nature of your proposed works in order for us to fully establish whether any additional precautionary or diversionary works are necessary to protect our network.

Arrangements can be set in place so that one of our representatives can meet on site (date to be agreed) and we will be happy to discuss the impact of your proposals on the network once we have received the details.

A list of precautionary measures is attached for your information. This must be passed on to the appointed contractors carrying out the work and any other associated parties.

ESP are continually constructing new gas and electricity networks and this notification is valid for 90 days from the date of this letter. If your proposed works start after this period of time, please re-submit your enquiry.

If you wish to discuss the matter further please contact myself or the team on 01372 587500, alternatively you can email us at [PlantResponses@espug.com](mailto:PlantResponses@espug.com).

Yours faithfully,

Plant Protection Team  
ESP Utilities Group Ltd



Bluebird House  
Mole Business Park  
Leatherhead  
KT22 7BA  
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<http://www.espug.com>

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## PRECAUTIONS TO BE TAKEN WHEN CARRYING OUT WORK IN THE VICINITY OF UNDERGROUND GAS PIPES

### ADVICE TO SITE PERSONNEL

#### **MANAGEMENT NOTE**

Please ensure that a copy of this note is read by your site management and to your site operatives.

Early consultation with ES Pipelines Ltd prior to excavation is recommended to obtain the location of plant and precautions to be taken when working nearby.

This note has been produced after consultation with and at the request of the Health and Safety Executive, the construction industry and the local authorities as an interim measure pending the issue of an HSE Guidance Note.

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#### **Introduction**

Damage to ES Pipelines Ltd's plant can result in uncontrolled gas escapes which may be dangerous. In addition these occurrences can cause expense, disruption of work and inconvenience to the public.

Various materials are used for gas mains and services. Cast Iron, Ductile Iron, Steel and Plastic pipes are the most widely found. Modern Plastic pipes are either bright yellow or orange in colour.

Cast Iron and Ductile Iron water pipes are very similar in appearance to Cast Iron and Ductile Iron gas pipes and if any Cast Iron or Ductile Iron pipe is uncovered, it should be treated as a gas pipe. ES Pipelines Ltd do not own any metallic gas pipes but their gas network infrastructures may be connected to Cast Iron, Ductile Iron or Steel pipes owned by Transco.

The following general precautions apply to Intermediate Pressure (2-7barg MOP), Medium Pressure (75mbarg-2barg MOP), Low Pressure (up to 75mbarg MOP) and other gas mains and services likely to be encountered in general site works and are referred to within this document as 'pipes'.

#### **Locating Gas Pipes**

It should be assumed when working in urban and residential areas that gas mains and services are likely to be present. On request, E S Pipelines Ltd will give approximate locations of pipes derived from their records. The records do not normally show the position of service pipes but their probable line can be deducted from the gas meter position. E S Pipelines Ltd's staff will be pleased to assist in the location of gas plant and provide advice on any precautions that may be required. The records and advice are given in good faith but cannot be guaranteed until hand excavation has taken place. Proprietary pipe and cable locators are available although generally these will not locate plastic pipes.

#### **Safe working Practices**

##### **To achieve safe working conditions adjacent to gas plant the following must be observed:**

Observe any specific request made by E S Pipelines Ltd's staff.

Gas pipes must be located by hand digging before mechanical excavation. Once a gas pipe has been located, mechanical excavation must proceed **with care**. A mechanical excavator must not in any case be used within 0.5 metre of a gas pipe and greater safety distances may be advised by E S Pipelines Ltd depending on the mains maximum operating pressure (MOP).

Where heavy plant may have to cross the line of a gas pipe during construction work, the number of crossing points should be kept to a minimum. Crossing points should be clearly indicated and crossings at other places along the line of the pipe should be prevented.

Where the pipe is not adequately protected by an existing road, crossing points should be suitably reinforced with sleepers, steel plates or a specially constructed reinforced concrete raft as necessary. E S Pipelines Ltd staff will advise on the type of reinforcement necessary.

No explosives should be used within 30 metres of any gas pipe without prior consultation with E S Pipelines Ltd.

**E S Pipelines Ltd must be consulted prior to carrying out excavation work within 10 metres of any above ground gas installation.**

Where it is proposed to carry out piling or boring within 15 metres of any gas pipe, E S Pipelines Ltd should be consulted prior to the commencement of the works.

Access to gas plant must be maintained at all times during on site works.

### **Proximity of Other Plant**

A minimum clearance of 300 millimetres (mm) should be allowed between any plant being installed and an existing gas main to facilitate repair, whether the adjacent plant be parallel to or crossing the gas pipe. No apparatus should be laid over and along the line of a gas pipe irrespective of clearance.

No manhole or chambers shall be built over or around a gas pipe and no work should be carried out which results in a reduction of cover or protection over a pipe, without consultation with E S Pipelines Ltd.

### **Support and Backfill**

Where excavation of trenches adjacent to any pipe affects its support, the pipe must be supported to the satisfaction of E S Pipelines Ltd and must not be used as an anchor or support in any way. In some cases, it may be necessary to divert the gas pipe before work commences.

Where a trench is excavated crossing or parallel to the line of the gas pipe, the backfill should be adequately compacted, particularly beneath the pipe, to prevent any settlement which could subsequently cause damage to the pipe.

In special cases it may be necessary to provide permanent support to the gas pipe, before backfilling and reinstatement is carried out. Backfill material adjacent to gas plant must be selected fine material or sand, containing no stones, bricks or lumps of concrete, etc., placed to a minimum depth of 150mm around the pipes and well compacted by hand. No power compaction should take place until 300 mm of selected fine fill has been suitably compacted.

If the road construction is in close proximity to the top of the gas pipe, a "cushion" of selected fine material such as sand must be used to prevent the traffic shock being transmitted to the gas pipe. The road construction depth must not be reduced without permission from the local Highway Authority.

No concrete or other hard material must be placed or left under or adjacent to any Cast Iron pipe as this may cause fracture of the pipe at a later date.

Concrete backfill should not be used closer than 300 mm to the pipe.

### **Damage to Coating**

Where a gas pipe is coated with special wrapping and this is damaged, even to a minor extent E S Pipelines Ltd must be notified so that repairs can be made to prevent future corrosion and subsequent leakage.

### **Welding or "Hot Works"**

When welding or other "hot works" involving naked flames are to be carried out in close proximity to gas plant and the presence of gas is suspected, E S Pipelines Ltd must be contacted before work commences to check the atmosphere. Even when a gas free atmosphere exists care must be taken when carrying out hot works in close proximity to gas plant in order to ensure that no damage occurs.

Particular care must be taken to avoid damage by heat or naked flame to plastic gas pipes or to the protective coating on other gas pipes.

### **Leakage from Gas Mains or Services**

If damage or leakage is caused or an escape of gas is smelt or suspected the following action should be taken at once:

- ❖ Remove all personnel from the immediate vicinity of the escape;
- ❖ Contact Transco's National Gas Escape Call Centre, on: **0800 111 999**;
- ❖ Prevent any approach by the public, prohibit smoking, extinguish all naked flames or other source of ignition for at least 15 metres from the leakage;
- ❖ Assist gas personnel, Police or Fire Service as requested.

**REMEMBER - IF IN DOUBT, SEEK ADVICE FROM E S PIPELINES LTD.**

**ES Pipelines Ltd can be contacted at:**

**Office Address:** Hazeldean, Station Road, Leatherhead, Surrey, KT22 7AA

**Office Tel:** 01372 227560; **Fax:** 01372 377996; **email:** plantresponses@espipelines.com

## **PRECAUTIONS TO BE TAKEN WHEN CARRYING OUT WORK IN THE VICINITY OF ELECTRICITY CABLES**

### **ADVICE TO SITE PERSONNEL**

#### **MANAGEMENT NOTE**

Please ensure that a copy of this note is read by your site management and to your site operatives.

Early consultation with ESP Electricity Ltd prior to excavation is recommended to obtain the location of plant and precautions to be taken when working nearby.

This has been produced after consultation with and at the request of the Health and Safety Executive, the construction industry and the electricity companies.

#### **1.0 Introduction**

This procedure should be read in conjunction with the ESP Electricity Distribution Safety Rules and other relevant procedures. The object of this procedure is:

- a) To lay down the rules for the location of cable before work is started.
- b) To specify the safe working procedure to be adopted by persons who have to work on or in the vicinity of cables.

#### **2.0 Reference**

ESP Electricity G81 – Design and Planning  
ESP Electricity G81 – Installation and Records  
National Joint Utilities Group (NJUG) Guidance Notes  
Avoiding danger from underground services HSG47 HSE Advice Booklet.

#### **3.0 Work**

- 3.1 All cables and apparatus to which the cables are connected shall be treated as being live, until they have been proved dead and all points of isolation have been established and controlled.
- 3.2 All work carried out under this procedure shall also be carried out in strict accordance with the ESP Electricity Distribution Safety Rules and other relevant procedures.
- 3.3 For the purpose of this procedure:
  - a) Work on a cable includes the intentional cutting or removal of its Sheath or Armour, cutting of its core(s) or conductor(s) and the removal of a spiking gun.
  - b) Work in the vicinity of a cable includes digging or any activity carried out at any work location where cables are or may be present, whether or not for the specific purpose of preparation for work on a cable.

#### **4.0 Cable Locating Devices**

- 4.1 An approved cable locating device is to be used on every occasion before any surface is removed or any digging is started. It must also be used during the course of any digging work.
- 4.2 Cable location devices provide information on the position of cables. They must not be used as the only means of cable location.
- 4.3 Cable locating devices must be regularly checked for correct operation.

All persons using cable locating devices must be adequately trained in their use and must be Competent Persons.

#### **5.0 Location of Cables**

- 5.1 The depth of underground cables varies greatly. It is essential that a site specific risk assessment is undertaken for the proposed work you are planning this must include obtaining an up-to-date map of the electricity cables in the area and to make use of it. The electricity cable records must be checked before any work is started. Changes in surface level or reference points, and work carried out by other people may affect the reliability of these records. Anybody excavating must be told of these possibilities.
- 5.2 Before the start of any excavation work, a cable locating device shall be used to establish the run of live cables. Reasonable steps should be taken to establish the runs of cables both along and across the length of the intended area of digging. The cable avoidance tool shall be used together with mains records and where provided, service records.

5.3 All cable runs either confirmed by use of the cable locating device or indicated on the mains records must be marked out on the surface using a waterproof marker. Marked cable runs must be extended 300mm beyond either end or side of the intended digging area, and must stay visible while the digging is going on. The trial hole dig method can be used to identify the run of cables using hand dig tools only.

**6.0 Precautions to be Taken while Working in Vicinity of Cables**

- 6.1 Work in the vicinity of cables must be carried out as if the cables are live and all excavation work must be personally supervised by a Competent Person. All persons shall wear a minimum of safety footwear, Safety Glasses, hard hat, Task Specific Gloves flame retardant overalls.
- 6.2 Approved hand tools should always be used in preference to power tools in the vicinity of cables, unless site conditions make this impracticable. Spades should always be used in preference to forks. Extreme care must always be taken when using a fork or pick. Forks must be of approved type with shortened chisel ended tines. Spades must have sharp corners of the blade rounded. The selection of a fork or pick will be assessed on a Task Specific Risk Assessment.
- 6.3 A proprietary air digging tool, which removes soil with a high-velocity jet of air, can be used to expose buried services without damage to the service. However, it will not penetrate asphalt, concrete or frozen ground. Also precautions need to be taken that will prevent injury to the operator and members of the public from ejected soil and other materials.
- 6.4 When site conditions require the use of hand held power tools they must be fitted with a short bit. The following method of work must be used:
- a) Using all the information provided, together with an approved cable locating device, the line of all known cables must be marked out at least 300mm past the hole that will be dug using waterproof marker.
  - b) Encroachment lines must be drawn 300mm parallel to and away from the outer and innermost cable marker lines. And as in (a) above these must be drawn to extend at least 300mm beyond the edge of the hole that will be dug.
  - c) Hand held power tools must not be used below ground level in between the encroachment lines. Hand tools must be used for progressive and careful undermining from outside the encroachment lines towards the cable(s). Hand power tools must only be used to break up any hard surface, keeping pace with, but not going past the undermining. Extreme care must, in particular, be exercised when using power tools above cables already exposed by undermining. The use of power tools must stop if at any time the cutting rate quickens, indicating softer ground. At all times, attention must be paid to the cable run marker lines outside the edges of the holes.
  - d) The safe digging procedure in (c) above must be followed until all cable(s) required for work or for identification have been located.
  - e) If all recorded or detected cables inside the digging area have been located then hand held power tools may be used below ground level to break up concrete or similar structures, but even then only when site conditions render the use of hand tools impractical.
- 6.5 During excavation, full use must be made of cable locating devices which must be used to assist in establishing the exact location of live cables.
- 6.6 Where exposed cables are likely to be damaged in any way they shall be adequately protected and/or supported. Where in the opinion of the person in charge on site it is appropriate, warning notices must be attached to cables e.g. 'live cable exposed above ground level' or 'live coiled cables'.
- 6.7 Irrespective of the color of the electricity cable it shall be considered as being in a 'live' status unless it has been confirmed and proven that the cable has been physically isolated or turned off.

**If damage is caused or suspected the following action should be taken at once:**

- ❖ Remove all personnel from the immediate vicinity
- ❖ Contact ESP Electricity 01372 227560 or out of hours Emergency contact Number 0800 731 6945
- ❖ Prevent any approach by the public.
- ❖ Assist electricity personnel, Police or Fire Service as requested.

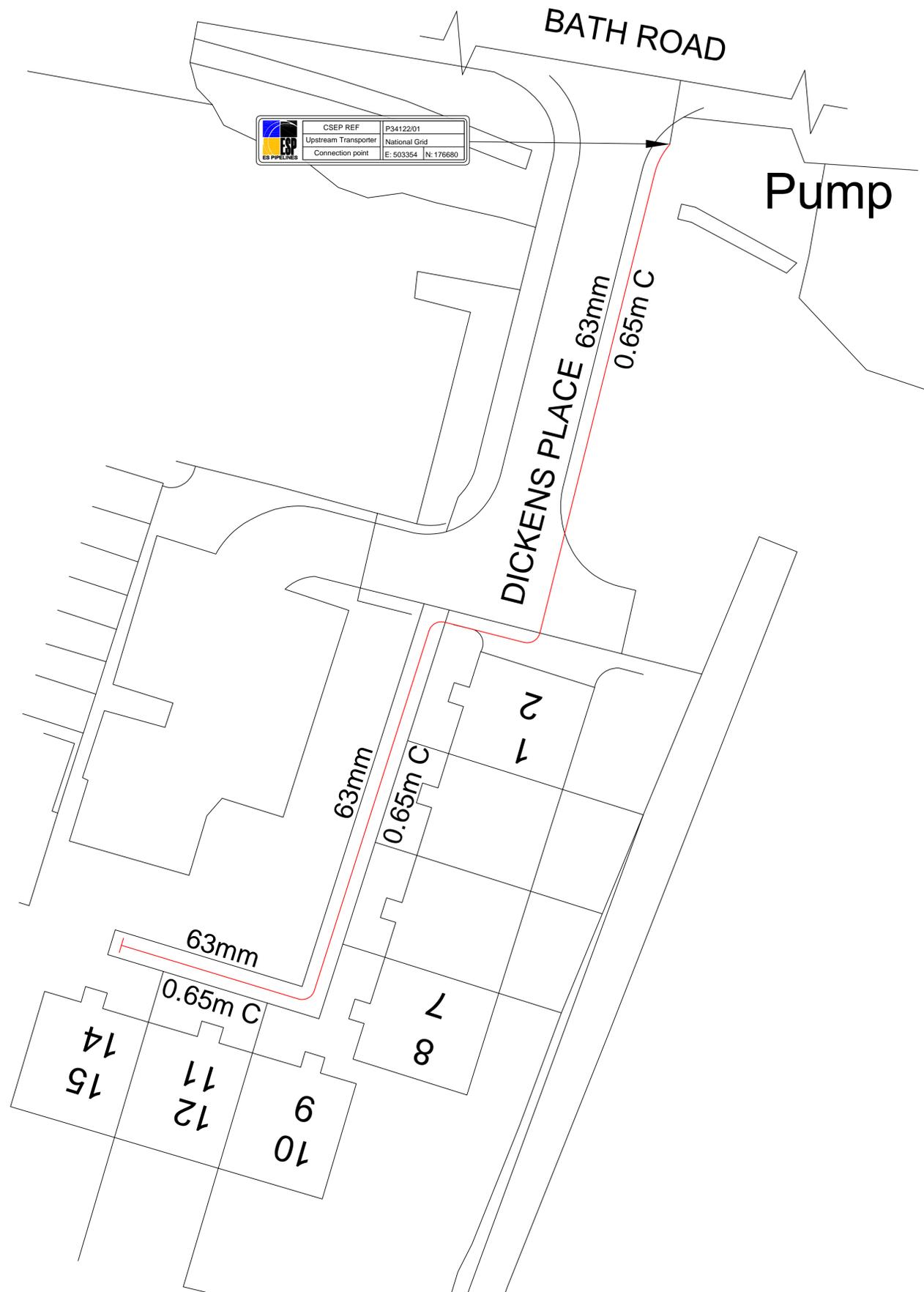
**REMEMBER - IF IN DOUBT, SEEK ADVICE FROM ESP Electricity Ltd.**

**ESP Electricity Ltd can be contacted at:**

**Office Address:** Hazeldean, Station Road, Leatherhead, Surrey, KT22 7AA

**Office Tel:** 01372 227560; **Fax:** 01372 377996; **email:** plantresponses@esppipelines .com

**UNCONTROLLED  
WHEN PRINTED**



Materials	Description
DI	Ductile Iron Main
CI	Cast Iron Main
ST	Steel main or service
MDPE (17.6)	Medium Density Polyethylene (SDR Rating) main or service
HDPE (11)	High Density Polyethylene (SDR Rating) main or service

Size	Description
12"	Metallic main or service - Imperial (nominal bore)*
150mm	Metallic main or service - Metric (nominal bore)
3'	Polyethylene main or service - Imperial (nominal bore)
90	Polyethylene main or service - Metric (outsidediameter)

\* note - for Steel 18" denotes the pipe size where the designation changes from nominal bore to outside diameter

Pressure	Description
LP	Low Pressure - up to 75 millibar gauge
MP	Medium Pressure - between 75 millibar and 2 bar gauge
IP	Intermediate Pressure - between 2 bar and 7 bar gauge
HP	High Pressure - above 7 bar gauge

**Key for Mains & Service Pipework**

- Existing LP mains or services operating up to 75 millibar gauge
- Proposed LP mains or services operating up to 75 millibar gauge
- Existing MP mains or services operating between 75 millibar and 2 bar gauge
- Proposed MP mains or services operating between 75 millibar and 2 bar gauge
- Existing IP mains or services operating between 2 bar and 7 bar gauge
- Proposed IP mains or services operating between 2 bar and 7 bar gauge

**ES PIPELINES**  
 ES Pipelines  
 HAZELDEAN  
 STATION ROAD  
 LEATHERHEAD  
 SURREY  
 KT22 7AA  
 Tel: 01372 227560 FAX: 01372 377996

MDPE Mains	90mm & above SDR 17.6	63mm SDR 11
------------	-----------------------	-------------

**Drawing Nomenclature**

- Change in diameter nominal bore
- Mains not connected
- Valve
- Pressure Regulator
- Cap End
- Pressure / Purge point
- 0.8m C Depth of Cover main or service
- Node

Drawn by	M. Hyslop	Scale	1:200	Date created	July '11
<b>DRAWING TITLE</b>					
<b>Bath Road Slough Berkshire SL3</b>					
Drawing No	PPS14182 / 1910	REV:			
Issue Number:	SHEET: 1 of 1	Printed:			
Pipe Lengths (mtrs)					
63mm	90mm	125mm	180mm	250mm	315mm 355mm
LP					
MP					
IP					
REV	DETAILS OF REVISION				Date

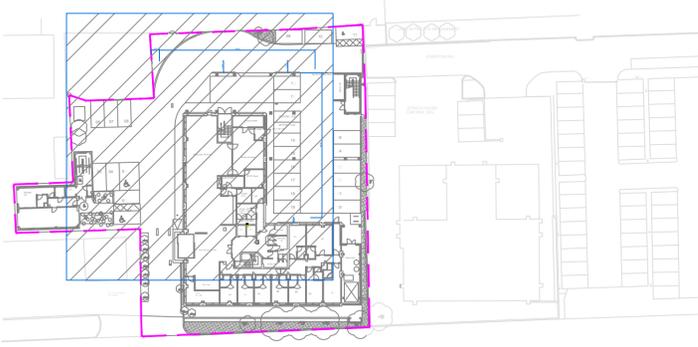
This Plan shows only the pipes owned by E S Pipelines Ltd in its role as a licensed Gas Transporter (GT). Gas pipes owned by other GT's, and also privately owned, may be present in the area. Information with regard to such pipes should be obtained from the owners. The information shown on this plan is given without obligation, or warranty. The accuracy thereof cannot be guaranteed. All service pipes are not necessarily shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by E S Pipelines Ltd, its agents or servants, for any error or omission. Safe digging practices, as detailed in Health and Safety booklet HS(G)47 'Avoiding danger from underground services', must be used to verify and establish the actual position of mains, services and other plant on site before any Mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct or contract labour) working for you on or near gas apparatus. The information on this plan should not be referred to beyond 28 days following the date of issue. **DATE OF ISSUE:**

REPRODUCED FROM THE ORDNANCE SURVEY MAP WITH THE SANCTION OF THE CONTROLLER OF HER MAJESTY'S STATIONARY OFFICE © CROWN COPYRIGHT RESERVED.  
 THIS DRAWING IS THE COPYRIGHT OF E.S. PIPELINES LIMITED AND MAY NOT BE REPRODUCED WITHOUT WRITTEN CONSENT ©





Key Plan



1:100

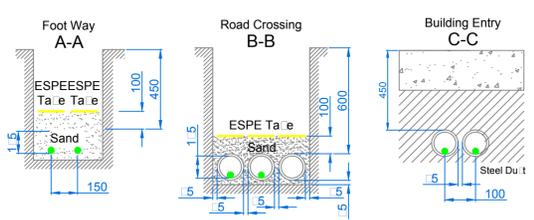
Legend	
	2 x 300mm <sup>2</sup> Al Waveform Cable
	Point of Connection
	Site Boundary
	Link Box
	DNO Equipment

Site Address: 76 Bath Road, Heathrow, UB5

Cable Installation Data			
Cable Type	Max Pulling Tension	Minimum Bending Radius	Minimum Duct Size
185mm <sup>2</sup> 3c Wavecon	7000N	700mm	115mm

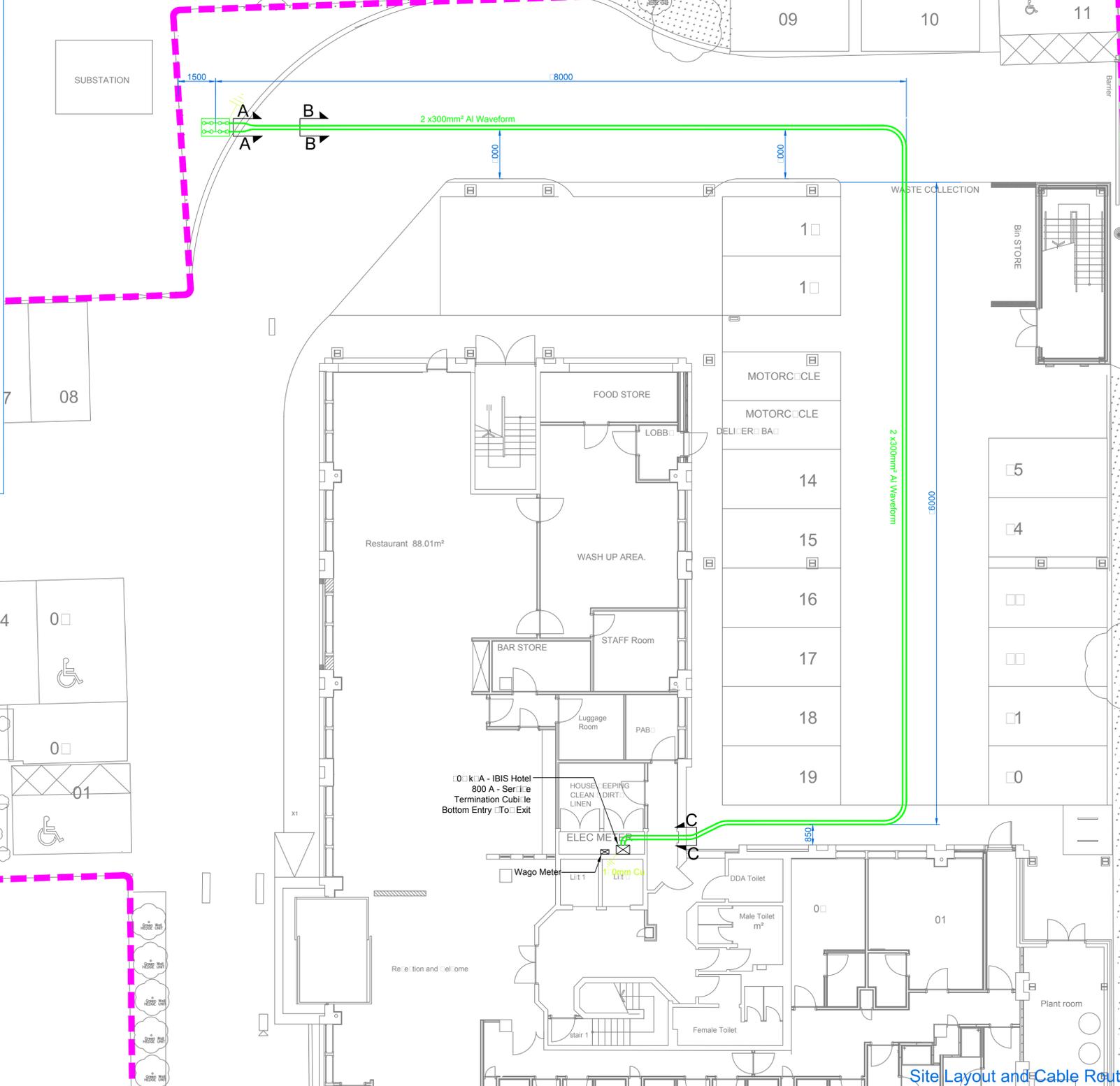
Cable Data

1:10



Excavation, installation of ducting, trenching and reinstatement will be carried out in accordance with the ESP G81 and NRSWA requirements.

Trench Cross Sections

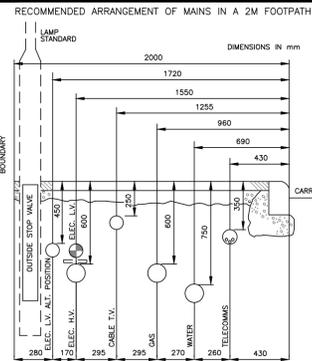


For Project Scope and Material Specifications, please refer to U.P. 448 - Project Information Documents - IDNO

**UKPOWER SOLUTIONS**  
 Riterie House  
 Bonds Mill Estate  
 Stonehouse  
 Gloucestershire  
 GL10 0RF

Client	RGB Plastering Construction Ltd		
Project	IBIS Hotel, Heathrow		
Title	As Laid Plan		
Planning Engineer	Anetor Ogie	Contact No.	0845 577 105
Project Manager	Tony O'Hara	Contact No.	
Drawn By	CH	Checked By	PS
Date	08.16		
Scale	As Shown	Sheet No.	1.1
Original Size	A1		
Drawing No.	U.P. 448 - DWG900		0
Drawing Status	For Information Only		

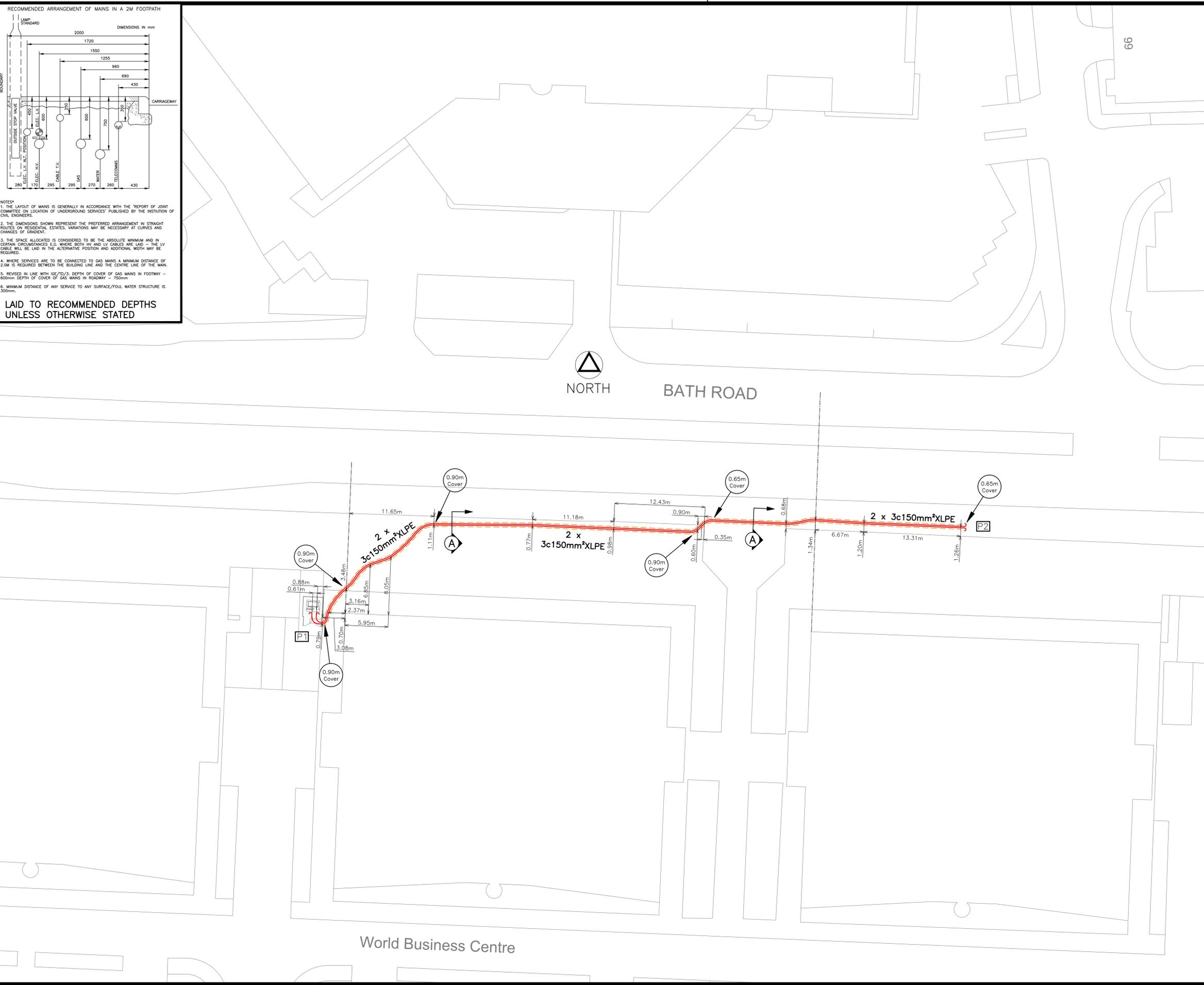
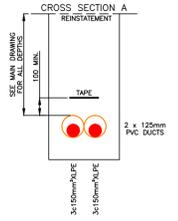
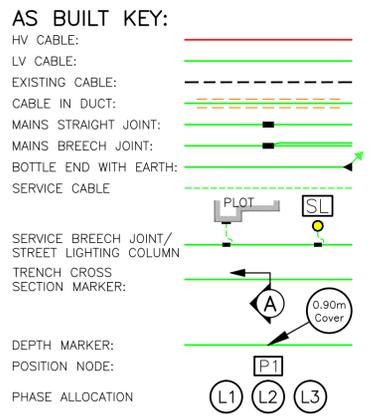
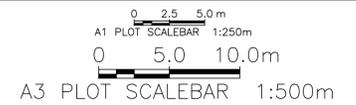
Site Layout and Cable Route



**NOTES\***

1. THE LAYOUT OF MAINS IS GENERALLY IN ACCORDANCE WITH THE 'REPORT OF JOINT COMMITTEE ON LOCATION OF UNDERGROUND SERVICES' PUBLISHED BY THE INSTITUTION OF CIVIL ENGINEERS.
2. THE DIMENSIONS SHOWN REPRESENT THE PREFERRED ARRANGEMENT IN STRAIGHT ROUTES ON RESIDENTIAL ESTATES. VARIATIONS MAY BE NECESSARY AT CURVES AND CHANGES OF GRADIENT.
3. THE SPACE ALLOCATED IS CONSIDERED TO BE THE ABSOLUTE MINIMUM AND IN CERTAIN CIRCUMSTANCES E.G. WHERE BOTH HV AND LV CABLES ARE LAID IN THE LV CABLE WILL BE LAID IN THE ALTERNATIVE POSITION AND ADDITIONAL WIDTH MAY BE REQUIRED.
4. WHERE SERVICES ARE TO BE CONNECTED TO GAS MAINS A MINIMUM DISTANCE OF 2.0M IS REQUIRED BETWEEN THE BUILDING LINE AND THE CENTRE LINE OF THE MAIN.
5. REVISED IN LINE WITH IGE/TD/3. DEPTH OF COVER OF GAS MAINS IN FOOTWAY - 600mm DEPTH OF COVER OF GAS MAINS IN ROADWAY - 750mm
6. MINIMUM DISTANCE OF ANY SERVICE TO ANY SURFACE/POUL WATER STRUCTURE IS 300mm.

**LAI TO RECOMMENDED DEPTHS UNLESS OTHERWISE STATED**



**AS LAID INFORMATION**  
 Supplied by Matrix ABC Limited  
 Office: 1-2 Logistics House, St Johns Works, Nettle Road, Bradford West Yorkshire BD4 8LU  
 Tel: 01274 723427

**Matrix ABC Limited**  
 As Built and Cad

**STATUS:** HV AS BUILT **REV:** A

**SCHEME:**  
 WORLD BUSINESS CENTRE  
 BATH ROAD, HEATHROW

**PROJECT MANAGER:** JULIAN HARRIS

**PRINCIPLE QUANTITIES - INFO TO 11.07.14**

FROM	TO	SIZE	LENGTH IN m
P1	P2	3c150mm²XLPE	98.5
P1	P2	3c150mm²XLPE	97.8

**SURVEYOR:** BEN HOWE **CONTACT No.:**

Rev.	Description/Details	Rev. Date	Rev. by
A	FIRST ISSUE. SEE PRINCIPLE QUANTITIES.	17.07.14	JAH

**Contractor:** **Matrix Networks Limited**  
 6500 Daresbury Park  
 Daresbury, Warrington,  
 Cheshire  
 WA4 4GE  
 Tel: 0844 74 000 74  
 Fax: 0844 74 000 75

Scheme / Site Name:  
**WORLD BUSINESS CENTRE**  
**BATH ROAD, HEATHROW**  
 Site Developer: -  
 Grid Reference: TQ083769  
 Drawing Status: **HV AS BUILT**  
 Contractor Ref. No. **MN208713** IDNO/DNO Ref. No. -  
 Contractor Dwg. No. **MN208713-JAH-001**

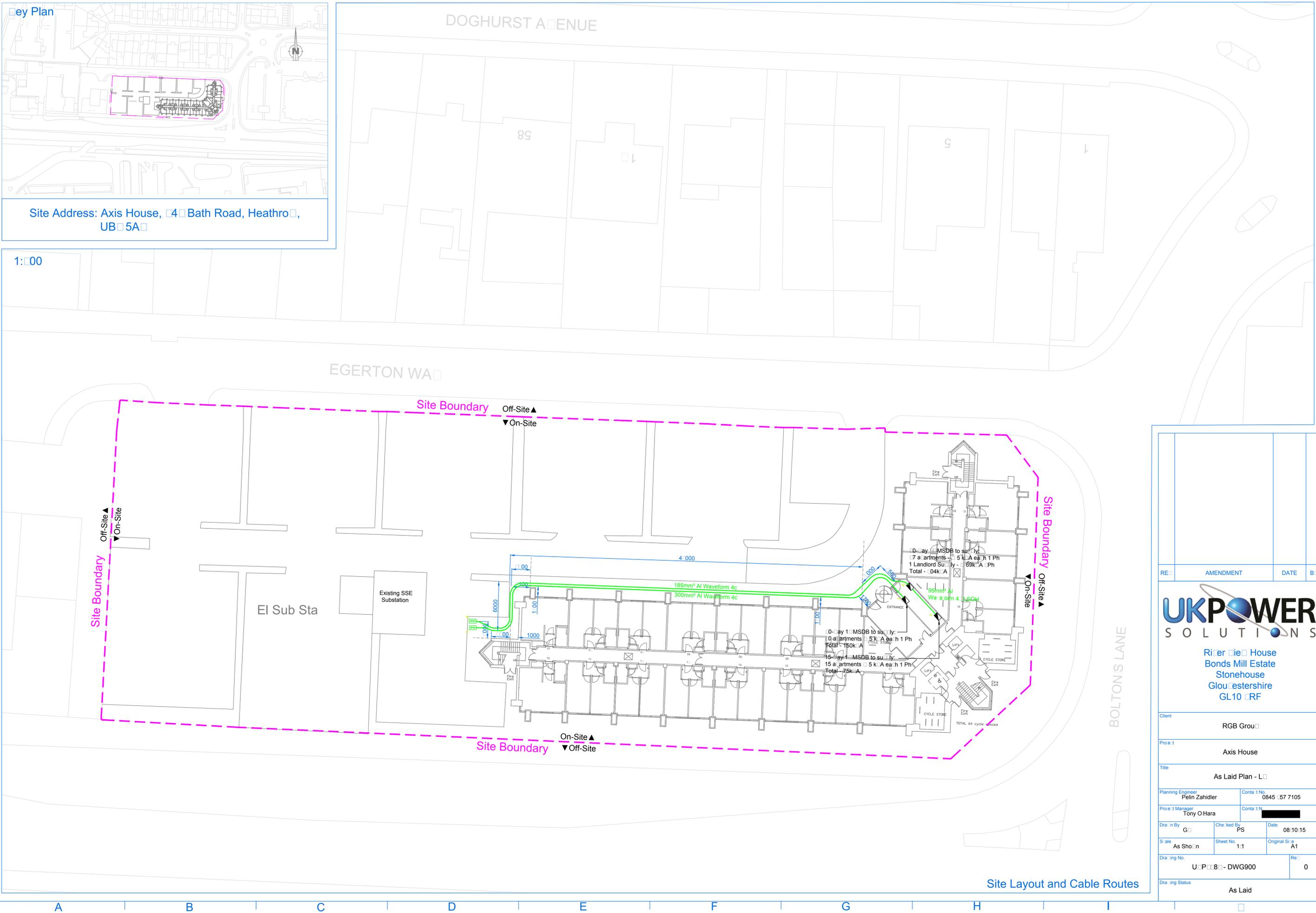
Designed by	Drawn by	Checked by	Approved by	Sheet 1 of 1
-	JAH	BAH	-	-

Scale 1:250 Orig. Size A1 Date drawn 17.07.2014 Revision A



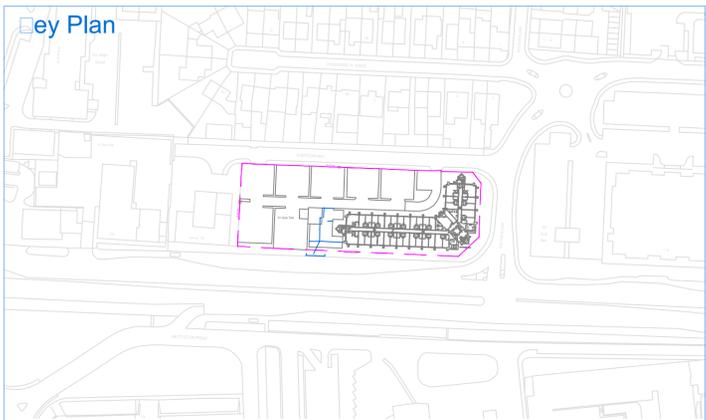
Site Address: Axis House, 4 Bath Road, Heathrow, UB5A

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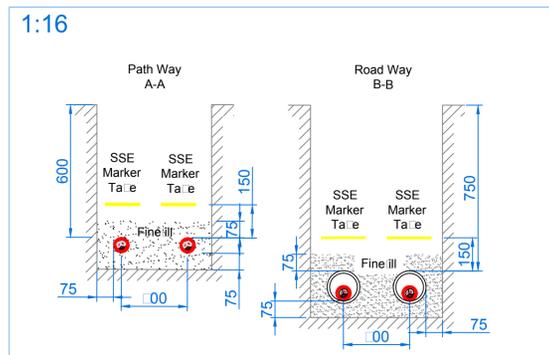
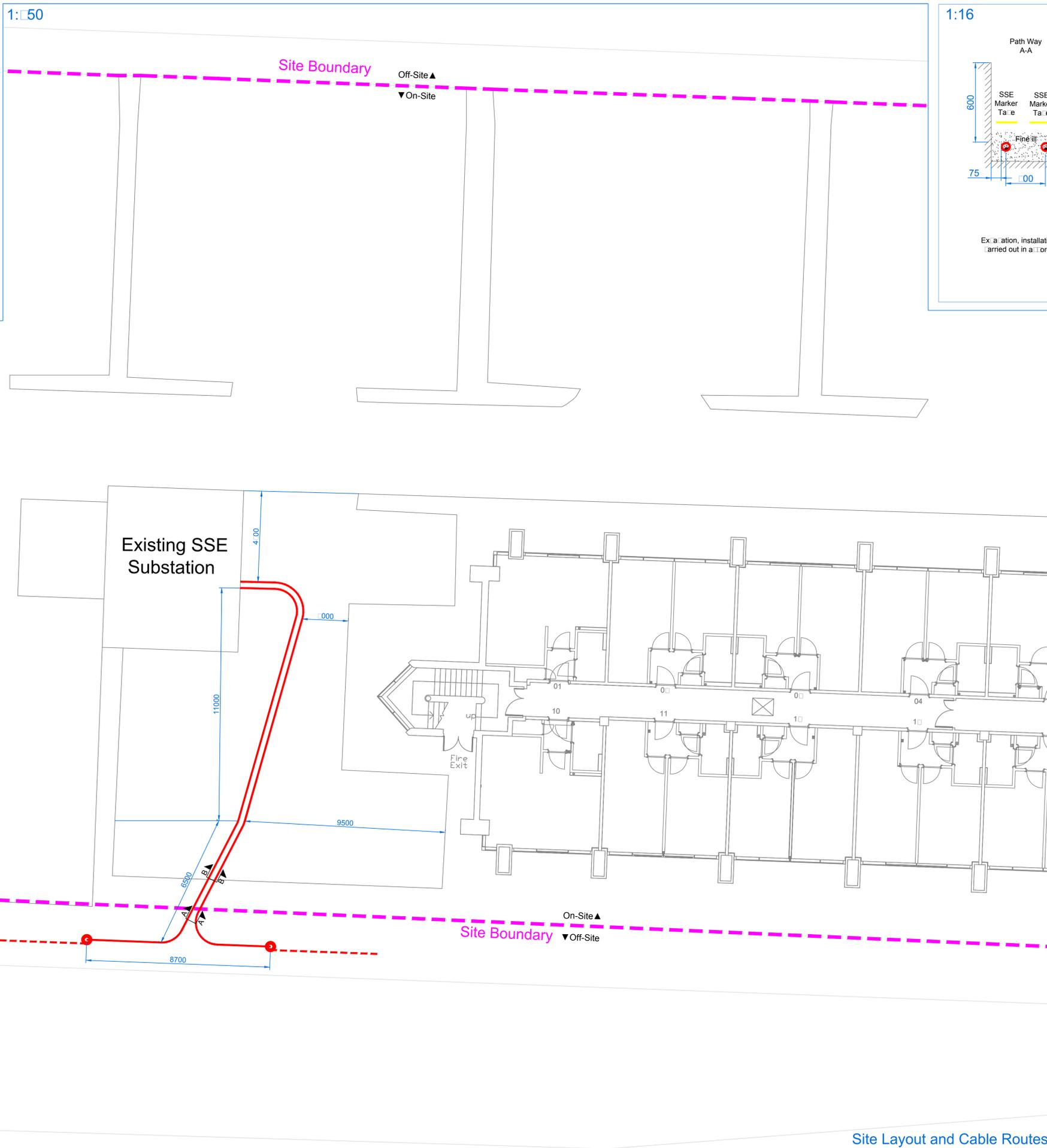


Site Layout and Cable Routes

REVISION	AMENDMENT	DATE	BY
Client: RGB Group Project: Axis House Title: As Laid Plan - L1 Planning Engineer: Pelin Zahidler (Contact No: 0845 57 7105) Project Manager: Tony O'Hara (Contact No: [REDACTED]) Drawn By: G (Checked By: PS, Date: 08/10/15) Scale: As Shown (Sheet No: 1.1, Original Size: A1) Drawing No: UPP8 - DWG900 (Revision: 0) Drawing Status: As Laid			



Site Address: Axis House, 4 Bath Road, Heathrow, UB5A



Excavation, installation of ducting, warning tape and reinstatement will be carried out in accordance with the SSE G81 and NRSWA requirements.

Trench Cross Sections

Legend	
	Existing H.V. Cable
	New H.V. Cable
	H.V. Point of Connection
	Site Boundary
	New L.V. Cable
	IDNO Element
	Earthing
	Link Box

For Project Scope and Material Specifications, please refer to U.P.P.B. - Project Information Document - DNO

REV	AMENDMENT	DATE	BY

**UKPOWER SOLUTIONS**

Ritter House  
Bonds Mill Estate  
Stonehouse  
Gloucestershire  
GL10 1RF

Client: RGB Group

Project: Axis House

Title: H.V. As Laid Plan

Planning Engineer Pelin Zahidler	Contact No. 0845 57 7105
Project Manager Tony O'Hara	Contact No. 

Drawn By CH	Checked By PS	Date 01.11.2015
Scale As Shown	Sheet No. 1.1	Original Size A1

Drawing No. U.P.P.B. - DWG901	Rev. 0
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Drawing Status: For Information Only

Site Layout and Cable Routes

South East & London Area Office  
Bucks Horn Oak  
Farnham  
Surry  
GU10 4LS

Major Casework Directorate  
Temple Quay House  
2 The Square  
Bristol, BS1 6PN

**Area Director**  
Alison Field

VIA EMAIL ONLY

Your Ref TR020004\_ 31095887  
Our Ref; 23 NSIP Heathrow Western Hub

Date: 14<sup>th</sup> March 2019

Dear Sir/Madam,

**Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) – Regulations 10 and 11**

**Application by Arora Holdings Limited (the Applicant) for an Order granting Development Consent for the Heathrow Western Hub (the Proposed Development)**

**Scoping consultation and notification of the Applicant's contact details and duty to make available information to the Applicant if requested**

Thank you for consulting the Forestry Commission on the above application.

The Forestry Commission is the Government experts on forestry & woodland and a statutory consultee (as defined by Schedule 1 of The Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009)<sup>1</sup> for major infrastructure (Nationally Significant Infrastructure Projects (NSIPs)) that are likely to affect the protection or expansion of forests and woodlands (Planning Act 2008). We have reviewed the Environmental Impact Assessment Scoping Report supplied on the 14<sup>th</sup> February, in particular sections relating to woodland and trees.

The Forestry Commission's summary points are:

Ancient Woodlands, Ancient Trees and Veteran Trees are acknowledged as irreplaceable habitats and are a part of our Historical Natural heritage. It is not possible to fully compensate for the loss of any irreplaceable habitat such as Ancient Woodland, therefore, the Forestry Commission recommends:

- Doing everything possible to avoid the loss or damage to ancient woodland and veteran trees;
- Where this is not possible, a significant package of ecologically significant compensation, which collectively delivers ecological enhancement to our ancient woodland and veteran tree infrastructure, is secured in perpetuity.
- Encourage a thorough assessment of any loss of trees and woodlands within the project boundary.

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<sup>1</sup> <http://www.legislation.gov.uk/uksi/2009/2264/contents/made>

- Compensate and the use of buffer zones to enhance the resilience of neighbouring ancient woodlands. These ones could include further tree planting or a mosaic of semi natural habitats.
- Encourage you to design green infrastructure to link the existing conurbations to adjacent countryside.
- Locally sourced timber is used in construction of appropriate structures

### **Ancient Woodland:**

Ancient woodlands are irreplaceable. As highlighted in the National Planning Policy Framework revised July 2018<sup>2</sup>: Irreplaceable habitats include ancient woodland, ancient trees and veteran trees:

Paragraph 175c – “*development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists*”. They have great value because they have a long history of woodland cover, with many features remaining undisturbed. This applies both to Ancient Semi Natural Woodland (ASNW) and Plantations on Ancient Woodland Sites (PAWS).

Within the Scoping Report ancient woodland has been identified within the development area.

The Forestry Commission has also prepared joint standing advice with Natural England on ancient woodland, ancient trees and veteran trees<sup>3</sup> which we refer you to as it notes that ancient woodland, ancient trees and veteran trees are an irreplaceable habitat, and that, in planning decisions, Plantations on Ancient Woodland Sites (PAWS) should be treated equally in terms of the protection afforded to ancient woodland.

Within Table 11.3 of the Scoping Report the Ancient Woodland Inventory is identified for the baseline data. Woodland under 2 hectares may not appear on the Ancient Woodland Inventory but may still have ancient woodland characteristics so we would support that a detailed investigation is undertaken to ascertain whether any additional ancient woodlands exist that may be impacted by the proposed scheme.

One of the most important features of Ancient woodlands is the quality and inherent biodiversity of the soil; they being relatively undisturbed physically or chemically. Direct impacts of development that could result in the loss or deterioration of ancient woodland or ancient and veteran trees include:

- damaging or destroying all or part of them (including their soils, ground flora or fungi)
- damaging roots and understorey (all the vegetation under the taller trees)
- damaging or compacting soil around the tree roots
- polluting the ground around them
- changing the water table or drainage of woodland or individual trees
- damaging archaeological features or heritage assets

It is therefore essential that the ancient woodland identified is considered appropriately to avoid the above impacts.

We particularly refer you to further technical information set out in Natural England and Forestry Commission’s [Standing Advice on Ancient Woodland](#) – plus supporting [Assessment Guide and Case Decisions](#). The standing advice provides details on the hierarchy of: avoid impacts, mitigate impacts and compensate as a last resort. This hierarchy could apply to any deterioration to woodland, ancient trees and veteran trees within the proposals.

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<sup>2</sup> <https://www.gov.uk/government/collections/revised-national-planning-policy-framework>

<sup>3</sup> <https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences>

Details of any mitigate or compensation should be within the ES.

The scoping report confirms veteran trees will be assessed as part of the baseline. Ancient trees and veteran trees can be individual trees, or groups of trees including within hedgerows<sup>4</sup>. Site investigations should identify ancient and veteran trees.

Within the Constraints Maps – they show Ancient Woodland but no other woodland; we would like to see all woodland assessed for value and impact, and to be considered within mitigation/compensation provisions.

### **Carbon and Greenhouse Gases**

As highlighted in the Defra 25 years Environment Plan the value of woods and forests with the services they deliver and provided to society includes carbon sequestration, the process which trees lock-up and store carbon from the atmosphere.

Therefore, the Forestry commission would recommend that as part of the assessment any loss of trees or woodland as part of this application are included in the GHG calculations.

The Forestry Commission suggests that the ES includes an assessment of the:

- Proposed loss of carbon stored in existing woodlands, tree, soils that will be negatively impacted from the application.
- Carbon cost of construction (reduced by the use of timber where possible)
- Carbon cost of running the airport in perpetuity (excluding aircraft)
  - Carbon lean power / heat using local sources of fuelwood as per east terminal and T5 Biomass CHP power station
  - Carbon cost of commuting vs the promotion of green corridors

### **Conclusion**

For the loss of any woodland, the Forestry Commission would ask:

- To explore with you how this loss could be further reduced and how direct and indirect impacts on ancient woodland can be minimised;
- It is made clear how creation of new woodland will be targeted to compensate for the loss of all trees and woodlands;
- That the applicant engages with the Forestry Commission at the earliest opportunity so that our expertise can be used to support the development of designs.

We hope these comments are helpful to you. If you have any further queries please do not hesitate to contact us.

Yours sincerely



Richard Pearce  
Local Partnership Advisor

---

<sup>4</sup> <https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences>

## A summary of Government policy on ancient woodland

[Natural Environment and Rural Communities Act 2006](#) (published October 2006).

**Section 40** – “Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity”.

[National Planning Policy Framework](#) (published July 2018).

**Paragraph 175** – “*development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists*”.

[National Planning Practice Guidance](#) – Natural Environment Guidance. (published March 2014)

This Guidance supports the implementation and interpretation of the National Planning Policy Framework. This section outlines the Forestry Commission’s role as a non statutory consultee on “*development proposals that contain or are likely to affect Ancient Semi-Natural woodlands or Plantations on Ancient Woodlands Sites (PAWS) (as defined and recorded in [Natural England’s Ancient Woodland Inventory](#)), including proposals where any part of the development site is within 500 metres of an ancient semi-natural woodland or ancient replanted woodland, and where the development would involve erecting new buildings, or extending the footprint of existing buildings*”

It also notes that ancient woodland is an irreplaceable habitat, and that, in planning decisions, **Plantations on Ancient Woodland Sites (PAWS) should be treated equally in terms of the protection afforded to ancient woodland in the National Planning Policy Framework**. It highlights the Ancient Woodland Inventory as a way to find out if a woodland is ancient.

[The UK Forestry Standard](#) (4th edition published August 2017).

Page 23: “Areas of woodland are material considerations in the planning process and may be protected in local authority Area Plans. These plans pay particular attention to woods listed on the Ancient Woodland Inventory and areas identified as Sites of Local Nature Conservation Importance (SLNCIs)”.

[Keepers of Time](#) – A Statement of Policy for England’s Ancient and Native Woodland (published June 2005).

**Page 10** “The existing area of ancient woodland should be maintained and there should be a net increase in the area of native woodland”.

[Natural Environment White Paper “The Natural Choice”](#) (published June 2011)

**Paragraph 2.53** - This has a “renewed commitment to conserving and restoring ancient woodlands”.

**Paragraph 2.56** – “The Government is committed to providing appropriate protection to ancient woodlands and to more restoration of plantations on ancient woodland sites”.

[Standing Advice for Ancient Woodland and Veteran Trees](#) (first published October 2014, revised November 2017)

This advice, issued jointly by Natural England and the Forestry Commission, is a material consideration for planning decisions across England. It explains the definition of ancient woodland, its importance, ways to identify it and the policies that are relevant to it.

The Standing Advice refers to an [Assessment Guide](#). This guide sets out a series of questions to help planners assess the impact of the proposed development on the ancient woodland. Summaries of some [Case Decisions](#) are also available that demonstrate how certain previous planning decisions have taken planning policy into account when considering the impact of proposed developments on ancient woodland.

[Biodiversity 2020: a strategy for England's wildlife and ecosystem services](#) (published August 2011).

**Paragraph 2.16** - Further commitments to protect ancient woodland and to continue restoration of Plantations on Ancient Woodland Sites (PAWS).

## Importance and Designation of Ancient and Native Woodland

### **Ancient Semi Natural Woodland (ASNW)**

Woodland composed of mainly native trees and shrubs derived from natural seedfall or coppice rather than from planting, and known to be continuously present on the site since at least AD 1600. Ancient Woodland sites are shown on Natural England's Inventory of Ancient Woodland.

### **Plantations on Ancient Woodland Site (PAWS)**

Woodlands derived from past planting, but on sites known to be continuously wooded in one form or another since at least AD 1600. They can be replanted with conifer and broadleaved trees and can retain ancient woodland features, such as undisturbed soil, ground flora and fungi. Very old PAWS composed of native species can have characteristics of ASNW. Ancient Woodland sites (including PAWS) are on Natural England's Inventory of Ancient Woodland.

### **Other Semi-Natural Woodland (OSNW)**

Woodland which has arisen since AD 1600, is derived from natural seedfall or planting and consists of at least 80% locally native trees and shrubs (i.e., species historically found in England that would arise naturally on the site). Sometimes known as 'recent semi-natural woodland'.

Other woodlands may have developed considerable ecological value, especially if they have been established on cultivated land or been present for many decades.

## Information Tools – The Ancient Woodland Inventory

This is described as provisional because new information may become available that shows that woods not on the inventory are likely to be ancient or, occasionally, vice versa. In addition ancient woods less than two hectares or open woodland such as ancient wood-pasture sites were generally not included on the inventories. For more technical detail see [Natural England's Ancient Woodland Inventory](#). Inspection may determine that other areas qualify.

As an example of further information becoming available, Wealden District Council, in partnership with the Forestry Commission, Countryside Agency, the Woodland Trust and the High Weald AONB revised the inventory in their district, including areas under 2ha. Some other local authorities have taken this approach.

## Further Guidance

[Felling Licences](#) - Under the Forestry Act (1967) a Felling Licence is required for felling more than 5 cubic metres per calendar quarter. Failure to obtain a licence may lead to prosecution and the issue of a restocking notice.

[Environmental Impact Assessment](#) - Under the Environmental Impact Assessment (Forestry) (England and Wales) Regulations 1999, as amended, deforestation which is likely to have a significant impact on the environment may also require formal consent from the Forestry Commission.

**From:** [Planning Policy](#)  
**To:** [Heathrow Western Hub](#)  
**Cc:** ["sarah.applegate@newforestnpa.gov.uk"](mailto:sarah.applegate@newforestnpa.gov.uk); ["Selina.Crocombe@portsmouthcc.gov.uk"](mailto:Selina.Crocombe@portsmouthcc.gov.uk); [Graham.Tuck@southampton.gov.uk](mailto:Graham.Tuck@southampton.gov.uk); [Planning Policy](#)  
**Subject:** RE: TR020004 – Heathrow Western Hub – EIA Scoping Notification and Consultation / Reg 11 Notification  
**Date:** 14 March 2019 17:22:36

---

Dear Sir/Madam,

## **TR020004 – Heathrow Western Hub – EIA Scoping Notification and Consultation / Reg 11 Notification**

Hampshire County Council would like to make the following comments relating to the Heathrow Western Hub – EIA Scoping Consultation.

### **Mineral Resources**

With regards to the proposed approach to mineral resources, we were pleased to see that the impacts of the proposed development on; active or former quarries, sites allocated for mineral extraction in a local plan, sites of high significance regionally or nationally and sites allocated as a Safeguarded Mineral Site or Mineral Safeguarding Area, were scoped in to the Land quality, Agricultural Land Quality and Mineral Safeguarding Assessment. We also support the stance that the avoidance of mineral sterilisation and additional mitigation requirements for mineral safeguarding will be considered as part of the waste assessment for the project. Yet, we feel there needs to be a more comprehensive statement about the use of recycled materials, so that the need for primary aggregates is reduced.

-

### **Waste Management**

With regards to the approach to waste management, as set out within the Scoping Report and Appendix 14.1 (Waste Appraisal Methodology), Hampshire County Council were pleased to see that proposed development design will aim to make a positive contribution to waste management. We agree that the effect of removing the Lakeside Energy from Waste Facility on capacity for treatment of waste will require assessment. However, we would like to emphasise the regional significance of this site for authorities in the South East. Hampshire County Council, along with the South East Waste Planning Advisory Group (SEWPAG), have particular concerns regarding the permanent loss of this facility and how the recovery capacity will be compensated for.

Furthermore, we support the stance that an assessment of the potential impact of waste will be needed and that the mitigation and waste management measures proposed will be based on the principle of moving waste up the hierarchy. We would like to promote the re-use of any construction demolition and excavation (CDE) arisings on site and that any wastes not used on site should also be sent to an appropriate waste facility, at the highest level possible within the waste hierarchy.

### **Conclusion**

In conclusion, it is felt that more studies are needed to determine the impact the

Heathrow expansion will have and how its effects can be mitigated most notably in relation to waste management provision in the area and potential borrow pits. Going forward, we would like to be consulted and we have particular interest in the Environmental Statement, Site Waste Management Plan and borrow pit locations.

Kind regards,

Hampshire Planning Policy

**Sophie Cardinal**  
**Minerals and Waste Policy Officer**  
**01962 845785**  
[sophie.cardinal@hants.gov.uk](mailto:sophie.cardinal@hants.gov.uk)

---

**From:** Strategic Planning  
**Sent:** 18 February 2019 07:48  
**To:** Planning Policy <[planning.policy@hants.gov.uk](mailto:planning.policy@hants.gov.uk)>  
**Subject:** FW: TR020004 – Heathrow Western Hub – EIA Scoping Notification and Consultation / Reg 11 Notification

---

**From:** Heathrow Western Hub <[HeathrowWesternHub@planninginspectorate.gov.uk](mailto:HeathrowWesternHub@planninginspectorate.gov.uk)>  
**Sent:** 15 February 2019 14:53  
**To:** Strategic Planning <[planning@hants.gov.uk](mailto:planning@hants.gov.uk)>  
**Cc:** Spriggs, Melissa <[melissa.spriggs@hants.gov.uk](mailto:melissa.spriggs@hants.gov.uk)>  
**Subject:** TR020004 – Heathrow Western Hub – EIA Scoping Notification and Consultation / Reg 11 Notification

Dear Sir/Madam

Please see attached correspondence on the proposed Heathrow Western Hub.

Please note the deadline for consultation responses is 15/03/2019 and is a statutory requirement that cannot be extended.

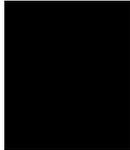
Kind regards

Major Casework Directorate  
The Planning Inspectorate, Temple Quay House, Temple Quay, Bristol, BS1 6PN

Twitter: @PINSgov  
Helpline: 0303 444 5000  
Email: [HeathrowWesternHub@planninginspectorate.gov.uk](mailto:HeathrowWesternHub@planninginspectorate.gov.uk)

Web: <http://infrastructure.planninginspectorate.gov.uk> (National Infrastructure Planning website)

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**From:** [Karen Thorpe](#)  
**To:** [Heathrow Western Hub](#)  
**Subject:** Heathrow Western Hub  
**Date:** 12 March 2019 11:07:29  
**Attachments:** 

---

Good morning Sue,

Thank you for sending the relevant information regarding the Heathrow Western Hub.

Harlaxton Energy Networks Ltd. at this time has no assets in the area, and will not be implementing any in the near future, therefore Harlaxton has no comment to make on this project.

Kind Regards

Karen Thorpe  
Distribution Administrator  
0844 800 1813



Visit our website [harlaxtonenergynetworks.co.uk](http://harlaxtonenergynetworks.co.uk) and explore at your leisure



Toll Bar Road, Marston, Grantham, Lincolnshire, NG32 2HT  
Registered Company Number : 7330883

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**From:** [Karen Thorpe](#)  
**To:** [Heathrow Western Hub](#)  
**Subject:** Heathrow Western Hub  
**Date:** 12 March 2019 11:09:01  
**Attachments:** [image002.png](#)

---

Good morning,

Thank you for sending the relevant information regarding the Heathrow Western Hub.

Harlaxton Gas Networks Ltd. at this time has no assets in the area, and will not be implementing any in the near future, therefore Harlaxton has no comment to make on this project.

Kind Regards

Karen Thorpe  
Distribution Administration Assistant



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CEMHD Policy - Land Use Planning  
NSIP Consultations  
Building 1.2, Redgrave Court  
Merton Road, Bootle  
Merseyside, L20 7HS

Your ref: TR020004  
Our ref: 4.2.1.6574  
HSE email: [NSIP.applications@hse.gov.uk](mailto:NSIP.applications@hse.gov.uk)

The Planning Inspectorate  
Temple Quay House  
Temple Quay,  
Bristol  
BS1 6PN

Dear Planning Inspectorate,

08 Mar 2019

**PROPOSED HEATHROW WESTERN HUB (the project)  
PROPOSAL BY ARORA HOLDINGS LIMITED (the applicant)  
INFRASTRUCTURE PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2017  
(as amended) – Regulations 10 and 11**

Thank you for your letter of 15<sup>th</sup> February 2019 regarding the information to be provided in an environmental statement relating to the above project. HSE does not comment on EIA Scoping Reports but the following information is likely to be useful to the applicant.

**HSE's land use planning advice**

Will the proposed development fall within any of HSE's consultation distances?

According to HSE's records, there are no major accident hazard sites or major accident hazard pipelines within the proposed DCO application boundary of the proposed Heathrow Western Hub for this nationally significant infrastructure project.

This is based on the current configuration for the principal works area under consideration for Heathrow Western Hub as illustrated, for example, in figure 2.2 (Drawing reference: PB8426-RHD-ZZ-XX-DR-Z-0147).

Hazardous Substance Consent

The presence of hazardous substances on, over or under land at or above set threshold quantities (Controlled Quantities) will probably require Hazardous Substances Consent (HSC) under the Planning (Hazardous Substances) Act 1990 as amended. The substances, alone or when aggregated with others for which HSC is required, and the associated Controlled Quantities, are set out in The Planning (Hazardous Substances) Regulations 2015 as amended.

Hazardous Substances Consent would be required to store or use any of the Named Hazardous Substances or Categories of Substances at or above the controlled quantities set out in schedule 1 of these Regulations.

Further information on HSC should be sought from the relevant Hazardous Substances Authority.

Consideration of risk assessments

Regulation 5(4) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 requires the assessment of significant effects to include, where relevant, the expected significant effects arising from the proposed development's vulnerability to major accidents. HSE's role on NSIPs is

summarised in the following Advice Note 11 An Annex on the Planning Inspectorate's website - [Annex G – The Health and Safety Executive](#) . This document includes consideration of risk assessments on page 3

Explosives sites

As there are no licensed explosive sites in the vicinity, HSE has no comment to make in this regard.

**Electrical Safety**

No comment from a planning perspective

Please send any further electronic communication on this project directly to the HSE's designated e-mail account for NSIP applications. Alternatively any hard copy correspondence should be sent to:

Mr Dave Adams (MHPD)  
NSIP Consultations  
1.2 Redgrave Court  
Merton Road, Bootle,  
Merseyside L20 7HS

Yours sincerely,



Dave Adams  
(CEMHD4 Policy)

St Martins Place,  
51 Bath Rd  
Slough SL1 3UF

Email: [admin@heathrowstrategicplanninggroup.com](mailto:admin@heathrowstrategicplanninggroup.com)

Date: 15 March 2019

## **Heathrow Strategic Planning Group (HSPG) – Heathrow Western Hub - EIA Scoping Report Response**

Dear Sir/Madam,

The following letter details our initial response to the EIA Scoping Report for the Heathrow Western Hub being promoted by Arora Holdings Limited.

HSPG is a joint working agreement of members that represent most of the local authorities and other public organisations responsible for the land use planning, transport, environment, economic development and sustainable development in the wider area surrounding Heathrow Airport. The Group seeks to ensure that any expansion of the airport is well and sustainably planned, benefits are maximised, and negative impacts minimised and mitigated. The Group is independent of any promoters or developers at the airport. The Group has a Service Level Agreement with Heathrow Airport Ltd (HAL) to input into its emerging DCO scheme. HSPG is open and willing to engage with other promoters and developers such as Arora Group to shape any proposals. The individual member organisations have their own policy positions on proposals (whether supporting or opposing) for Heathrow expansion.

Our key comments on the EIA Scoping Report are as follows:

- Consultation with HSPG - The Applicant states that they plan to establish a consultation group that includes all members of the Heathrow Strategic Planning Group (HSPG), but it is not clear whether the Applicant intends to consult directly with HSPG itself. HSPG is open and willing to engage with the Applicant.
- Assessment in the context of HAL proposals – It is recognised that the Arora proposals do not include provision of the new runway and changes to the M25. The EIA assessment approach appears to rely primarily on the cumulative assessment to ensure that the HAL and Arora assessments link with and inform one another. The two EIAs clearly need to be interlinked closely to avoid double counting and ensure data generated from one assessment feeds into the other (for example, aircraft noise resulting from the new runway contributing to a change in the future noise environment). The mechanisms for ensuring that the two assessments will dovetail are not clear and need to be explained more fully to ensure a robust assessment is delivered. HSPG considers that the cumulative assessment alone does not provide a sufficient basis to ensure the collective effects of both the HAL and Arora proposals are identified.
- Surveys and data gathering – the Scoping Report does not provide much detail on the extensive surveys and data gathering which will be required to inform the EIA and ensure a robust assessment (for example ground investigations, archaeology, species surveys and noise and air quality monitoring). Further details on whether data will be shared with HAL or separate data gathering efforts will be undertaken is needed.
- Consideration of alternatives – It is recognised that alternative designs and technologies etc will be considered in due course and details included in the PEIR. However, there does not appear to be any alternatives considered in terms of the location and functions of the proposed terminal and associated development including local road alignments. HSPG would expect to see evidence of other alternatives considered, particularly in relation to the effects of the proposal on the western

perimeter of the airport and M25. Alternatives in relation to river diversions have been outlined but not considered fully at this stage.

- The Applicant acknowledges that the proposal is reliant on the HAL DCO project and the scope of the EIA currently has a high level of uncertainty until precise details of the HAL project are available. The Applicant states that the Rochdale Envelope is therefore drawn widely at this stage and a worst-case approach has been adopted. However, it is unclear how the Applicant intends to narrow the scope sufficiently in the PEIR and ES to ensure a robust assessment given the level of detail required from the HAL proposal may not be available for some time and the proposals are likely to run in parallel. HSPG consider that an updated EIA Scoping Report may be required once enough detail on the HAL proposal is available which has the potential to change the proposed scope of the Arora assessment considerably.
- The Scoping Report seems to rely significantly on the HAL Scoping Report and associated scoping responses from consultees. Given that Arora will not have access to the background data underpinning the HAL Scoping Report, further justification on how this provides a sufficient robust basis for the EIA Scope is required. Opinions expressed by consultees on the HAL scoping proposals also may not be the same for the Arora proposal and may not serve as a robust basis for EIA scoping assumptions.
- The range of topics to be considered, including the elements scoped in or out within each topic, appear to be appropriate and closely mirror the HAL proposal assessment scope.
- The overall assessment approach, methodologies, study areas, mitigation approach and significance criteria for each of the topic assessments appear to meet current best practice and are considered to be an appropriate basis for assessment. It is acknowledged that the assessment approach mirrors the HAL assessment approach closely.
- In relation to air quality and greenhouse gas emissions, consideration should be given to the effects of the growth of passenger numbers which would be facilitated by the proposed Arora development, and not purely related to provision of a new runway. The study areas for noise and air quality need to be more clearly defined.
- In relation to community, economics, employment and health effects, consideration should be given to the effects of an influx of construction workers related to health, housing, transport, crime and other local services.

The above comments set out our initial and high-level views on the EIA scope for the proposed Heathrow Western Hub proposal. We would be open to providing further and more detailed comments on the emerging scope as the assessment and design progresses.

Yours sincerely

**Daniel O'Kelly CEnv MIEMA**  
**Environmental Advisor to HSPG**

On behalf of the following HSPG member organisations:

- London Borough of Hounslow
- Slough Borough Council
- South Bucks District Council
- Buckinghamshire County Council
- London Borough of Ealing
- Spelthorne Borough Council
- Runnymede Borough Council
- Surrey County Council
- Thames Valley Berkshire LEP
- Bucks and Thames Valley LEP

- Enterprise M3 LEP
- Colne Valley Park CIC
- Elmbridge Borough Council
- Royal Borough of Windsor and Maidenhead

**From:** Edward Chetwynd-Stapylton <ecstapylton@elmbridge.gov.uk>  
**Sent:** 25 March 2019 15:52  
**To:** Heathrow Western Hub  
**Cc:** Daniel O'Kelly; daniel.okelly@atkinsglobal.com; Admin HSPG; Lucy Owen; Shaun Fisher; Michael Thornton  
**Subject:** HSPG Response to EIA Scoping Report - Heathrow Western Hub  
**Attachments:** HSPG response to EIA Scoping Report - Heathrow Western Hub.pdf

To whom it may concern

Please find attached a copy of the response prepared by the Heathrow Strategic planning Group (a consortium of local authorities of which Elmbridge Borough Council is a full member). The attached response reflects the views of this local authority and the jointly held views of the local authority members of the Heathrow Strategic Planning Group. Please accept this response this as our response to the Arora Holdings Ltd Scoping Report submitted to the Secretary of State on 14 February 2019.

Kind Regards

Edward Chetwynd-Stapylton  
BSc (Hons), DipTP, DipSurv, MRTPI, FRGS  
Special Projects Officer  
Planning Services  
Elmbridge Borough Council  
Civic Centre  
High Street  
Esher  
Surrey KT10 9SD  
Tel: 01372 474784  
Email: [ecstapylton@elmbridge.gov.uk](mailto:ecstapylton@elmbridge.gov.uk)



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**From:** Ajit Bansal <Ajit.Bansal@hounslow.gov.uk>  
**Sent:** 26 March 2019 06:44  
**To:** Heathrow Western Hub  
**Cc:** Sweetland, Darl; imohammed@buckscc.gov.uk; Lisa Michelson; BartonS@ealing.gov.uk; Richard Shaw; Dawes, Geoff; Biggs, Ann; Robinson, Jane; sue.janota@surreycc.gov.uk; 'Judith Jenkins El'; paul.stimpson@slough.gov.uk; Pippa.hopkins@slough.gov.uk; 'Marcel Steward'; 'Rachel Raynaud'; Danalee Edmund; Geoffrey Hugall; Ajit Bansal; SPomeroy@Groundwork.org.uk; Jerry Unsworth; Sukhpreet Khull; Tom Dobson; Edward Chetwynd-Stapylton; Jenifer.Jackson@RBWM.gov.uk; Sukhpreet Khull; 'Robert Paddison'; 'Adrian Colwell'; Cc: Daniel O'Kelly; daniel.okelly@atkinsglobal.com; Admin HSPG; Lucy Owen; Shaun Fisher; Michael Thornton  
**Subject:** Response to Arora Holdings Ltd EIA Scoping Report  
**Attachments:** HSPG response to EIA Scoping Report - Heathrow Western Hub.pdf  
**Importance:** High

Dear Sir,

The attached response reflects the views of this local authority and the jointly held views of the local authority members of the Heathrow Strategic Planning Group. Please accept this response as part of our reply to the Arora Holdings Ltd Scoping Report submitted to the Secretary of State on 14 February 2019.

Should you have any questions please do not hesitate to contact us [Heathrow@hounslow.gov.uk](mailto:Heathrow@hounslow.gov.uk) and [admin@heathrowstrategicplanninggroup.com](mailto:admin@heathrowstrategicplanninggroup.com).

Kind regards

Ajit

**Ajit Bansal | Principal Environmental Strategy Officer**

Chief Executives Directorate – Traffic, Transport and Environmental Strategy  
London Borough of Hounslow  
Civic Centre, Lampton Road,  
Hounslow, TW34DN.

T: 020 8583 3275

E: [ajit.bansal@hounslow.gov.uk](mailto:ajit.bansal@hounslow.gov.uk)

E: [heathrow@hounslow.gov.uk](mailto:heathrow@hounslow.gov.uk)

Our ref:  
Your ref: TR020004\_ 31095887

Jeremy Bloom

Major Casework Directorate  
Temple Quay House  
2 The Square  
Bristol, BS1 6PN

Network Planning Director  
Highways England  
8 City Walk,  
Leeds  
LS11 9AT

via Email:  
HeathrowWesternHub@planninginspectorate.gov.uk

15<sup>th</sup> March 2019

Dear Sir/Madam,

**Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017(the EIA Regulations) – Regulations 10 and 11**

**Application by Arora Holdings Limited (the Applicant) for an Order granting Development Consent for the Heathrow Western Hub (the Proposed Development)**

**Scoping consultation**

Under the Planning Act 2008 (as amended) and the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, Highways England is a statutory consultee on applications for Development Consent Orders (DCO) likely to affect roads for which the Secretary of State for Transport is the highway authority (the Strategic Road Network (the SRN)).

Arora's proposed western hub will consist of reconfiguration and expansion of terminal and airfield facilities on the western boundary of Heathrow Airport. The northern extent of the principal works area is defined by the access road to junction 14A of the M25 that provides direct access from the motorway to the Western Perimeter Road and Terminal 5. The development is also in close proximity to the M4, M3 and M40 motorways.

It is noted that the applicant does not plan to construct a third runway at Heathrow or carry out the works required for the M25 realignment required for the construction of a third runway, rather the applicant intends that its works would combine with the runway works undertaken by other parties. However, the proposed development will require changes to existing road access infrastructure to facilitate access to the proposed western hub, including alterations to junction 14 and 14A of the M25. We have not received any details of road access proposals from the applicant.

Highways England welcomes the opportunity to provide advice on the scope of any Environmental Statement, pursuant to the procedures set out in the Infrastructure planning (Environmental Impact Assessment) Regulations 2017, in relation to the Proposed Development. We have set out below both general and specific areas of concern that Highways England requires consideration of as part an Environmental Statement. The comments relate specifically to matters arising from Highways England's responsibilities to

manage and maintain the SRN, as set out in our [Licence](#). Comments relating to non-trunk roads should be sought from the relevant local highway authorities.

### **General aspects to be addressed**

Highways England's principal concern with any development proposal is the impact on the SRN. Highways England notes the reference in Table 17.2 to specific government policy on the appraisal of development proposals with regard to the SRN, which is contained within [DfT Circular 02/2013: The strategic road network and the delivery of sustainable development](#) (the Circular). This sets out the policy tests that scheme promoters will need to satisfy in order to demonstrate that a proposal is acceptable to Highways England. The applicant will need to demonstrate that these tests have been addressed through the development of its planning application. Furthermore, Highways England will also need to be satisfied that the impact of the proposed development on the SRN has been modelled robustly and, if necessary, all schemes to provide capacity on the network to accommodate the development will achieve their objectives. In particular, given the complex road layout in the area, microsimulation modelling should be used to demonstrate the impact of the Proposed Development on the SRN. The applicant should share further detail on the scope of their Transport Assessment, for comment on by Highways England, as information becomes available prior to the eventual submission of the DCO.

As stated in our response to Arora's stakeholder consultation in December 2018, Highways England would expect to agree with the applicant which junctions require individual capacity assessments, and review any consequential mitigation activities proposed. The applicant will need to clearly articulate to Highways England any proposed changes to the SRN. The Circular confirms that any mitigation is required to be in line with relevant standards and must be demonstrated to be safe. Given the criticality of these elements to the delivery of the applicant's proposals, the applicant shall demonstrate to Highways England ahead of any DCO submission that the proposed SRN works are acceptable.

An assessment of transport related impacts of the proposal should be carried out and reported as described in the Department for Transport '*Guidance on Transport Assessment (GTA)*'. This provides a good practice guide in preparing a Transport Assessment. In addition, the Ministry of Housing, Communities and Local Government (MHCLG) also provide guidance on preparing Transport Assessments.

Traffic and environmental impact arising from changes to the SRN, the increase/re-routing of traffic post-opening (including phased opening) of the Proposed Development, disruption during construction, traffic volume (including cumulative effects), composition or routing change and transport infrastructure modification should be fully assessed and reported.

Adverse change to noise and air quality should be particularly considered, including in relation to compliance with the European air quality limit values and/or in local authority designated Air Quality Management Areas (AQMAs).

Any mitigation proposals identified in relation to the above (including environmental mitigation on the SRN) should conform with the requirements of the [DfT Circular 02/13](#), as referenced above, which expects development to conform with the Design Manual for Roads and Bridges (DMRB). This requires mitigation to be identified and completed to outline design stage, culminating in a Stage 1 Road Safety Audit, before submission of any planning application.

## Location specific considerations

It is noted that the proposed development will include modifications or additional capacity upgrades to Junctions 14 and 14A of the M25. Furthermore, the principal access and egress to Heathrow Western Hub is proposed to be from J14, via the A3113 with a short sub-surface link entering Heathrow Western Hub from the south. It is also noted the applicant may alter J14 to include dedicated entry and exit slip roads from the M25.

Highways England requires further information on the applicant's proposals to ensure alignment with policy contained within the [DfT Circular 02/13](#), and in line with guidance provided by [Planning for the future: A guide to working with Highways England on planning matters](#).

Highways England would expect the applicant to further consult on matters relating to the SRN. Furthermore, Highways England requires more information from Arora in relation to its DCO application, any proposed changes to the SRN and how it plans to integrate its proposals including construction works, with a third runway delivered by other parties.

The above comments imply no pre-determined view on the part of Highways England as to the acceptability of the proposed development in traffic, environmental or highway terms.

Yours sincerely,



Jeremy Bloom

Network Planning Director

The Planning Inspectorate  
Major Casework Directorate  
Temple Quay House  
2 The Square  
Bristol BS1 6PN

By email: [HeathrowWesternHub@pins.gsi.gov.uk](mailto:HeathrowWesternHub@pins.gsi.gov.uk)

15 March 2019

Dear Sir/Madam

## Scoping Consultation – Environmental Impact Assessment for the expansion of Heathrow Airport

Thank you for consulting Historic England on the scoping report for the Environmental Statement that will accompany the planning application for the proposed Heathrow Western Hub scheme.

As the Government's statutory adviser, Historic England is keen to ensure that conservation and enhancement of the historic environment is fully taken into account at all stages and levels of the planning process. Given the potentially unprecedented level of impacts on the historic environment should a third runway be built at Heathrow, it is clearly critical that these effects are properly understood, assessed and mitigated through the planning process.

Broadly speaking, Historic England welcomes the approach to the assessment of impacts on the historic environment set out in the scoping report by the applicants and considers that it satisfies the requirements of the Airports National Policy Statement (ANPS). We note the heritage significance-based approach to assessment, the focus on significance arising from the setting of individual assets and the consultative approach to the development of assessment of impacts set out. We also agree with the study areas identified by the applicants to assess likely effects of airport expansion. We also offer some detailed comments on particular issues below.

However, we would wish to take this opportunity to stress that if the overall Northwest Runway Scheme (NRS) identified by the ANPS is to be delivered through separate projects (as is the aim of the Heathrow Western Hub proposals) it is clearly important that processes and timetables are appropriately aligned to allow for the proper assessment of overall cumulative



effects and the identification and assessment of potential mitigation measures. A new north-west runway at Heathrow as envisaged by the ANPS would entail unprecedented adverse impacts on the historic environment, including the demolition of around 20 designated heritage assets. The entire Longford village conservation area and a substantial part of Harmondsworth conservation area would be lost as a result. Should the airport expansion go ahead, we would expect to see mitigation proposals commensurate with the level of impacts on the historic environment.

We note that at this stage, the extent of the proposed development is considered to cover significant areas of land beyond that strictly necessary for the construction and operation of an expanded airport. This clearly therefore draws in a large number of designated heritage assets and could have potential impacts on wider historic character, while it also goes beyond the extent of land identified as affected under Heathrow Airport Limited's proposals for the expansion project. We would urge early confirmation as to the exact requirements for the Heathrow Western Hub proposals to aid assessment of likely impacts.

### Detailed comments

**Table 11.1:** this fails to mention that the ANPS (para 5.193) requires the applicant to undertake archaeological assessment and evaluation, although this is referred to in relation to the National Networks NPS further down. The nature and scope of any further assessment and evaluation should be discussed and agreed with the Greater London Archaeological Advisory Service (GLAAS). The consequent archaeological report will need to establish the significance of the site, the impact of the proposed development and opportunities for positive public benefits. Off-site compensation may need to be considered for offsetting, for example through contributions to green and heritage infrastructure strategies.

**Para 11.4.1:** we assume that this sentence should refer to the historic environment, rather than air quality.

**Para 11.5.1 and Appendix 11.1:** while conservation areas are referred to at para 11.5.33 and table 11.4, they are not identified either here or in Appendix 11.1.

**Table 11.5:** we agree that archaeology should be scoped into consideration by the EIA due to the likelihood of significant effects. The scheme lies in an area of considerable archaeological interest in the Lower Colne Valley and edge of the Heathrow plateau. As above, it is important that the archaeological impact of the project is considered alongside and cumulatively with the new North West runway and indeed to the Western Rail Link. Collaboration with the respective archaeological teams is recommended.



Historic England

At present, our understanding of the archaeological survival and potential is incomplete and will be critical to assessing significance and impact. The potential for surviving buried remains of the Neolithic Stanwell Cursus should be given particular attention in view of its importance. Further information should be available in the form of digitised site plans and in the site archives of previous investigations especially for Terminal 5, Bedfont Court and the proposed Western Rail Link.

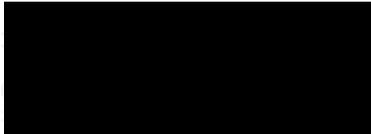
**Table 11.6:** this should include the London Research Framework, GLAAS Archaeological Standards and CIFA Standards and Guidance.

**Table 11.7:** we would welcome clarification of what is being referred to by the phrase ‘designated historic landscapes’ – it is unclear whether this refers to registered parks and gardens.

Finally, it should be noted that this advice is based on the information that has been provided to us and does not affect our obligation to advise on, and potentially object to any specific development proposal which may subsequently arise from these documents, and which may have adverse effects on the environment.

I trust these comments are helpful. Please do not hesitate to contact me should you require any further information or clarification.

Yours faithfully



**Tim Brennan MRTPI**

Historic Environment Planning Adviser

E-mail: [tim.brennan@HistoricEngland.org.uk](mailto:tim.brennan@HistoricEngland.org.uk)

DD: 020 – 7973 3279 M: 



Historic England, 4<sup>th</sup> Floor, Cannon Bridge House, Dowgate Hill, London EC4R 2YA  
Telephone 020 7973 3700 Facsimile 020 7973 3001  
[HistoricEngland.org.uk](http://HistoricEngland.org.uk)

Please note that Historic England operates an access to information policy.  
Correspondence or information which you send us may therefore become publicly available.



# Response to Application by Arora Holdings for new Heathrow Development

Horton Parish Council

March 2019

Horton Parish Council have considered the extremely long report produced on behalf of Arora Holdings for the proposed additional development of Heathrow Airport. We note that yet again the Planning Inspectorate have submitted a document in excess of 300 pages for comment by Parishes, small organisations and households. It is unrealistic and unfair to produce such a convoluted and complicated consultation which provides no reference or index by area. Huge organisations expect to expend large resources, normally funded by public or investors' money, to evaluate and review such a proposal. We, as a Parish, do not have the resource or finance available to do this and so have to rely on voluntary efforts. Despite our best efforts, we are aware that we may have overlooked or misunderstood important aspects of this proposal which will inevitably have an adverse effect on the area.

We object to the proposal for the following reasons:

## 1. Erosion of Horton Village Community

Horton is a small Village of less than 1000 houses, still based around a farming heritage, albeit the numbers of farms have significantly diminished as the land has been used for mineral extraction. The statement in the report that local historic landscape zone has little historic landscape significance, suggests that the report's authors haven't visited the area. Since Heathrow's inception, the commercial and residential areas around the airport have expanded to their maximum extent. Rural, agricultural and recreational amenity areas have been largely eroded and in the recent swathe of Local Plan proposals, even Green Belt Land is no longer safe-guarded. In the middle of this is some of the most significant agricultural land in the area, flanked by a number of historical/listed buildings. The latest submission of proposals involves further compulsory purchases of residential, and recreational land, as well as erosion of ancient agricultural and heritage land and buildings, movement of ancient waterways and the inevitable forced displacement of some of the community. In a perceived first-world civilisation, such activities would normally be considered unthinkable.

## 2. Increase in air pollution.

A report issued on 11th March by Professor Paul Cosford, Director of Health Protection and Medical Director at PHE, makes it clear that 'Air pollution is the biggest environmental threat to health in the UK, with between 28,000 and 36,000 deaths a year attributed to long-term exposure. There is strong evidence that air pollution causes the development of coronary heart disease, stroke, respiratory disease and lung cancer, and exacerbates asthma'. The area around Heathrow Airport is subject to extremely high levels of air pollution already due to overhead aircraft, the proximity of M4 and M25 motorways and mineral extraction. Any further works on development, traffic movements of mineral extraction will inevitably increase air pollution.

## 3. Increase in Traffic Movements

It is clear from the report that road traffic will increase through the Village whilst construction takes place and airport traffic will increase once airport enlargement has occurred. We are particularly concerned about the increase in HGV movements and have asked the Royal Borough of Windsor and Maidenhead to assist us in preventing HGV movement through the Village.

# Response to Application by Arora Holdings for new Heathrow Development

Horton Parish Council

March 2019

## 4. Permanent Disruption to and Destruction of Ancient Land and Waterways and Flood Risk

The proposed diversion of the River Colne and Horton Brook will have a detrimental impact on the flood plain, soil sub-structure and water purity for Horton. Proposals to move waterways to facilitate road and building work will mean permanent destruction of wildlife, habitat and visual aspects. We also believe this will have further negative impacts on the connecting waterways which run through Horton and to the proposed Thames Plan. Existing excess water drainage from the airport already causes issues with established water courses in the area. This will inevitably worsen with additional land use for runways and airport related buildings and roadways.

## 5. Housing Pressure/further land erosion

Inevitability of subsequent further airport expansion will further impinge on the Village. Pressure on local authority to provide housing for additional airport personnel – the whole village of Horton is in the Green Belt and this will be infringed. Pressure on local amenities e.g. Health centres, schools, already overburdened. Further increase in price of local housing will force local/long term residents out of the area. The Local Borough /councils are already struggling to provide adequate Social and Affordable Housing for existing residents.

Horton is a small Village with a huge history. Over the past century, much of the historical land has been given over to gravel extraction amidst a plethora of promised restoration and compensation work. Most of the recompense has never been fulfilled. Additional expansion of Heathrow can only further exacerbate this situation. We do not believe that assessment of the negative impacts on our Village can be obtained through matrices.

In the event that the Heathrow expansion goes ahead regardless, we would ask that Horton Village be designated a conservation area to protect the heritage buildings and residents from the pollution, noise and disruption of all passing vehicle traffic.

**0 – 0 – 0**

## Land and Acquisitions

Anne Holdsworth  
DCO Liaison Officer  
Network Management  
anne.holdsworth@nationalgrid.com  
Direct tel: [REDACTED]

SUBMITTED ELECTRONICALLY:  
[HeathrowWesternHub@planninginspectorate.gov.uk](mailto:HeathrowWesternHub@planninginspectorate.gov.uk).

[www.nationalgrid.com](http://www.nationalgrid.com)

11 March 2019

Dear Sir/Madam

### **Application by Arora Holdings Limited (the Applicant) for an Order granting Development Consent for the Heathrow Western Hub (the Proposed Development) Scoping Consultation**

This is a response on behalf of National Grid Electricity Transmission PLC (NGET) and National Grid Gas PLC (NGG).

I refer to your letter dated 15<sup>th</sup> February 2019 in relation to the above scoping consultation. I would like to make the following comments.

### **National Grid infrastructure within / in close proximity to the illustrative boundary and areas for associated works:**

#### **Gas Transmission Infrastructure:**

National Grid Gas has no gas transmission apparatus within or in close proximity to the proposed boundary and associated works areas.

#### **Electricity Transmission:**

National Grid Electricity Transmission has a high voltage electricity overhead transmission line and underground cables within or in close proximity to the proposed boundary and work areas. The overhead line and underground cables form an essential part of the electricity transmission network in England and Wales. The details of the electricity assets are shown below:

#### Overhead Line

- VW 275kV Overhead Line – Iver to Laleham  
Iver to West Weybridge

#### Underground cables

- Iver to North Hyde 275kV cables; and
- Ealing to Laleham 275kV cables.

## Specific Comments – Electricity Infrastructure:

- National Grid's Overhead Line/s is protected by a Deed of Easement/Wayleave Agreement which provides full right of access to retain, maintain, repair and inspect our asset
- Statutory electrical safety clearances must be maintained at all times. Any proposed buildings must not be closer than 5.3m to the lowest conductor. National Grid recommends that no permanent structures are built directly beneath overhead lines. These distances are set out in EN 43 – 8 Technical Specification for “overhead line clearances Issue 3 (2004)
- If any changes in ground levels are proposed either beneath or in close proximity to our existing overhead lines then this would serve to reduce the safety clearances for such overhead lines. Safe clearances for existing overhead lines must be maintained in all circumstances.
- The relevant guidance in relation to working safely near to existing overhead lines is contained within the Health and Safety Executive's ([www.hse.gov.uk](http://www.hse.gov.uk)) Guidance Note GS 6 “Avoidance of Danger from Overhead Electric Lines” and all relevant site staff should make sure that they are both aware of and understand this guidance.
- Plant, machinery, equipment, buildings or scaffolding should not encroach within 5.3 metres of any of our high voltage conductors when those conductors are under their worse conditions of maximum “sag” and “swing” and overhead line profile (maximum “sag” and “swing”) drawings should be obtained using the contact details above.
- If a landscaping scheme is proposed as part of the proposal, we request that only slow and low growing species of trees and shrubs are planted beneath and adjacent to the existing overhead line to reduce the risk of growth to a height which compromises statutory safety clearances.
- Drilling or excavation works should not be undertaken if they have the potential to disturb or adversely affect the foundations or “pillars of support” of any existing tower. These foundations always extend beyond the base area of the existing tower and foundation (“pillar of support”) drawings can be obtained using the contact details above.
- National Grid Electricity Transmission high voltage underground cables are protected by a Deed of Grant; Easement; Wayleave Agreement or the provisions of the New Roads and Street Works Act. These provisions provide National Grid full right of access to retain, maintain, repair and inspect our assets. Hence we require that no permanent / temporary structures are to be built over our cables or within the easement strip. Any such proposals should be discussed and agreed with National Grid prior to any works taking place.
- Ground levels above our cables must not be altered in any way. Any alterations to the depth of our cables will subsequently alter the rating of the circuit and can compromise the reliability, efficiency and safety of our electricity network and requires consultation with National Grid prior to any such changes in both level and construction being implemented.

To download a copy of the HSE Guidance HS(G)47, please use the following link:

<http://www.hse.gov.uk/pubns/books/hsg47.htm>

## **Further Advice**

**National Grid requests consultation to ensure that the most appropriate protective provisions are included within the DCO application to safeguard the integrity of our apparatus and to remove the requirement for objection. All further consultations should be sent to the following email address: [box.landandacquisitions@nationalgrid.com](mailto:box.landandacquisitions@nationalgrid.com).**

**We would request that the potential impact of the proposed scheme on National Grid's existing assets as set out above and including any proposed diversions is considered in any subsequent reports, including in the Environmental Statement, and as part of any subsequent application.**

**Where any diversion of apparatus may be required to facilitate a scheme, National Grid is unable to give any certainty with the regard to diversions until such time as adequate conceptual design studies have been undertaken by National Grid. Further information relating to this can be obtained by contacting the email address below.**

**Where the promoter intends to acquire land, extinguish rights, or interfere with any of National Grid apparatus protective provisions will be required in a form acceptable to it to be included within the DCO.**

In order to respond at the earliest opportunity National Grid will require the following:

- Draft DCO including the Book of Reference and relevant Land Plans;
- Shape Files or CAD Files for the order limits.

I hope the above information is useful. If you require any further information please do not hesitate to contact me.

The information in this letter is provided notwithstanding any discussions taking place in relation to connections with electricity or gas customer services.

Yours faithfully



**Anne Holdsworth  
DCO Liaison Officer, Land and Acquisitions**

Boundary House  
Cricket Field Road  
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Middlesex  
UB8 1QG

Tel: 01895 203000  
Fax: 01895 203010

<http://www.hillingdonccg.nhs.uk>

**Sent by email only to: HeathrowWesternHub@planninginspectorate.gov.uk**

Friday 15<sup>th</sup> March 2019

Dear Sirs,

Many thanks for the opportunity to respond to the scoping proposal for the Heathrow Western Hub.

NHS Ealing, Hillingdon and Hounslow Clinical Commissioning Groups consider that the following information should be provided in the ES:

1. What is the impact of the development on existing healthcare infrastructure?
2. What pressure is the new development going to place on the local health system? How does this arise? And what portion comes from new residents, new workforce, construction workers and visitors?
3. What additional healthcare facilities are proposed within the new development?
4. How does the development relate to the 9,000 new homes in the New London Plan?
5. How will the Applicant contribute to the local health infrastructure?
6. The NHS will need to be a contributor to the London Borough of Hillingdon new Local Plan
7. What exactly is "other related airport development"?
8. What is the timeline and phasing for development and what pressures does each phase place on the health system?
9. How will the health of Hillingdon residents be impacted?
10. How will the NHS be engaged throughout the process? And what resource will this require the NHS to commit?

Yours Sincerely,



**Chair:** Dr Ian Goodman  
**Accountable Officer:** Mark Easton  
**Managing Director:** Caroline Morison



MAYOR OF LONDON



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E: [natssafeguarding@nats.co.uk](mailto:natssafeguarding@nats.co.uk)

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**The Planning Inspectorate**

Major Casework Directorate  
Temple Quay House  
2 The Square  
Bristol, BS1 6PN

1<sup>st</sup> March 2019

NATS /PINS Ref: **SG27631 / TR020004**

Sent via email: [HeathrowWesternHub@planninginspectorate.gov.uk](mailto:HeathrowWesternHub@planninginspectorate.gov.uk)

Dear Sirs,

***Application by Arora Holdings Limited (the Applicant) for an Order granting Development Consent for the Heathrow Western Hub***

I refer to your correspondence dated 15 February 2019 regarding the Application for a Western Hub at Heathrow. NATS En-Route acknowledges receipt of the consultation and of the EIA Scoping Report.

At this time, NATS En-Route has no comments to make on the Scoping Opinion relating to the Environmental Statement. NATS En-Route is currently engaged with the wider aviation community and stakeholders generally on the proposals for Heathrow Expansion and associated airspace changes.

NATS En-Route's position is that it is likely that any expansion proposal at Heathrow will have a major impact upon its operations and infrastructure; accordingly it will need to be a stakeholder in respect of all options being considered.

NATS En-Route remains at the Inspector's disposal and will respond to any consultation it receives. I trust our position is clear, but should there be any further requests or queries, do not hesitate to contact us.

Yours faithfully

  
Mr Sacha Rossi

For and on behalf of NATS En-Route plc

Date: 11 March 2019  
Our ref: 274043  
Your ref: TR020004\_ 31095887



HeathrowWesternHub@planninginspectorate.gov.uk

**BY EMAIL ONLY**

Customer Services  
Hornbeam House  
Crewe Business Park  
Electra Way  
Crewe  
Cheshire  
CW1 6GJ

T 0300 060 3900

Dear Sir/Madam,

**Environmental Impact Assessment Scoping consultation (Regulation 15 (4) of the EIA Regulations 2017): Application by Arora Holdings Limited (the Applicant) for an Order granting Development Consent for the Heathrow Western Hub (the Proposed Development)**

Thank you for seeking our advice on the scope of the Environmental Impact Assessment (EIA) in your consultation dated 15 February 2019 which we received on the same day.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

Case law<sup>1</sup> and guidance<sup>2</sup> has stressed the need for a full set of environmental information to be available for consideration prior to a decision being taken on whether or not to grant planning permission. Annex A to this letter provides Natural England's advice on the scope of the Environmental Impact Assessment (EIA) for this development.

Should the proposal be amended in a way which significantly affects its impact on the natural environment then, in accordance with Section 4 of the Natural Environment and Rural Communities Act 2006, Natural England should be consulted again.

We would be happy to comment further should the need arise but if in the meantime you have any queries please do not hesitate to contact us. For any queries relating to the specific advice in this letter only please contact Jonathan Shavelar at [jonathan.shavelar@naturalengland.org.uk](mailto:jonathan.shavelar@naturalengland.org.uk).

For any new consultations, or to provide further information on this consultation please send your correspondences to [consultations@naturalengland.org.uk](mailto:consultations@naturalengland.org.uk).

Yours faithfully

Jonathan Shavelar  
Thames Team

---

<sup>1</sup> Harrison, J in *R. v. Cornwall County Council ex parte Hardy* (2001)

<sup>2</sup> *Note on Environmental Impact Assessment Directive for Local Planning Authorities* Office of the Deputy Prime Minister (April 2004) available from <http://webarchive.nationalarchives.gov.uk/+http://www.communities.gov.uk/planningandbuilding/planning/sustainability/environmental/environmentalimpactassessment/noteenvironmental/>

## **Annex A – Advice related to EIA Scoping Requirements**

### **1. General Principles**

Schedule 4 of the Town & Country Planning (Environmental Impact Assessment) Regulations 2017, sets out the necessary information to assess impacts on the natural environment to be included in an ES, specifically:

- A description of the development – including physical characteristics and the full land use requirements of the site during construction and operational phases.
- Expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation, etc.) resulting from the operation of the proposed development.
- An assessment of alternatives and clear reasoning as to why the preferred option has been chosen.
- A description of the aspects of the environment likely to be significantly affected by the development, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the interrelationship between the above factors.
- A description of the likely significant effects of the development on the environment – this should cover direct effects but also any indirect, secondary, cumulative, short, medium and long term, permanent and temporary, positive and negative effects. Effects should relate to the existence of the development, the use of natural resources and the emissions from pollutants. This should also include a description of the forecasting methods to predict the likely effects on the environment.
- A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment.
- A non-technical summary of the information.
- An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the applicant in compiling the required information.

It will be important for any assessment to consider the potential cumulative effects of this proposal, including all supporting infrastructure, with other similar proposals and a thorough assessment of the 'in combination' effects of the proposed development with any existing developments and current applications. A full consideration of the implications of the whole scheme should be included in the ES. All supporting infrastructure should be included within the assessment.

### **2. Biodiversity and Geology**

#### **2.1 Ecological Aspects of an Environmental Statement**

Natural England advises that the potential impact of the proposal upon features of nature conservation interest and opportunities for habitat creation/enhancement should be included within this assessment in accordance with appropriate guidance on such matters. Guidelines for Ecological Impact Assessment (EclA) have been developed by the Chartered Institute of Ecology and Environmental Management (CIEEM) and are available on their website.

EclA is the process of identifying, quantifying and evaluating the potential impacts of defined actions on ecosystems or their components. EclA may be carried out as part of the EIA process or to support other forms of environmental assessment or appraisal.

The National Planning Policy Framework sets out guidance in S.174-177 on how to take account of biodiversity interests in planning decisions and the framework that local authorities should provide to assist developers.

The approach to scoping shows that the study area is 'within and up to 2km of the Proposed Development area'. This may be a suitable study area to assess the impacts of construction, however there is the potential for operational impacts to have impacts further away than 2km from protected sites. There needs to be a clarity in whether impacts arise as a result of the runway construction (HAL) or the hub construction (Aurora), as impacts may be inter-linked. A good example of this might be the impacts of increased vehicle traffic travelling to/from the airport. Traffic modelling will have to dictate the wider study area in order for the competent authority to assess the

impacts of pollutant deposition on protected sites, and 2km would not be a precautionary study area in this context.

Clarity over who is responsible for these impacts will have a further effect on the content of the HRA. The EIA Scoping report suggests the HRA Screening Report would focus on the South West London Waterbodies SPA, but if traffic effects are included then the focus of the Screening Report will have to be broadened.

## **2.2 Internationally and Nationally Designated Sites**

The ES should thoroughly assess the potential for the proposal to affect designated sites. European sites (i.e. designated Special Areas of Conservation and Special Protection Areas) fall within the scope of the Conservation of Habitats and Species Regulations 2017 (as amended). In addition paragraph 176 of the National Planning Policy Framework requires that potential Special Protection Areas, possible Special Areas of Conservation, listed or proposed Ramsar sites, and any site identified as being necessary to compensate for adverse impacts on classified, potential or possible SPAs, SACs and Ramsar sites be treated in the same way as classified sites. Under Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended) an appropriate assessment needs to be undertaken in respect of any plan or project which is (a) likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and (b) not directly connected with or necessary to the management of the site.

## **2.3 Sites of Special Scientific Interest (SSSIs) and sites of European or international importance (Special Areas of Conservation, Special Protection Areas and Ramsar sites)**

The Scoping Report identifies all SSSIs within the 2km study area. Further information on the SSSIs and their special interest features can be found at [www.magic.gov](http://www.magic.gov). The Environmental Statement should include a full assessment of the direct and indirect effects of the development on the features of special interest within nearby SSSIs and should identify mitigation measures as may be required in order to avoid, minimise or reduce any adverse significant effects.

European site conservation objectives are available on our internet site <http://publications.naturalengland.org.uk/category/6490068894089216>

The EIA scoping document does not specifically refer to SPA 'Functionally Linked Habitat'. Special Protection Areas (SPAs) are classified for rare and vulnerable birds, and for regularly occurring migratory species. Annex 1 bird species associated with the SPA receive protection both within and outside of the SPA boundary. Sites outside of the SPA which support the Annex 1 bird species, often referred to as SPA supporting habitat or 'functionally linked' habitat, play an important role in maintaining the SPA bird population through the provision of additional roosting or feeding areas. Due to the importance of these off-site habitats in maintaining Annex 1 bird populations, the supporting habitat benefits from the same level of protection as the SPA itself. Therefore, any impact to, or loss of, SPA functionally linked habitat would need to be adequately mitigated against or compensated for. Natural England advise that full consideration should be given to the assessment of Functionally Linked Habitat.

## **2.4 Regionally and Locally Important Sites**

The EIA will need to consider any impacts upon local wildlife and geological sites. Local Sites are identified by the local wildlife trust, geoconservation group or a local forum established for the purposes of identifying and selecting local sites. They are of county importance for wildlife or geodiversity. The Environmental Statement should therefore include an assessment of the likely impacts on the wildlife and geodiversity interests of such sites. The assessment should include proposals for mitigation of any impacts and if appropriate, compensation measures. Contact the local wildlife trust, geoconservation group or local sites body in this area for further information.

## **2.5 Protected Species - Species protected by the Wildlife and Countryside Act 1981 (as amended) and by the Conservation of Habitats and Species Regulations 2017 (as amended)**

The ES should assess the impact of all phases of the proposal on protected species (including, for example, great crested newts, reptiles, birds, water voles, badgers and bats). Natural England does not hold comprehensive information regarding the locations of species protected by law, but advises

on the procedures and legislation relevant to such species. Records of protected species should be sought from appropriate local biological record centres, nature conservation organisations, groups and individuals; and consideration should be given to the wider context of the site for example in terms of habitat linkages and protected species populations in the wider area, to assist in the impact assessment.

The conservation of species protected by law is explained in Part IV and Annex A of Government Circular 06/2005 *Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System*. The area likely to be affected by the proposal should be thoroughly surveyed by competent ecologists at appropriate times of year for relevant species and the survey results, impact assessments and appropriate accompanying mitigation strategies included as part of the ES.

In order to provide this information there may be a requirement for a survey at a particular time of year. Surveys should always be carried out in optimal survey time periods and to current guidance by suitably qualified and where necessary, licensed, consultants. Natural England has adopted standing advice for protected species which includes links to guidance on survey and mitigation.

## **2.6 Habitats and Species of Principal Importance**

The ES should thoroughly assess the impact of the proposals on habitats and/or species listed as 'Habitats and Species of Principal Importance' within the England Biodiversity List, published under the requirements of S41 of the Natural Environment and Rural Communities (NERC) Act 2006. Section 40 of the NERC Act 2006 places a general duty on all public authorities, including local planning authorities, to conserve and enhance biodiversity. Further information on this duty is available [here](#).

Government Circular 06/2005 states that Biodiversity Action Plan (BAP) species and habitats, 'are capable of being a material consideration...in the making of planning decisions'. Natural England therefore advises that survey, impact assessment and mitigation proposals for Habitats and Species of Principal Importance should be included in the ES. Consideration should also be given to those species and habitats included in the relevant Local BAP.

Natural England advises that a habitat survey (equivalent to Phase 2) is carried out on the site, in order to identify any important habitats present. In addition, ornithological, botanical and invertebrate surveys should be carried out at appropriate times in the year, to establish whether any scarce or priority species are present. The Environmental Statement should include details of:

- Any historical data for the site affected by the proposal (e.g. from previous surveys);
- Additional surveys carried out as part of this proposal;
- The habitats and species present;
- The status of these habitats and species (e.g. whether priority species or habitat);
- The direct and indirect effects of the development upon those habitats and species;
- Full details of any mitigation or compensation that might be required.

The development should seek if possible to avoid adverse impact on sensitive areas for wildlife within the site, and if possible provide opportunities for overall wildlife gain.

The record centre for the relevant Local Authorities should be able to provide the relevant information on the location and type of priority habitat for the area under consideration.

## **2.7 The Water Environment**

The Project will have a direct impacts on the water environment and rivers in the area. Although the water environment is considered in section 18 of the Scoping document, there is a lack of consideration regarding biodiversity. Section 6 is the biodiversity chapter and there is no specific content regarding the water environment (e.g. the chalk streams are not identified as habitats). The proposal includes changes which have the opportunity to cause major changes to the water environment. Specifically we would wish to see consideration of aquatic and terrestrial species which rely on the river and river corridor. It is imperative that the Project adequately assesses the

direct and indirect biodiversity impacts to the rivers and subsequent downstream receptors.

## **2.8 Contacts for Local Records**

Natural England does not hold local information on local sites, local landscape character and local or national biodiversity priority habitats and species. We recommend that you seek further information from the appropriate bodies (which may include the local records centre, the local wildlife trust, local geoconservation group or other recording society and a local landscape characterisation document).

## **3. Designated Landscapes and Landscape Character**

### **Landscape and visual impacts**

Natural England would wish to see details of local landscape character areas mapped at a scale appropriate to the development site as well as any relevant management plans or strategies pertaining to the area. The EIA should include assessments of visual effects on the surrounding area and landscape together with any physical effects of the development, such as changes in topography.

The EIA should include a full assessment of the potential impacts of the development on local landscape character using landscape assessment methodologies. We encourage the use of Landscape Character Assessment (LCA), based on the good practice guidelines produced jointly by the Landscape Institute and Institute of Environmental Assessment in 2013. LCA provides a sound basis for guiding, informing and understanding the ability of any location to accommodate change and to make positive proposals for conserving, enhancing or regenerating character, as detailed proposals are developed.

Natural England supports the publication *Guidelines for Landscape and Visual Impact Assessment*, produced by the Landscape Institute and the Institute of Environmental Assessment and Management in 2013 (3rd edition). The methodology set out is almost universally used for landscape and visual impact assessment.

In order to foster high quality development that respects, maintains, or enhances, local landscape character and distinctiveness, Natural England encourages all new development to consider the character and distinctiveness of the area, with the siting and design of the proposed development reflecting local design characteristics and, wherever possible, using local materials. The Environmental Impact Assessment process should detail the measures to be taken to ensure the building design will be of a high standard, as well as detail of layout alternatives together with justification of the selected option in terms of landscape impact and benefit.

The assessment should also include the cumulative effect of the development with other relevant existing or proposed developments in the area. In this context Natural England advises that the cumulative impact assessment should include other proposals currently at Scoping stage. Due to the overlapping timescale of their progress through the planning system, cumulative impact of the proposed development with those proposals currently at Scoping stage would be likely to be a material consideration at the time of determination of the planning application.

The assessment should refer to the relevant National Character Areas which can be found on our website. Links for Landscape Character Assessment at a local level are also available on the same page.

### **Heritage Landscapes**

You should consider whether there is land in the area affected by the development which qualifies for conditional exemption from capital taxes on the grounds of outstanding scenic, scientific or historic interest. An up-to-date list may be obtained at [www.hmrc.gov.uk/heritage/lbsearch.htm](http://www.hmrc.gov.uk/heritage/lbsearch.htm).

#### **4. Access and Recreation**

Natural England encourages any proposal to incorporate measures to help encourage people to access the countryside for quiet enjoyment. Measures such as reinstating existing footpaths together with the creation of new footpaths and bridleways are to be encouraged. Links to other green networks and, where appropriate, urban fringe areas should also be explored to help promote the creation of wider green infrastructure. Relevant aspects of local authority green infrastructure strategies should be incorporated where appropriate.

#### **Rights of Way, Access land, Coastal access and National Trails**

The EIA should consider potential impacts on access land, public open land, rights of way and coastal access routes in the vicinity of the development. Consideration should also be given to the potential impacts on nearby trails. The National Trails website [www.nationaltrail.co.uk](http://www.nationaltrail.co.uk) provides information including contact details for the National Trail Officer. Appropriate mitigation measures should be incorporated for any adverse impacts. We also recommend reference to the relevant Right of Way Improvement Plans (ROWIP) to identify public rights of way within or adjacent to the proposed site that should be maintained or enhanced.

#### **5. Soil and Agricultural Land Quality**

Impacts from the development should be considered in light of the Government's policy for the protection of the best and most versatile (BMV) agricultural land as set out in paragraph 170 of the NPPF. We also recommend that soils should be considered in the context of the sustainable use of land and the ecosystem services they provide as a natural resource, as also highlighted in paragraph 170 of the NPPF.

Soil is a finite resource that fulfils many important functions and services (ecosystem services) for society, for example as a growing medium for food, timber and other crops, as a store for carbon and water, as a reservoir of biodiversity and as a buffer against pollution. It is therefore important that the soil resources are protected and used sustainably.

The applicant should consider the following issues as part of the Environmental Statement:

1. The degree to which soils are going to be disturbed/harmed as part of this development and whether 'best and most versatile' agricultural land is involved. This may require a detailed survey if one is not already available. For further information on the availability of existing agricultural land classification (ALC) information see [www.magic.gov.uk](http://www.magic.gov.uk). Natural England Technical Information Note 049 - *Agricultural Land Classification: protecting the best and most versatile agricultural land* also contains useful background information.
2. If required, an agricultural land classification and soil survey of the land should be undertaken. This should normally be at a detailed level, eg one auger boring per hectare, (or more detailed for a small site) supported by pits dug in each main soil type to confirm the physical characteristics of the full depth of the soil resource, ie 1.2 metres.
3. The Environmental Statement should provide details of how any adverse impacts on soils can be minimised. Further guidance is contained in the *Defra Construction Code of Practice for the Sustainable Use of Soil on Development Sites*.

#### **6. Air Quality**

Air quality in the UK has improved over recent decades but air pollution remains a significant issue; for example over 97% of sensitive habitat area in England is predicted to exceed the critical loads for ecosystem protection from atmospheric nitrogen deposition (*England Biodiversity Strategy*, Defra 2011). A priority action in the England Biodiversity Strategy is to reduce air pollution impacts on biodiversity. The planning system plays a key role in determining the location of developments which may give rise to pollution, either directly or from traffic generation, and hence planning decisions can have a significant impact on the quality of air, water and land. The assessment should take account of the risks of air pollution and how these can be managed or reduced. Further information on air pollution impacts and the sensitivity of different habitats/designated sites can be

found on the Air Pollution Information System ([www.apis.ac.uk](http://www.apis.ac.uk)). Further information on air pollution modelling and assessment can be found on the Environment Agency website.

As per our comments in section 2.1, there is a lack of clarity regarding which effects may be caused by HAL and which may be caused by the aurora hub. The combined proposals have the potential to create a significant amount of road traffic, the effects of which will have to be assessed in-combination with other plans and projects.

## **7. Climate Change Adaptation**

The England Biodiversity Strategy published by Defra establishes principles for the consideration of biodiversity and the effects of climate change. The ES should reflect these principles and identify how the development's effects on the natural environment will be influenced by climate change, and how ecological networks will be maintained. The NPPF requires that the planning system should contribute to the enhancement of the natural environment 'by establishing coherent ecological networks that are more resilient to current and future pressures' (NPPF Para 174), which should be demonstrated through the ES.

## **8. Cumulative and in-combination effects**

A full consideration of the implications of the whole scheme should be included in the ES. All supporting infrastructure should be included within the assessment.

The ES should include an impact assessment to identify, describe and evaluate the effects that are likely to result from the project in combination with other projects and activities that are being, have been or will be carried out. The following types of projects should be included in such an assessment, (subject to available information):

- a. existing completed projects;
- b. approved but uncompleted projects;
- c. ongoing activities;
- d. plans or projects for which an application has been made and which are under consideration by the consenting authorities; and
- e. plans and projects which are reasonably foreseeable, i.e. projects for which an application has not yet been submitted, but which are likely to progress before completion of the development and for which sufficient information is available to assess the likelihood of cumulative and in-combination effects.

**From:** Wheaton Ian <Ian.Wheaton@networkrail.co.uk>  
**Sent:** 15 March 2019 10:49  
**To:** Heathrow Western Hub  
**Subject:** 190315-IW-PINs-TR020004-31095887-Heathrow Western Hub Scoping Opinion  
**Attachments:** Heathrow ltr.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

Network Rail  
1st Floor  
Bristol Temple Point  
Bristol  
BS1 6NL

Ask for : Ian Wheaton  
Tel : 07713 302676

My Ref : P/TP19/0145/BM  
Your Ref : TR020004-31095887

Date : 15 March 2019

Dear Sir/Madam

**Planning Act 2008 (as amended) and the Infrastructure Planning (Environmental Impact Assessment) Regulation 2017 (the EIA Regulations) – Regulations 10 and 11**

**Application by Arora Holdings Limited (the Applicant) for an Order granting Development Consent for the Heathrow Western Hub (the Proposed Development)**

**Scoping consultation and notification of the Applicant’s contact details and duty to make available information to the Applicant if requested**

Network Rail / Western Rail Link to Heathrow (WRLtH) Comments

Western Rail Link to Heathrow (WRLtH) is a Nationally Significant Project that requires the submission of A Development Consent Order (DCO). Following consultation in Q2 2018, submission of the DCO is scheduled for Q3 2019.

There are a number of areas where potential conflict between WRLtH and the emerging Heathrow Western Hub (HWH) scheme may occur and these are set out below.

We note the statement in paragraph 1.1.4 of the Scoping Report that “the proposed development represents an alternative vision to HAL for the terminal infrastructure component of the NRS”.

*“The Proposed Development excludes the proposed new Northwest Runway. It also excludes the major M25 alterations necessary to accommodate the Northwest Runway. Both of these elements are currently being promoted by HAL through a separate ‘DCO process, seeking approval for these elements as part of the HAL DCO Project. The Proposed Development represents an alternative vision to HAL for the terminal infrastructure component of the NRS.”*

We should like to be reassured that the WRLtH scheme is not adversely affected by the HWH proposals, in particular in the overlapping project areas between T5 and M25 Junction 14a and in the ‘associated development’ areas. In this regard, the HWH emerging environmental assessment should cover impacts of, among other matters:

- HWH works related to WRLtH tunnel load-bearing capacity and alignment in the T5 area;
- HWH underground works related to WRLtH depth of tunnels;
- The two schemes' proposed construction access routes;
- Any overlap affecting WRLtH shafts 2 and 3 areas

All of the comments made by Network Rail in our submitted response to the HAL scoping in June 2018 (copy attached) remain in place with regard to the HAL DCO proposed infrastructure and associated construction proposals and therefore we refer Arora Holdings Limited to those detailed comments for consideration.

In section 1.15 the proposed WRLTH scheme is described. For clarity, please note the following relevant changes that have been made to its design since the publication of the Preliminary Environmental Information Report (PEIR) in May 2018;

Design element	What has changed
Service Pattern	In August 2018, Network Rail and the WRLtH project sponsor, the DfT undertook a review of the project. Following the review DfT concluded that a turnback (shuttle) operation between Reading and Heathrow T5 was no longer required and a through service would be provided instead.
Cross-over at Heathrow Terminal 5 and Bedfont Court	The decision on the service pattern allowed the cross-over tracks to the west of Heathrow Terminal 5 to be omitted from the design. This then resulted in the removal of the cross-over box at Bedfont Court.  The cross-over at Bedfont Court has been replaced with bored tunnel between Shaft 3 – Poyle and the Sprayed Concrete Lined (SCL) tunnels.
Alignment	With removal of the track design constraints imposed by the cross-over at Bedfont Court, the bored tunnel could be realigned from Shaft 3 to the connection with the sprayed concrete lined tunnels at Terminal 5, reducing the overall length of the proposed tunnels by approximately 100m per tunnel.
Shaft 4 – Bedfont Court	The removal of the cross-over at Bedfont Court also removed the requirement for a shaft at Bedfont Court which was required for intervention and evacuation access.  The shorter track alignment resulting from the removal of the cross-over allows safety to be maintained without Shaft 4. Therefore, Shaft 4 has subsequently been omitted from the design.
Shaft 4 head house building, surface compound and access road	Associated with the removal of Shaft 4, the Shaft 4 head house building and associated surface compound and access road are not now required and have also been removed from the design.
Bedfont Court flood plain compensation area	The deletion of the Shaft 4 compound and its associated access road means that the existing Environment Agency (EA) flood defence does not need to be modified and that there is no permanent impact on the existing flood storage capacity in the vicinity of Bedfont Court. Therefore, the proposed permanent flood compensation previously identified is not now required.
Permanent land take – Bedfont Court	As a consequence of all the changes at Bedfont Court, permanent land take would be reduced for the Proposed Scheme.
Temporary Construction Shafts	The cut and cover box had also been proposed as the location to remove the TBMs used to bore the tunnels for the Up and Down Airport lines. Removing the cut and cover box from the design required an alternative method to be devised to remove the TBMs. Therefore, the bored tunnels have been extended to the east side of the Bedfont Court worksite, where the TBMs would be removed via temporary construction shafts. These temporary shafts (or shaft) would also be used for construction access to build the SCL tunnels that would connect the bored tunnels to the existing stub tunnels.

## Morgan Barbara

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**From:** Morgan Barbara  
**Sent:** 18 June 2018 09:07  
**To:** 'HeathrowAirport@pins.gsi.gov.uk'  
**Subject:** FW: Ref: TR020003 Expansion of Heathrow Airport (Third Runway)

Network Rail  
1st Floor  
Bristol Temple Point  
Bristol  
BS1 6NL

Ask for : Barbara Morgan  
Tel : 0117 3721125

My Ref : P/TP18/0397/BM  
Your Ref : TR020003

Date : 18 June 2018

Dear Sir/Madam

### **Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) – Regulations 10 and 11**

### **Application by Heathrow Airport Limited (the Applicant) for an Order granting Development Consent for the Expansion of Heathrow Airport (Third Runway) (the Proposed Development)**

### **Scoping consultation and notification of the Applicant's contact details and duty to make available information to the Applicant if required>**

Western Rail Link to Heathrow (WRLtH) is a Nationally Significant Infrastructure Project and requires the submission of a Development Consent Order (DCO). Statutory consultation is taking place in May/June 2018 with an anticipated DCO submission date of mid-2019. The material within the Heathrow Expansion Scoping Report suggests that there may be design conflicts with WRLtH Shafts 2, 3 and 4 (surface portals to tunnels). It is essential that Heathrow works with Network Rail's project team to provide assurance on compatibility of design. Incompatibility could mean that the WRLtH alignment needs to be reviewed, which would have significant programme, cost, and delivery implications.

Our comments as set out below relate to the Scoping Report and those aspects where we believe there is an interface with the proposed WRLtH scheme. For clarity I have set out our response into the following sections:

- Cumulative development;
- Optioneering and design development; and
- Further information

#### **Cumulative development**

The methodology for cumulative effects assessment is set out in Chapter 4 and Appendix 4.2 of the Scoping Report. Within these documents the WRLtH project has been categorised as a Tier 2 scheme for the cumulative effects assessment with the proposed Heathrow Expansion. However, Table 3.4.4 of Appendix 3.4 contains outdated information from the Planning Inspectorate's website quoting the planned submission of the WRLtH Development Consent Order (DCO) application as "submission expected: Q4 2017".

For clarity the proposed dates Network Rail are working to are as follows:

- DCO application submission mid 2019;
- Construction commencing end 2020 for environmental works and 2022 for main construction works; and
- Construction works complete by end of 2027, a period of testing and commissioning would follow in 2028 (year of opening).

On the basis of the proposed dates associated with the DCO process for Heathrow Airport as set out in the Scoping Report, we are in agreement that the WRLtH should be considered a Tier 2 development for the Preliminary Environmental Impact Report (PEIR). We would note that for the Environmental Statement (ES), WRLtH should be considered as a Tier 1 development as our DCO application is proposed to be submitted prior to the submission of the Heathrow Expansion DCO application.

### **Optioneering and design development**

Chapter 3 'The DCO Project' of the Scoping Report sets out the principal components of the scheme and where there are a number of options for some of the elements (including but not limited to: runways and taxiways, terminals and aprons and M25 motorway and other road diversions). The proposals are also set out within Figures 3.1 – 3.15. Network Rail have identified a number of potential conflicts with the design for the WRLtH at Shafts 2, 3 and 4 and also note that some of this development including the proposed expanded airfield would be directly above the proposed WRLtH twin-bored tunnel.

Network Rail would request that Heathrow consider the options with the least impact on the WRLtH proposals and work with Network Rail's project team to provide assurance on compatibility of design. The load bearing capacity of the tunnel will need to be considered for any development that is proposed to be on top of the proposed alignment.

The proposed construction site plans for Heathrow Expansion are set out within Figure 3.17. Network Rail has again noted potential conflict with these locations and would request that a similar approach as set out above be considered to ensure that both schemes are compatible during both construction and operation.

### **Further Information**

If you would like any further information or clarification on any point then please do not hesitate to contact [michaela.payne@networkrail.co.uk](mailto:michaela.payne@networkrail.co.uk).

Yours sincerely,

Barbara Morgan  
Town Planning Technician (Western & Wales)

[www.networkrail.co.uk/property](http://www.networkrail.co.uk/property)

Please send all Notifications and Consultations to [townplanningwestern@networkrail.co.uk](mailto:townplanningwestern@networkrail.co.uk) or by post to Network Rail, Town Planning, 1st Floor, Bristol Temple Point, Redcliffe Way, Bristol BS1 6NL



# Old Windsor Parish Council

John Lee – Clerk to the Council

Jubilee Hub  
St Lukes Road  
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15<sup>th</sup> March 2019

Planning Inspectorate  
Temple Quay House  
2 The Square  
Bristol  
BS1 6PN

**Your reference: TR020004 31095887**

As our community has been overwhelmed with background activity relating to Council and/or community group legal challenge(s) to Heathrow Expansion in the High Court this week and Heathrow's Airspace Consultations which only concluded last week, there simply has not been enough time for member's of the public to present a detailed response to the EIA Scoping Report.

Old Windsor Parish Council strongly opposes any development related to the Expansion of Heathrow. The raft of Environmental Impacts which the Scoping Report refers to will impair the health and quality of life of almost every resident in the parish.

The Arora's documents lack any details of its actual proposals despite something like 400 pages relating to the potential environmental impacts, it will not be possible to address those impacts until the plans are published.

Why were not the RBWM not been one of the Councils which received presentations from Arora? This is astounding when the fact that land and residents within two separate locations less than 2 and about 4 kilometres respectively from the proposed new site boundary are within an area of "Land being considered for Outside Works" which could suffer considerably greater detrimental consequences than any other areas.

Residents of those locations are likely to be among the worst of any affected by the construction and operations of Arora and Heathrow plus the many disadvantages which they would exacerbate with the promotion of a new runway ending about the same distances from the communities concerned as mentioned above.

The opposition to these items and concerns relating to the low level of consultation with the Royal Borough of Windsor & Maidenhead indicated in the Scoping Reports is accentuated by the fact that half of ALL flight landings or take offs also currently pass at the lowest altitudes and noisiest levels to or from the nearby runway ends over the nearby locations noted above. It is disappointing that the considerable number of environmental matters relating to the Windsor & Maidenhead shown on the maps are not matched by appropriate liaison in the text of the Scoping Reports, but these matters will have to be addressed in coming consultations.

Sent on behalf of Old Windsor Parish Council.



Public Health  
England

Environmental Hazards and  
Emergencies Department  
Centre for Radiation,  
Chemical and Environmental  
Hazards (CRCE)  
Seaton House  
City Link  
London Road  
Nottingham NG2 4LA

[nsipconsultations@phe.gov.uk](mailto:nsipconsultations@phe.gov.uk)

[www.gov.uk/phe](http://www.gov.uk/phe)

The Planning Inspectorate  
Major Casework Directorate  
Temple Quay House  
2 The Square  
Bristol BS1 6PN

Your Ref:

Our Ref: 49644

15<sup>th</sup> March 2019

Dear Sirs

**Re: Scoping Consultation  
Application for an Order Granting Development Consent for the proposed  
Heathrow Western Hub**

Thank you for including Public Health England (PHE) in the scoping consultation phase of the above application. Advice offered by PHE is impartial and independent.

PHE exists to protect and improve the nation's health and wellbeing, and reduce health inequalities; these two organisational aims are reflected in the way we review and respond to Nationally Significant Infrastructure Project (NSIP) applications. The health of an individual or a population is the result of a complex interaction of a wide range of different determinants of health, from an individual's genetic make-up, to lifestyles and behaviours, and the communities, local economy, built and natural environments to global ecosystem trends. All developments will have some effect on the determinants of health, which in turn will influence the health and wellbeing of the general population, vulnerable groups and individual people. Although assessing impacts on health beyond direct effects from for example emissions to air or road traffic incidents is complex, there is a need to ensure a proportionate assessment focused on an application's significant effects.

This project sits within the remit of the draft Airports National Policy Statement (NPS), which specifically refers to the need to assess the likely significant effects of the project on health in Section 4 (paragraphs 4.66–4.69). The draft NPS indicates that airport infrastructure development proposals can have both beneficial and adverse impacts on health (para 4.66) and that the scale of development may have indirect impacts on health through a range of determinants (para 4.67). It also notes that more than one development may affect people simultaneously; as such, cumulative impacts on health should be given due consideration (para 4.69).

## **Environmental Public Health**

We acknowledge that the promoter is proposing to include a specific health section within the Environmental Statement (ES) providing a focus which ensures that public health is given adequate consideration. The section should summarise key information, risk assessments, proposed mitigation measures, conclusions and residual impacts, relating to human health. Compliance with the requirements of relevant NPS, guidance and standards should also be highlighted.

In terms of the level of detail to be included in an ES, we recognise that the differing nature of projects is such that their impacts will vary. Any assessments undertaken to inform the ES should be proportionate to the potential impacts of the proposal, therefore we accept that, in some circumstances particular assessments may not be relevant to an application, or that an assessment may be adequately completed using a qualitative rather than quantitative methodology. In cases where this decision is made the promoters should fully explain and justify their rationale in the submitted documentation.

The complex nature of the proposed project and the associated development will require careful consideration of all the combined elements. Specific elements such as air quality or noise should not be considered in isolation, to ensure that any mitigation measures proposed for one aspect do not cause adverse impacts or unintended consequences for another.

The attached appendix A outlines generic areas that should be addressed by all promoters when preparing ES for inclusion with an NSIP submission. Further details in relation to the assessment of noise is included in Appendix B.

## **Health and Wellbeing**

This section of our scoping response, identifies the wider determinants of health and wellbeing we expect the Environmental Statement (ES) to address, to demonstrate whether they are likely to give rise to significant effects. We have focused our approach on scoping determinants of health and wellbeing under four themes, which have been derived from an analysis of the wider determinants of health mentioned in the National Policy Statements. The four themes are:

- Access
- Traffic and Transport
- Socioeconomic
- Land Use

Appendix C outlines the specific comments and recommendations.

We are happy to assist and discuss proposals further in the light of this advice provided.

Yours faithfully

On behalf of Public Health England  
[nsipconsultations@phe.gov.uk](mailto:nsipconsultations@phe.gov.uk)

*Please mark any correspondence for the attention of National Infrastructure Planning Administration*

## Appendix A: PHE recommendations regarding the scoping document

### General approach

The EIA should give consideration to best practice guidance such as the Government's Good Practice Guide for EIA<sup>1</sup>. It is important that the EIA identifies and assesses the potential public health impacts of the activities at, and emissions from, the installation. Assessment should consider the development, operational, and decommissioning phases.

It is not PHE's role to undertake these assessments on behalf of promoters as this would conflict with PHE's role as an impartial and independent body.

We note that the Proposed Development does not include proposed new Northwest Runway and alterations/realignment of the M25 and that these will be the subject of separate planning consent applications. It is acknowledged however that the Proposed Development is designed to be operated alongside these components and we recommend that the EIA includes consideration of the impacts of these associated developments and that cumulative impacts are fully accounted for.

Consideration of alternatives (including alternative sites, choice of process, and the phasing of construction) is widely regarded as good practice. Ideally, EIA should start at the stage of site and process selection, so that the environmental merits of practicable alternatives can be properly considered. Where this is undertaken, the main alternatives considered should be outlined in the ES<sup>2</sup>.

The following text covers a range of issues that PHE would expect to be addressed by the promoter. However this list is not exhaustive and the onus is on the promoter to ensure that the relevant public health issues are identified and addressed. PHE's advice and recommendations carry no statutory weight and constitute non-binding guidance.

### Receptors

The ES should clearly identify the development's location and the location and distance from the development of off-site human receptors that may be affected by emissions from, or activities at, the development. Off-site human receptors may include people living in residential premises; people working in commercial, and industrial premises and people using transport infrastructure (such as roads and railways), recreational areas, and publicly-accessible land. Consideration should also be given to environmental receptors such as the surrounding land, watercourses, surface and groundwater, and drinking water supplies such as wells, boreholes and water abstraction points.

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<sup>1</sup> Environmental Impact Assessment: A guide to good practice and procedures - A consultation paper; 2006; Department for Communities and Local Government. Available from: <http://webarchive.nationalarchives.gov.uk/20100410180038/http://communities.gov.uk/planningandbuilding/planning/sustainability/environmental/environmentalimpactassessment/>

<sup>2</sup> DCLG guidance, 1999 <http://www.communities.gov.uk/documents/planningandbuilding/pdf/155958.pdf>

### **Impacts arising from construction and decommissioning**

Any assessment of impacts arising from emissions due to construction and decommissioning should consider potential impacts on all receptors and describe monitoring and mitigation during these phases. Construction and decommissioning will be associated with vehicle movements and cumulative impacts should be accounted for.

We would expect the promoter to follow best practice guidance during all phases from construction to decommissioning to ensure appropriate measures are in place to mitigate any potential impact on health from emissions (point source, fugitive and traffic-related). An effective Construction Environmental Management Plan (CEMP) (and Decommissioning Environmental Management Plan (DEMP)) will help provide reassurance that activities are well managed. The promoter should ensure that there are robust mechanisms in place to respond to any complaints of traffic-related pollution, during construction, operation, and decommissioning of the facility.

### **Emissions to air and water**

Significant impacts are unlikely to arise from installations which employ Best Available Techniques (BAT) and which meet regulatory requirements concerning emission limits and design parameters. However, PHE has a number of comments regarding emissions in order that the EIA provides a comprehensive assessment of potential impacts.

When considering a baseline (of existing environmental quality) and in the assessment and future monitoring of impacts these:

- should include appropriate screening assessments and detailed dispersion modelling where this is screened as necessary
- should encompass all pollutants which may be emitted by the installation in combination with all pollutants arising from associated development and transport, ideally these should be considered in a single holistic assessment
- should consider the construction, operational, and decommissioning phases
- should consider the typical operational emissions and emissions from start-up, shut-down, abnormal operation and accidents when assessing potential impacts and include an assessment of worst-case impacts
- should fully account for fugitive emissions
- should include appropriate estimates of background levels
- should identify cumulative and incremental impacts (i.e. assess cumulative impacts from multiple sources), including those arising from associated development, other existing and proposed development in the local area, and new vehicle movements associated with the proposed development; associated transport emissions should include consideration of non-road impacts (i.e. rail, sea, and air)
- should include consideration of local authority, Environment Agency, Defra national network, and any other local site-specific sources of monitoring data
- should compare predicted environmental concentrations to the applicable standard or guideline value for the affected medium (such as UK Air Quality Standards and Objectives and Environmental Assessment Levels)
  - If no standard or guideline value exists, the predicted exposure to humans should be estimated and compared to an appropriate health-based value

(a Tolerable Daily Intake or equivalent). Further guidance is provided in Annex 1

- This should consider all applicable routes of exposure e.g. include consideration of aspects such as the deposition of chemicals emitted to air and their uptake via ingestion
- should identify and consider impacts on residential areas and sensitive receptors (such as schools, nursing homes and healthcare facilities) in the area(s) which may be affected by emissions, this should include consideration of any new receptors arising from future development

Whilst screening of impacts using qualitative methodologies is common practice (e.g. for impacts arising from fugitive emissions such as dust), where it is possible to undertake a quantitative assessment of impacts then this should be undertaken.

PHE's view is that the EIA should appraise and describe the measures that will be used to control both point source and fugitive emissions and demonstrate that standards, guideline values or health-based values will not be exceeded due to emissions from the installation, as described above. This should include consideration of any emitted pollutants for which there are no set emission limits. When assessing the potential impact of a proposed installation on environmental quality, predicted environmental concentrations should be compared to the permitted concentrations in the affected media; this should include both standards for short and long-term exposure.

*Additional points specific to emissions to air*

When considering a baseline (of existing air quality) and in the assessment and future monitoring of impacts these:

- should include consideration of impacts on existing areas of poor air quality e.g. existing or proposed local authority Air Quality Management Areas (AQMAs)
- should include modelling using appropriate meteorological data (i.e. come from the nearest suitable meteorological station and include a range of years and worst case conditions)
- should include modelling taking into account local topography

*Additional points specific to emissions to water*

When considering a baseline (of existing water quality) and in the assessment and future monitoring of impacts these:

- should include assessment of potential impacts on human health and not focus solely on ecological impacts
- should identify and consider all routes by which emissions may lead to population exposure (e.g. surface watercourses; recreational waters; sewers; geological routes etc.)
- should assess the potential off-site effects of emissions to groundwater (e.g. on aquifers used for drinking water) and surface water (used for drinking water abstraction) in terms of the potential for population exposure
- should include consideration of potential impacts on recreational users (e.g. from fishing, canoeing etc) alongside assessment of potential exposure via drinking water

## **Land quality**

We would expect the promoter to provide details of any hazardous contamination present on site (including ground gas) as part of the site condition report.

Emissions to and from the ground should be considered in terms of the previous history of the site and the potential of the site, once operational, to give rise to issues. Public health impacts associated with ground contamination and/or the migration of material off-site should be assessed<sup>3</sup> and the potential impact on nearby receptors and control and mitigation measures should be outlined.

Relevant areas outlined in the Government's Good Practice Guide for EIA include:

- effects associated with ground contamination that may already exist
- effects associated with the potential for polluting substances that are used (during construction / operation) to cause new ground contamination issues on a site, for example introducing / changing the source of contamination
- impacts associated with re-use of soils and waste soils, for example, re-use of site-sourced materials on-site or offsite, disposal of site-sourced materials offsite, importation of materials to the site, etc.

## **Waste**

The EIA should demonstrate compliance with the waste hierarchy (e.g. with respect to re-use, recycling or recovery and disposal).

For wastes arising from the installation the EIA should consider:

- the implications and wider environmental and public health impacts of different waste disposal options
- disposal route(s) and transport method(s) and how potential impacts on public health will be mitigated

## **Other aspects**

Within the EIA PHE would expect to see information about how the promoter would respond to accidents with potential off-site emissions e.g. flooding or fires, spills, leaks or releases off-site. Assessment of accidents should: identify all potential hazards in relation to construction, operation and decommissioning; include an assessment of the risks posed; and identify risk management measures and contingency actions that will be employed in the event of an accident in order to mitigate off-site effects.

The EIA should include consideration of the COMAH Regulations (Control of Major Accident Hazards) and the Major Accident Off-Site Emergency Plan (Management of Waste from Extractive Industries) (England and Wales) Regulations 2009: both in terms of their applicability to the installation itself, and the installation's potential to impact on, or be impacted by, any nearby installations themselves subject to these Regulations.

There is evidence that, in some cases, perception of risk may have a greater impact on health than the hazard itself. A 2009 report<sup>4</sup>, jointly published by Liverpool John

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<sup>3</sup> Following the approach outlined in the section above dealing with emissions to air and water i.e. comparing predicted environmental concentrations to the applicable standard or guideline value for the affected medium (such as Soil Guideline Values)

<sup>4</sup> Available from: <http://www.cph.org.uk/wp-content/uploads/2012/08/health-risk-perception-and-environmental-problems--summary-report.pdf>

Moore's University and the HPA, examined health risk perception and environmental problems using a number of case studies. As a point to consider, the report suggested: "Estimation of community anxiety and stress should be included as part of every risk or impact assessment of proposed plans that involve a potential environmental hazard. This is true even when the physical health risks may be negligible." PHE supports the inclusion of this information within EIAs as good practice.

## **Electromagnetic fields (EMF)**

This statement is intended to support planning proposals involving electrical installations such as substations and connecting underground cables or overhead lines. PHE advice on the health effects of power frequency electric and magnetic fields is available in the following link:

<https://www.gov.uk/government/collections/electromagnetic-fields#low-frequency-electric-and-magnetic-fields>

There is a potential health impact associated with the electric and magnetic fields around substations, and power lines and cables. The field strength tends to reduce with distance from such equipment.

The following information provides a framework for considering the health impact associated with the electric and magnetic fields produced by the proposed development, including the direct and indirect effects of the electric and magnetic fields as indicated above.

## **Policy Measures for the Electricity Industry**

The Department of Energy and Climate Change has published a voluntary code of practice which sets out key principles for complying with the ICNIRP guidelines:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/37447/1256-code-practice-emf-public-exp-guidelines.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/37447/1256-code-practice-emf-public-exp-guidelines.pdf)

Companion codes of practice dealing with optimum phasing of high voltage power lines and aspects of the guidelines that relate to indirect effects are also available:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/48309/1255-code-practice-optimum-phasing-power-lines.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48309/1255-code-practice-optimum-phasing-power-lines.pdf)

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/224766/powerlines\\_vcop\\_microshocks.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/224766/powerlines_vcop_microshocks.pdf)

## **Exposure Guidelines**

PHE recommends the adoption in the UK of the EMF exposure guidelines published by the International Commission on Non-ionizing Radiation Protection (ICNIRP). Formal advice to this effect was published by one of PHE's predecessor

organisations (NRPB) in 2004 based on an accompanying comprehensive review of the scientific evidence:-

<http://webarchive.nationalarchives.gov.uk/20140629102627/http://www.hpa.org.uk/Publications/Radiation/NPRBArchive/DocumentsOfTheNRPB/Absd1502/>

Updates to the ICNIRP guidelines for static fields have been issued in 2009 and for low frequency fields in 2010. However, Government policy is that the ICNIRP guidelines are implemented in line with the terms of the 1999 EU Council Recommendation on limiting exposure of the general public (1999/519/EC):

[http://webarchive.nationalarchives.gov.uk/+www.dh.gov.uk/en/PublicHealth/HealthProtection/DH\\_4089500](http://webarchive.nationalarchives.gov.uk/+www.dh.gov.uk/en/PublicHealth/HealthProtection/DH_4089500)

### **Static magnetic fields**

For static magnetic fields, the ICNIRP guidelines published in 2009 recommend that acute exposure of the general public should not exceed 400 mT (millitesla), for any part of the body, although the previously recommended value of 40 mT is the value used in the Council Recommendation. However, because of potential indirect adverse effects, ICNIRP recognises that practical policies need to be implemented to prevent inadvertent harmful exposure of people with implanted electronic medical devices and implants containing ferromagnetic materials, and injuries due to flying ferromagnetic objects, and these considerations can lead to much lower restrictions, such as 0.5 mT.

### **Power frequency electric and magnetic fields**

At 50 Hz, the known direct effects include those of induced currents in the body on the central nervous system (CNS) and indirect effects include the risk of painful spark discharge on contact with metal objects exposed to the field. The ICNIRP guidelines published in 1998 give reference levels for public exposure to 50 Hz electric and magnetic fields, and these are respectively 5 kV m<sup>-1</sup> (kilovolts per metre) and 100 µT (microtesla). The reference level for magnetic fields changes to 200 µT in the revised (ICNIRP 2010) guidelines because of new basic restrictions based on induced electric fields inside the body, rather than induced current density. If people are not exposed to field strengths above these levels, direct effects on the CNS should be avoided and indirect effects such as the risk of painful spark discharge will be small. The reference levels are not in themselves limits but provide guidance for assessing compliance with the basic restrictions and reducing the risk of indirect effects.

### **Long term effects**

There is concern about the possible effects of long-term exposure to electromagnetic fields, including possible carcinogenic effects at levels much lower than those given in the ICNIRP guidelines. In the NRPB advice issued in 2004, it was concluded that the studies that suggest health effects, including those concerning childhood leukaemia, could not be used to derive quantitative guidance on restricting exposure. However, the results of these studies represented uncertainty in the underlying

evidence base, and taken together with people's concerns, provided a basis for providing an additional recommendation for Government to consider the need for further precautionary measures, particularly with respect to the exposure of children to power frequency magnetic fields.

## **The Stakeholder Advisory Group on ELF EMFs (SAGE)**

SAGE was set up to explore the implications for a precautionary approach to extremely low frequency electric and magnetic fields (ELF EMFs), and to make practical recommendations to Government:

<http://www.emfs.info/policy/sage/>

SAGE issued its First Interim Assessment in 2007, making several recommendations concerning high voltage power lines. Government supported the implantation of low cost options such as optimal phasing to reduce exposure; however it did not support the option of creating corridors around power lines on health grounds, which was considered to be a disproportionate measure given the evidence base on the potential long term health risks arising from exposure. The Government response to SAGE's First Interim Assessment is available here:

[http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_107124](http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_107124)

The Government also supported calls for providing more information on power frequency electric and magnetic fields, which is available on the PHE web pages (see first link above).

## **Ionising radiation**

Particular considerations apply when an application involves the possibility of exposure to ionising radiation. In such cases it is important that the basic principles of radiation protection recommended by the International Commission on Radiological Protection<sup>5</sup> (ICRP) are followed. PHE provides advice on the application of these recommendations in the UK. The ICRP recommendations are implemented in the Euratom Basic Safety Standards<sup>6</sup> (BSS) and these form the basis for UK legislation, including the Ionising Radiation Regulations 1999, the Radioactive Substances Act 1993, and the Environmental Permitting Regulations 2016.

PHE expects promoters to carry out the necessary radiological impact assessments to demonstrate compliance with UK legislation and the principles of radiation protection. This should be set out clearly in a separate section or report and should not require any further analysis by PHE. In particular, the important principles of justification, optimisation and radiation dose limitation should be addressed. In addition compliance with the Euratom BSS and UK legislation should be clear.

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<sup>5</sup> These recommendations are given in publications of the ICRP notably publications 90 and 103 see the website at <http://www.icrp.org/>

<sup>6</sup> Council Directive 96/29/EURATOM laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionising radiation.

When considering the radiological impact of routine discharges of radionuclides to the environment PHE would expect to see a full radiation dose assessment considering both individual and collective (population) doses for the public and, where necessary, workers. For individual doses, consideration should be given to those members of the public who are likely to receive the highest exposures (referred to as the representative person, which is equivalent to the previous term, critical group). Different age groups should be considered as appropriate and should normally include adults, 1 year old and 10 year old children. In particular situations doses to the fetus should also be calculated<sup>7</sup>. The estimated doses to the representative person should be compared to the appropriate radiation dose criteria (dose constraints and dose limits), taking account of other releases of radionuclides from nearby locations as appropriate. Collective doses should also be considered for the UK, European and world populations where appropriate. The methods for assessing individual and collective radiation doses should follow the guidance given in 'Principles for the Assessment of Prospective Public Doses arising from Authorised Discharges of Radioactive Waste to the Environment August 2012'<sup>8</sup>. It is important that the methods used in any radiological dose assessment are clear and that key parameter values and assumptions are given (for example, the location of the representative persons, habit data and models used in the assessment).

Any radiological impact assessment should also consider the possibility of short-term planned releases and the potential for accidental releases of radionuclides to the environment. This can be done by referring to compliance with the Ionising Radiation Regulations and other relevant legislation and guidance.

The radiological impact of any solid waste storage and disposal should also be addressed in the assessment to ensure that this complies with UK practice and legislation; information should be provided on the category of waste involved (e.g. very low level waste, VLLW). It is also important that the radiological impact associated with the decommissioning of the site is addressed. Of relevance here is PHE advice on radiological criteria and assessments for land-based solid waste disposal facilities<sup>9</sup>. PHE advises that assessments of radiological impact during the operational phase should be performed in the same way as for any site authorised to discharge radioactive waste. PHE also advises that assessments of radiological impact during the post operational phase of the facility should consider long timescales (possibly in excess of 10,000 years) that are appropriate to the long-lived nature of the radionuclides in the waste, some of which may have half-lives of millions of years. The radiological assessment should consider exposure of members of hypothetical representative groups for a number of scenarios including the expected migration of radionuclides from the facility, and inadvertent intrusion into

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<sup>7</sup> HPA (2008) Guidance on the application of dose coefficients for the embryo, fetus and breastfed infant in dose assessments for members of the public. Doc HPA, RCE-5, 1-78, available at <https://www.gov.uk/government/publications/embryo-fetus-and-breastfed-infant-application-of-dose-coefficients>

<sup>8</sup> The Environment Agency (EA), Scottish Environment Protection Agency (SEPA), Northern Ireland Environment Agency, Health Protection Agency and the Food Standards Agency (FSA). Principles for the Assessment of Prospective Public Doses arising from Authorised Discharges of Radioactive Waste to the Environment August 2012. [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/296390/geho1202bklh-e-e.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/296390/geho1202bklh-e-e.pdf)

<sup>9</sup> HPA RCE-8, Radiological Protection Objectives for the Land-based Disposal of Solid Radioactive Wastes, February 2009

the facility once institutional control has ceased. For scenarios where the probability of occurrence can be estimated, both doses and health risks should be presented, where the health risk is the product of the probability that the scenario occurs, the dose if the scenario occurs and the health risk corresponding to unit dose. For inadvertent intrusion, the dose if the intrusion occurs should be presented. It is recommended that the post-closure phase be considered as a series of timescales, with the approach changing from more quantitative to more qualitative as times further in the future are considered. The level of detail and sophistication in the modelling should also reflect the level of hazard presented by the waste. The uncertainty due to the long timescales means that the concept of collective dose has very limited use, although estimates of collective dose from the 'expected' migration scenario can be used to compare the relatively early impacts from some disposal options if required.

### **Human health risk assessment (chemical pollutants)**

The points below are cross-cutting and should be considered when undertaking a human health risk assessment:

- The promoter should consider including Chemical Abstract Service (CAS) numbers alongside chemical names, where referenced in the ES
- Where available, the most recent United Kingdom standards for the appropriate media (e.g. air, water, and/or soil) and health-based guideline values should be used when quantifying the risk to human health from chemical pollutants. Where UK standards or guideline values are not available, those recommended by the European Union or World Health Organisation can be used
- When assessing the human health risk of a chemical emitted from a facility or operation, the background exposure to the chemical from other sources should be taken into account
- When quantitatively assessing the health risk of genotoxic and carcinogenic chemical pollutants PHE does not favour the use of mathematical models to extrapolate from high dose levels used in animal carcinogenicity studies to well below the observed region of a dose-response relationship. When only animal data are available, we recommend that the 'Margin of Exposure' (MOE) approach<sup>10</sup> is used

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<sup>10</sup> Benford D et al. 2010. Application of the margin of exposure approach to substances in food that are genotoxic and carcinogenic. Food Chem Toxicol 48 Suppl 1: S2-24

## **Appendix B: Detailed noise specific comments**

### Cumulative Effects and Stakeholder Engagement

PHE understands that the Proposed Development does not include the new Northwest Runway and M25 realignment components of the wider Northwest Runway Scheme (NRS), and as such noise generated by construction and operational phases of these elements has been scoped out of the EIA (c.f. Scoping Report 16.1.3).

It is acknowledged however that the Proposed Development is designed to be operated alongside these components and therefore PHE supports the Applicant's commitment to consider the total cumulative noise effects of the NRS as a whole (c.f. 16.7.41). PHE recommends that this strategy is reflected in the proposed Stakeholder Engagement Plan (c.f. 12.3) as well as throughout the EIA more broadly.

### Health Outcomes and Significance of Impacts

PHE expects proper consideration to be given to the potential effects on human health due to changes in environmental noise arising from construction and operational phases of the Scheme. PHE recommends the quantification of health outcomes such as annoyance, sleep disturbance and cardiovascular effects – these can be expressed in terms of number of people affected, Disability Adjusted Life Years (DALYs) and/or monetary terms, and PHE expects the applicant to use the methodologies and exposure response relationships set out in publications by the WHO [1, 2] and the IGCBN [3].

PHE recommends that assessments of significance are based on impacts on health and quality of life, and not around noise exposure per se (in line with the Noise Policy Statement for England, NPSE). Furthermore, PHE expects significance to reflect both the severity of the health outcome and the size of the population affected. Other considerations that can be taken into account are:

- i. The existing noise exposure of affected communities – in particular any designated Noise Important Areas in proximity to the scheme. These are areas with the highest levels of noise exposure at a national level, and require very careful consideration in terms of opportunities for improvement of health and quality of life through noise management;
- ii. Cumulative exposure to other environmental risk factors, including other sources of noise and air pollution; and
- iii. Local health needs, sensitivities and objectives.

### Mitigation measures

PHE expects decisions about noise mitigation measures to be underpinned by good quality evidence, in particular whether mitigation measures are proven to reduce adverse impacts on health and quality of life. For interventions where evidence is weak or lacking, PHE expects a proposed strategy for monitoring and evaluating their effectiveness during construction and operation of the Scheme.

With regards to road traffic noise, PHE would expect to see consideration of low-noise road surfaces, acoustic barriers, traffic management and quiet facades [4], with

noise insulation schemes considered as a last resort. PHE expects any proposed noise insulation schemes to take a holistic approach which achieves a healthy indoor environment, taking into consideration noise, ventilation, overheating risk, indoor air quality and occupants' need to open windows. It should be noted that there is at present insufficient good quality evidence as to whether insulation schemes are effective at reducing annoyance and self-reported sleep disturbance [5], and initiatives to evaluate the effectiveness of noise insulation to improve health outcomes are strongly encouraged.

It is expected that a Construction Environmental Management Plan (CEMP) will be developed and implemented by the Contractor, in part to mitigate the adverse impact of construction noise. PHE recommends that the CEMP includes a detailed programme of construction which highlights the times and durations of particularly noisy works, the proposed noise mitigation measures, and a strategy for actively and routinely communicating this information to local communities.

#### Green spaces and private amenity spaces

PHE expects proposals to take into consideration the evidence which suggests that quiet areas can have both a direct beneficial health effect and can also help restore or compensate for the adverse health effects of noise in the residential environment [6-8]. Research from the Netherlands suggests that people living in noisy areas appear to have a greater need for areas offering quiet than people not exposed to noise at home [6].

Noise insulation schemes do not protect amenity spaces (such as private gardens or community green spaces) from increased noise exposure, and opportunities to create new tranquil public spaces that are easily accessible to those communities exposed to increased noise from the scheme should be explored.

#### Baseline Noise Conditions

PHE welcomes the scheme promoter's commitment to carry out a noise survey (c.f. 16.5.3). PHE recommends that the noise survey is carried out in such a way as to provide a reliable depiction of local diurnal noise variations for both weekdays and weekends, in a variety of locations, including the difference between day (07:00-19:00), evening (19:00-23:00) and night-time (23:00-07:00) periods. This is particularly important if there are areas within the scheme assessment boundary with atypical traffic day/evening/night distributions (e.g. near a freight distribution centre). Achieving these aims is likely to require long-term noise monitoring in multiple locations for more than seven days.

#### References:

[1] [WHO Environmental Noise Guidelines for the European Region, 2018](#)

[2] [WHO Burden of Disease from Environmental Noise, 2012](#)

[3] [Defra/Interdepartmental Group on Costs and Benefits Noise Subject Group, 2014](#)

[4] [Quiet Areas and Health, Health Council of the Netherlands Publication no. 2006/12, 2006](#)

- [5] [Lex Brown and Van Kamp. WHO Environmental Noise Guidelines for the European Region: A Systematic Review of Transport Noise Interventions and Their Impacts on Health. Int. J. Environ. Res. Public Health 2017, 14\(8\), 873](#)
- [6] [LIFE09 ENV/NL/000423, QSIDE - The positive effects of quiet façades and quiet urban areas on traffic noise annoyance and sleep disturbance, 2013](#)
- [7] [COST TD0804, Soundscape of European Cities and Landscapes, 2013](#)

## **Appendix C: Human Health and Wellbeing**

Having considered the submitted scoping report PHE wish to make the following specific comments and recommendations:

### **Methodology**

#### **Temporal scope and reporting**

The scale and nature of the proposed development results in the need for very clear reporting on the temporal impacts and effects on the local population. In this context “temporary” impacts can extend over long periods. The scoping report usefully identifies that the temporal scope of impacts will be determined using the following definition:

- ‘very short term’ relates to effects measured in hours, days or weeks (e.g. effects associated with cable laying activity past a particular dwelling);
  - ‘short term’ relates to effects measured in months (e.g. requirements of the overall construction stage, such as workforce use of accommodation);
  - ‘medium term’ relates to effects measured in years (e.g. the maturing of screening);
- and
- ‘long term’ relates to effects measured in decades (e.g. the operational stage).

#### **Recommendation**

The reporting within the PEIR should use the above definitions rather than generic temporary or permanent temporal descriptions to ensure a consistent, transparent and accurate approach to the report.

#### **In combination & Cumulative effects reporting**

The local community will experience impacts from a range of factors due to this and other local developments over an extended period. The range of impacts over such a long period may result in minor effects gaining increased significance to local communities and the vulnerable population within.

#### **Recommendation**

The PEIR should report effects at community level in order to assist the identification the overall potential effects across a range of impacts. These community level reports will also aid local communities to engage with consultations by providing relevant and accessible information.

#### **Population and human health**

The scoping report does not identify any aspects to be scoped out of the assessment for population and human health. The list of wider determinants to be scoped into the ES, by the applicant, are very broad descriptions and each will contain an important range of potential impacts on health and wellbeing.

Table 1 lists the wider determinants, as a minimum, that should be scoped into an assessment of effects on population and human health under the broad descriptions identified within the scoping report.

**Table 1 – Health and wellbeing wider determinants**

Health and wellbeing themes			
Access	Traffic and Transport	Socioeconomic	Land Use
<b>Wider determinants of health and wellbeing</b>			
<ul style="list-style-type: none"> <li>- Access to local public and key services and facilities</li> <li>- Access to good-quality affordable housing</li> <li>- Access to healthy affordable food</li> <li>- Access to the natural environment</li> <li>- Access to the natural environment within the urban environment</li> <li>- Access to leisure, recreation and physical activity opportunities within the urban and natural environments</li> </ul>	<ul style="list-style-type: none"> <li>- Accessibility</li> <li>- Access to/by public transport</li> <li>- Opportunities for/access by cycling and walking</li> <li>- Links between communities</li> <li>- Community severance</li> <li>- Connections to jobs</li> <li>- Connections to services, facilities and leisure opportunities</li> </ul>	<ul style="list-style-type: none"> <li>- Employment opportunities including training opportunities</li> <li>- Local business activity</li> <li>- Regeneration</li> <li>- Tourism and leisure industries</li> <li>- Community/social cohesion and access to social networks</li> <li>- Community engagement</li> </ul>	<ul style="list-style-type: none"> <li>- Land use in urban and/or rural settings</li> <li>- Quality of urban and natural environments</li> </ul>

Should the applicant wish to scope out any of these determinants the PEIR must provide adequate justification in accordance with the Planning Inspectorate Advice Note Seven (Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements).

**Mental health**

The scoping report accepts the broad definition of health proposed by the World Health Organisation (WHO) and we welcome the specific reference to mental health. Mental well-being is fundamental to achieving a healthy, resilient and thriving population. It underpins healthy lifestyles, physical health, educational attainment, employment and productivity, relationships, community safety and cohesion and quality of life. A scheme of this scale and nature has impacts on the over-arching protective factors, which are:

- Enhancing control
- Increasing resilience and community assets
- Facilitating participation and promoting inclusion.

### Recommendation

There should be parity between mental and physical health, and any assessment of health impact should include the appreciation of both. A systematic approach to the assessment of the effects on mental health, including suicide, is required.

The PEIR should reference the methodology used to complete assessments for the effects on mental health and wellbeing. The **Mental Well-being Impact Assessment (MWIA)**, could be used as a methodology. The assessment should identify vulnerable populations and provide clear mitigation strategies that are adequately linked to any local services or assets

### Vulnerable populations

An approach to the identification of vulnerable populations has been provided and does make links to the list of protected characteristics within an Equality Impact Assessment (EqIA). The impacts on health and wellbeing and health inequalities of the scheme may have particular effect on vulnerable or disadvantaged populations, including those that fall within the list of protected characteristics. The Environmental Statement and any Equalities Impact Assessment should not be completely separated.

### Recommendation

The assessments and findings of the Environmental Statement and any Equalities Impact Assessment should be cross-referenced between the two documents, particularly to ensure the comprehensive assessment of potential impacts for health and inequalities and where resulting mitigation measures are mutually supportive.

### Physical activity and active travel / access to open space

The scoping report identifies how non-motorised user (NMU) will be impacted through the loss or change in formal Public Rights of Way (PRoW), open space and the existing road network. Active travel forms an important part in helping to promote healthy weight environments and as such it is important that any changes have a positive long term impact where possible. Changes to NMU routes have the potential to impact on usage, create displacement to other routes and potentially lead to increased road traffic collisions.

A scheme of this scale and nature can also provide opportunities to enhance the existing infrastructure that supports active travel and we expect the proposal to contribute to improved provision for active travel and physical activity.

It is important to ensure that any impact on tranquillity in open spaces is considered.

### Recommendations

The overall risk to NMU and impact on active travel should be considered on a case-by-case basis, taking into account, the number and type of users and the effect that the temporary traffic management system will have on their journey and safety.

Any traffic counts and assessment should also, as far as reasonably practicable, identify informal routes used by NMU or potential routes used due to displacement.

The final ES should identify the temporary traffic management system design principles or standards that will be maintained with specific reference to NMU. This may be incorporated within the Code of Construction Practice.

The scheme should continue to identify any additional opportunities to contribute to improved infrastructure provision for active travel and physical activity.

The PEIR should clearly identify how the scheme will achieve the requirement of the ANPS Paragraph 5.17:

*“Must include details of how the applicant would increase the proportion of journeys made to the airport by public transport, cycling and walking to achieve a public transport mode share of at least 50% by 2030, and at least 55% by 2040 for passengers as well as a 25% reduction of all staff car trips by 2030, and a reduction of 50% by 2040 from a 2013 baseline.”*

### **Housing affordability and supply**

The Scoping Report identifies the potential for temporary and permanent land take in order to achieve the construction and operational phase. Loss of homes will attract compensation, but existing schemes only consider property owners.

The scoping report identifies a significant proportion of social or private rented sector housing within the local communities. Compensation schemes may not address the impact on the loss of homes on the tenants of these properties, who will often have poor health or be considered vulnerable.

The presence of significant numbers of workers could foreseeably have an impact on the local availability of affordable housing, particularly that of short term tenancies, for certain communities.

### **Recommendation**

Demand for temporary accommodation by the construction work force should be identified and an assessment made regarding the impact on local housing supply and affordability, particularly in relation to homelessness provision of short term housing supply. Given the number of other large developments the cumulative impact on housing provision should be included.

The impact of the development on the tenants of social or private rented sector housing should be considered within the PEIR, which should identify the scale and nature of impact and address and specific mitigation measures.

### **Monitoring**

PHE expects an assessment to include consideration of the need for monitoring. It may be appropriate to undertake monitoring where:

- Critical assumptions have been made

- There is uncertainty about whether negative impacts are likely to occur as it may be appropriate to include planned monitoring measures to track whether impacts do occur.
- There is uncertainty about the potential success of mitigation measures
- It is necessary to track the nature of the impact and provide useful and timely feedback that would allow action to be taken.

#### Recommendation

The need for monitoring should be assessed and reported within the PEIR.

**Assistant Director, Strategic Planning & Infrastructure**  
Alex Chrusciak

Our Ref: 19/00427/ADJ

# Decision Notice



Date of Decision: 08 March 2019

Royal Borough of Kingston upon Thames  
Guildhall 2  
High Street  
Kingston upon Thames  
KT1 1EU

## **TOWN AND COUNTRY PLANNING ACT, 1990 (AS AMENDED)**

**PROPOSAL:** Scoping Consultation  
**DEVELOPMENT:** Heathrow Western Hub

I refer to your letter requesting the Council's observations on the proposal shown above.

The Royal Borough of Kingston upon Thames appreciates the opportunity to provide comment on the Environmental Impact Assessment Scoping Report. This response sets out RBK's views in key areas of interest.

It is our understanding that the Scoping Report is seeking an opinion on a number of matters and aims to identify the likely significant effects arising from the proposed development on the physical, human and biological environments outlining the approach to understanding baseline conditions and addressing environmental impacts through the EIA process. It is also understood that the Proposed Development comprises the reconfiguration and expansion to the west of Terminal 5 (T5) to create terminal and airfield facilities that will be called Heathrow Western Hub, along with associated infrastructure.

We consider that the proposals will have a significant environmental impact and that the whole of this borough is likely to be affected. Hence we are of the opinion that all of the potential environmental topics should be included in the Environmental Impact Assessment. Key topics for investigation within the EIA are therefore expected to be as follows: air quality and odour, biodiversity, carbon and greenhouse gases, climate change, community, economics and employment, historic environment, health, landscape and visual amenity, land quality and waste, major accidents and disasters, noise and vibration, traffic and transport and water.

Kingston supports the stance adopted by TfL on airport expansion, as detailed in the Mayor's Transport Strategy. The Mayor states he will continue to oppose the expansion of Heathrow airport unless it can be shown that no new noise or air quality harm would result and it can be demonstrated that surface access networks will be invested in to accommodate the resultant

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additional demand alongside background growth. Recent TfL analysis shows that stated mode share targets will not be achieved, even with a comprehensive package of surface transport mitigations, including infrastructure investment and travel charges. We are concerned that objectives being set across a number of other key topic areas will be equally as difficult to satisfy.

Through a number of responses to recent consultation exercises on airport expansion (in particular Kingston's response to Heathrow's Airport Expansion Consultation in March 2018), the Council's general stance has been to oppose any airport expansion on a number of grounds including air quality, noise and surface transport implications. We do not support the need for new runway capacity in the South East, primarily on environmental grounds and also because we believe the priority should be to support economic regeneration in other regions. However if the government decides to proceed with new runway capacity in the South East, the Council has resolved to support growing Gatwick in preference to Heathrow and would prefer to see technology/management improvements (which will assist in making best use of existing runways) in preference to building a new runway, thereby helping to avoid major construction projects which are disruptive with very significant environmental impacts.

**Heathrow Western Hub Response by the  
Royal Borough of Windsor and Maidenhead to**

**Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017(the EIA Regulations) – Regulations 10 and 11**

**Application by Arora Holdings Limited (the Applicant) for an Order granting Development Consent for the Heathrow Western Hub (the Proposed Development)**

**Scoping consultation and notification of the Applicant's contact details and duty to make available information to the Applicant if requested**

**Sent to: [HeathrowWesternHub@planninginspectorate.gov.uk](mailto:HeathrowWesternHub@planninginspectorate.gov.uk)**

## **Introduction**

'The Applicant has asked the Planning Inspectorate on behalf of the Secretary of State for its opinion (a Scoping Opinion) as to the information to be provided in an Environmental Statement (ES) relating to the Proposed Development.' The Royal Borough has been asked:

'The Planning Inspectorate would be grateful therefore if you would:

- inform the Planning Inspectorate of the information you consider should be provided in the ES; or
- confirm that you do not have any comments.'

Despite being nearly 700 pages long the document does not spell out in any useful detail (with plans and maps) what is proposed making it difficult to comment.

It is not clear what is proposed where or even what the options are, or what has been fixed or not fixed in the design of the scheme, despite the ARORA web site saying there is a detailed viable worked up scheme for the Western Hub proposal. I would refer to NSIPS Advice Note 7:

### NSIPs Advice Note 7

*'2.13 In dealing with the description of the development and its possible effects on the environment, Applicants should ensure the information is set out with reference to the criteria in Schedule 3 to the EIA Regulations, these being:*

- *Characteristics of the development;*
- *Location of the development; and*
- *Types and characteristics of the potential impacts.*

*2.14 Applicants should also ensure that all aspects of the environment likely to be significantly affected by the development are addressed. The Planning Inspectorate refers to 'aspects' as meaning the relevant descriptions of the environment identified in accordance with the EIA Regulations.'*

*'2.16 Applicants are advised to consider the following questions in respect of their Proposed Development before making a screening request:*

1. *Is there sufficient detail and certainty regarding the location and characteristics of the Proposed Development?*
2. *Is there reasonable confidence that there will not be substantial changes to the information above which may affect any outcome in consideration of likely significant effects?*
3. *Is the absence of likely significant adverse effects dependent upon proposed measures envisaged to avoid or prevent such effects?*
4. *Are these measures capable of being appropriately defined in order to demonstrate their efficacy?*
5. *Is there a clear route to deliver the measures referred to above on which reliance is being placed e.g. planning requirement or other legally binding method?*

*2.17 If the answer to any of questions 1-5 above is 'no' or 'don't know' then Applicants should consider carefully whether the timing of the screening request is appropriate. In any event, Applicants should contact the relevant Infrastructure Planning Lead at the Planning Inspectorate who will arrange an inception meeting in advance of any request to discuss details of the Proposed Development. It is strongly advised that contact is made and this discussion is had before a screening opinion is requested.'*

RBWM considers that the answer to several of the questions 1 to 5 above is no or do not know, and on that basis the council considers that the applicant should have followed the advice in paragraph 2.17. The timing of this screening request may not be appropriate which is explored in further detail below.

Paragraph 4.9 states:

*'4.9 Applicants should consider carefully the best time to request a scoping opinion. In order to gain the most benefit, Applicants should consider requesting the opinion once there is sufficient certainty about the design of the Proposed Development and the main design elements likely to have a significant environmental effect [my emphasis]. Applicants should avoid submitting requests with multiple and varied design and layout options. However, if this cannot be avoided and options remain under consideration (for example a number of route corridors associated with a proposed linear development), Applicants should be aware that this may affect the ability of the Planning Inspectorate and consultation bodies to provide detailed comments. In addition, should a high level of uncertainty remain around key design elements of the Proposed Development this is likely to limit the Planning Inspectorate's ability to agree to scope out aspects/matters to enable the refinement of the ES.'*

It would seem clear to RBWM that the applicant has not followed this advice. There is no clear design or layout for this project in the EIA Screening document or attached to it, just a general description in words. It is in this light that the council has to respond. Whilst it is understood that the process is at a relatively early stage and more detailed information should be available later, at the moment it is really only possible to make some general comments. Consequently, these are not comprehensive and cover some of the areas that concern the council about the proposal and its possible significant effects on the environment and local communities.

### **Minerals and Waste Comments**

Bracknell Forest Council, Reading Borough Council, The Royal Borough of Windsor & Maidenhead and Wokingham Borough Council (collectively known as the Central and Eastern Berkshire Authorities) are working in partnership to produce a Joint Minerals and Waste Plan. This will guide minerals and waste decision-making in the Plan area for the period up to 2036.

Through this response from RBWM the Central and Eastern Berkshire Authorities (JCEBA) would like to make the following comments relating to the Heathrow Western Hub – EIA Scoping Consultation. Please note, this response relates purely to minerals and waste issues, therefore this letter should be considered in addition to any non-minerals and waste responses you receive from the other three authorities.

### **Mineral Resources**

With regards to the proposed approach to mineral resources, JCEBA were pleased to see that the impacts of the proposed development on; active or former quarries, sites allocated for mineral extraction in a local plan, sites of high significance regionally or nationally and sites allocated as a Safeguarded Mineral Site or Mineral Safeguarding Area, were scoped in to the Land quality, Agricultural Land Quality and Mineral Safeguarding Assessment. JCEBA also support the stance that the avoidance of mineral sterilisation and additional mitigation requirements for mineral safeguarding will be considered as part of the waste assessment for the project.

Firstly, whilst the JCEBA assessment of aggregate demand recognises that the development will have a significant impact on aggregate demand (and supply in the area) it does not take into account the identified need of the project specifically as neither the project on its own nor the associated quantities and timescales for aggregate demand are yet confirmed. Therefore the Draft JCEBA Minerals and Waste Plan, which was recently subject to formal regulation 18 consultation, stated that the projected demand of the Plan could be reviewed subject to a change in local circumstances, such as Heathrow. It is important that the Heathrow proposals consider sources of aggregates outside the area of Central and Eastern Berkshire Joint Minerals and Waste Plan especially due to the fact that materials could be transported via the rail depot at Colnbrook which would help to minimise vehicle movements. There also needs to be a more comprehensive statement about the use of recycled materials, so that the need for primary aggregates is reduced.

Secondly, it is understood that borrow pits and stockpile locations may be located outside the designated Construction Area, with a preference for sites within reasonable proximity to the airport. While the JCEBA understand that these are still under consideration, Figure 11.4q (Appendices) depicts land being considered for associated works, including two sites within the Royal Borough of Windsor and Maidenhead; Ham Island and the land immediately to the north west on the other side of the river, known as Southlea Farm. The JCEBA would therefore like to point out the following with regards to these land areas:

- As part of the preparation of the Central and Eastern Berkshire Joint Minerals and Waste Plan, Ham Island and Southlea Farm were/are being considered for inclusion as potential allocations.
- Ham Island was actively promoted as a potential extraction site. However, in consultation with Historic England concern has been raised regarding the potential for de-watering of the adjacent Scheduled Ancient Monument. For the site to be considered further for allocation, it would need to be demonstrated that there would be no impact on the Scheduled Ancient Monument, and in particular, no de-watering effect would occur to this nationally important archaeological site. Further information can be provided on this issue, should this be required. In addition, in consultation with the Environment Agency there are concerns over the viability of a structure in the river to serve the site. Servicing the site by river is fundamental due to the traffic restrictions on the only vehicular access to the site. Further issues regarding loss of flood plain and river navigation have also been raised. The JCEBA will need demonstration from the site promoter that these can be overcome in order

to progress with the allocation. These issues would also apply should the site be considered as a borrow pit. Notwithstanding that the site is being considered to meet the demands arising within the JCEBA plan area. The JCEBA is not planning to meet any need for minerals arising from any potential expansion of Heathrow airport.

- Following a review of the proposed Construction Management Plan for the Heathrow Expansion, JCEBA contacted the Crown Estate as landowners of Southlea Farm to enquire whether it would like to promote the land in the Joint Plan. The landowner confirmed that it had not promoted the land as a borrow pit and further that it did not want to promote the land in the Joint Plan. Without landowner support, the JCEBA ruled the site out from further consideration. The issue of lack of landowner support should also be taken into account should the site be considered as a borrow pit.
- It is recognised there is a strong need to utilise nearby materials in order to meet the substantial aggregate demands. However, it is important to do so in a sustainable and efficient way that limits the potential impacts on local communities.
- Nationally Significant Infrastructure Projects should take into account relevant Local Plans, which would include the emerging Joint Central and Eastern Berkshire Minerals and Waste Plan.

### **Waste Management**

With regards to the approach to waste management, as set out within the Scoping Report and Appendix 14.1 (Waste Appraisal Methodology), the Central and Eastern Berkshire Authorities were pleased to see that proposed development design will aim to make a positive contribution to waste management. It is agreed that the effect of removing the Lakeside Energy from Waste Facility on capacity for treatment of waste will require assessment. However, JCEBA would emphasise the regional significance of this site for authorities in the South East. The JCEBA, along with the South East Waste Planning Advisory Group (SEWPAG), have particular concerns regarding the permanent loss of this facility and how the recovery capacity will be compensated for.

Furthermore, the JCEBA support the stance that an assessment of the potential impact of waste will be needed and that the mitigation and waste management measures proposed will be based on the principle of moving waste up the hierarchy. The JCEBA would like to promote the re-use of any construction demolition and excavation (CDE) arisings on site and that any wastes not used on site should also be sent to an appropriate waste facility, at the highest level possible within the waste hierarchy.

### **Conclusion on minerals and waste**

In conclusion, given the impact that the expansion of Heathrow could have on the emerging JCEB Minerals and Waste Plan, it is essential that the above points be taken into consideration, especially as more details regarding the certainty and the details of the project emerge, as well as its timescale. Overall, more studies are needed to determine the impact the Heathrow expansion will have and how its effects can be mitigated most notably in relation to waste management provision in the area and potential borrow pits. Cognisance should be given of support, or lack of support, from landowners in continuing to suggest that sites within the JCEBA Plan Area will come forward for purposes specifically to support this proposal when this is not the case. This could be misleading for stakeholders within the JCEBA Plan Area and is becoming a focus for their concerns and representation – if evidence can be provided to support discussions had with those landowners for a different position to that the JCEBA understands then please provide it. Going forward, the JCEBA

would request to be consulted and in particular with regard to the Environmental Statement, Site Waste Management Plan and borrow pit locations.

Thank you for taking account of these comments from the Joint Central and Eastern Berkshire Authorities with regards to minerals and waste.

Turning back to comments specifically from the Royal Borough of Windsor and Maidenhead:

### **Health Indicators Concerns**

Table 12.3 – local health priorities doesn't reflect RBWM's health needs. It simply references the structure of the JSNA with nothing about the content and the borough's health needs.

The JSNA is a static document and health indicators and needs are constantly changing. It would not be appropriate to derive all the information from the JSNA. The Council position is that the applicant must speak with the LAs to understand the health needs better or look at the health data themselves on tools such as the Public Health Outcomes Framework.

12.6 baseline conditions – the Council considers that the outline health profiles used aren't that relevant to the expansion project. If these are being used to measure baseline health they won't show anything useful. For example it cover population that provide unpaid care. The applicant has also only included the working age population and neglected young people and the aging population. If these are used as baseline measures for health they are deeply flawed and need a complete overhaul; any outcomes using this approach will be flawed.

The documents states that the applicant is scoping out Non Communicable Diseases from the health impact assessment. The Council does not agree with this approach. The development is going to potentially have huge effects on respiratory and cardiovascular health. If these are scoped out how can these negative impacts be mitigated against? The Council position is that non communicable diseases should be in scope.

The applicant position is that health impacts are considered in the air quality and community chapters but having reviewed those chapters, where there is no reference to respiratory disease, asthma etc. it is clear that this is not the case. The Council position is that the documentation is incomplete in this regard and not acceptable.

The applicant has acknowledged that there may be an impact on health services with increased numbers using the airport and construction workers etc. But there is also a risk that there will be a knock on effect on community services such as drugs and alcohol, sexual health etc. Especially if there are to be 'construction villages' to accommodate the workforce during the development phase. This is not covered sufficiently at this point in time and should have been picked up in further detail. The applicant has also neglected to mention the health impacts on those working at Heathrow specifically, this could be different to impact on the local population and should be separately assessed within the documents.

Figures 10.2 and 12.3 show the indices of multiple deprivation, however these are shown on a Borough level and not on ward or LSOA level. At the moment this represents a very broad picture for the borough and concludes that there is very little deprivation when the council knows, from the more detailed data at LSOA that there are inequalities that exist within the Borough and there are areas of relative deprivation. Looking at it by ward or LSOA level would give a much more accurate indication of the levels of deprivation for the areas proposed for associated works.

Finally it would be good to have independent professionals present and a wide range of stakeholders take part of the HIA process, when deciding what is scoped in and out,

decisions should be based on the best available evidence which is currently not the case for the stated reasons above.

### **Flooding**

The Council is concerned about the identified river diversion work and its potential to impact on the Royal Borough. In 2014 the three parishes below these works were badly affected by floods, there are also contamination risks for those downstream, during construction and operation phases of the development. The 2014 floods is still very memorable for those communities affected and individuals are still in the process of recovering their properties from the effects of those floods, this is therefore a sensitive issue locally and the applicant is duly made aware of that position.

The applicant is advised that any diversion of the watercourses in the Colnbrook area will require careful consideration. Serious flooding has been experienced in the Colnbrook area in recent years (specifically in January / February 2014, despite a flood alleviation scheme implemented by the Environment Agency) and the flooding mechanism / interaction between the various watercourses / lakes is unclear. Although this area is beyond RBWM jurisdiction, a cross borough boundary consultation on this matter will shed some light on the flooding mechanism in the area.

Existing interaction between the watercourses and lakes in the Colnbrook area is quite complex and any diversion of the watercourses could influence this interaction and increase flood risk in the borough. The watercourses in the Colnbrook area drain into watercourses in the borough (primarily the Horton Drain and the Colne Brook). The diversion of watercourses in the Colnbrook area could also influence the timing of peak water levels, and the actual water levels, in the downstream watercourses thus increasing flood risk.

Flooding was also experienced in Stanwell Road, Horton, in January / February 2014 and a number of properties were flooded internally as a result of water leaving the Colne Brook upstream of the weir located to the east of Mill Lane / Cherry Way. The Environment Agency had also implemented a flood alleviation scheme on the Colne Brook downstream of this point and it is understood that the standard of protection of this scheme to be 1 in 100.

These are just some of the areas which cause concern as a result of the possible likely significant effects on the environment. There will of course be very significant and wide ranging effects during the construction phase and following it which will be different to the operational phase of any airport expansion.

In regard to flooding, the applicant should be aware already of the Lower River Thames Flood Alleviation Scheme and specifically to the proposed channel 1 which runs through some of the lakes to the west of the airport.

### **Other matters**

In addition to the specific comments above the council considers that it is also relevant that the applicant is aware of the South West London Waterbodies SPA which supports particular species of birds. Further the applicant's attention should be drawn to off airport consequences of the proximity of the airport to the borough which results in breaches of planning control which have an adverse impact on the environment and local communities, particularly problems related to airport parking in the parishes of Datchet and Horton.

The applicant may be aware that from Monday 11 March 2019 lawyers representing a coalition of local authorities opposed to Heathrow expansion, including RBWM, will make the case in the High Court today that the Government's Airport National Policy Statement backing Heathrow expansion should be quashed. The third runway can only be built by

demolishing thousands of homes and making life noisier and unhealthier for millions of people living in London and the Home Counties. Large increases in road traffic will make the capital and Home Counties pollution worse. The coalition says that the Secretary of State ignored crucial facts when adopting the ANPS. This included information about surface access provided by the Mayor of London. He failed to produce an environmental report showing which communities were going to be affected by noise. Instead he published only 'indicative flightpaths' which are almost meaningless. The failure to identify the areas likely to be affected by noise from new flightpaths to a third runway meant that people in those communities could not know that they might be overflowed. The authorities will argue he was required by law to identify all the areas that might be affected.



Jenifer Jackson  
Head of Planning  
Royal Borough of Windsor and Maidenhead  
15 March 2019

My Ref: RU.19/0250  
Your ref: TR020004\_ 31095887

14 March 2019

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Dear Sir/Madam

**Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017(the EIA Regulations) – Regulations 10 and 11**

**Application by Arora Holdings Limited (the Applicant) for an Order granting Development Consent for the Heathrow Western Hub (the Proposed Development)**

**Scoping consultation and notification of the Applicant's contact details and duty to make available information to the Applicant if requested**

**CONSULTATION RESPONSE BY RUNNYMEDE BOROUGH COUNCIL**

I refer to your consultation to Runnymede Borough Council (RBC) in respect of a Scoping Opinion produced by the applicant relating to the Proposed Development. It is understood that Runnymede would not be a "host authority" for the DCO. However, there is the potential for Runnymede to be affected by some of the identified impacts. As such this letter details the adequacy of the EIA scoping Report prepared by the Applicant with this taken into consideration.

**Runnymede Borough Council's Position**

Runnymede Borough Council acknowledges the decision made by Government in June 2018 that its intended airport expansion option in the South East is a North West Runway at Heathrow Airport. The Council is now refocused to achieve the best possible outcomes for the Borough of Runnymede with regards to the Heathrow expansion plans.

The Council has not formed an opinion on the proposed Heathrow Western Hub.

**Airport National Planning Statement (ANPS)**

Officers note that reliance is placed on the Airport National Planning Statement (ANPS). As of 11 March 2019, this is subject to a judicial review and the Report will need to be updated to reflect the decision of the JR.

## The Proposed Development

The Proposed Development is understood to comprise the reconfiguration and expansion to the West of Terminal 5 to create a terminal and airfield facilities that will be called the Heathrow Western Hub.

Officers understand:

- that the proposal presents an alternative vision to that presented by the Heathrow Airports Limited (HAL) DCO.
- the Applicants DCO does not include delivery of the Northwest Runway or changes to the M25 to allow the Northwest Runway to cross the motorway
- the Applicants DCO is intended to integrate with the Northwest Runway DCO proposed by HAL
- the Applicants DCO includes associated infrastructure - including surface access, airport supporting facilities, relocation of displaced uses and other works necessary to deliver this component of the Northwest Runway Scheme and to enable integration into the wider scheme being proposed by the HAL
- other proposed works include landscaping, ecological improvement works and works to watercourse

## Comments

### 1. High Level / Low Resolution Scoping Report

The Applicants Report is contingent on the HAL DCO regarding delivery of the Northwest Runway.

The HAL DCO application is still evolving and details are not known to the Applicant creating a lack of granularity at their interface. This is a limiting factor on the Applicant, with gaps in areas pending completion of the HAL DCO and limits meaningful comment.

An example of this is the relative phasing of the two DCO schemes – accepting the worst case scenario assessment methodology of the Applicant – leaves residual uncertainty regarding cumulative effects of impacts.

### 2. Scoping Approach

Officers agree with the approach taken to scope in all topics until such time that there is clarity around the integration of both DCO's.

Officers also agree with the cumulative assessment scenarios proposed (paragraph 4.6.15).

The Applicant assumes the same level of 'other Airport related development' as the HAL DCO but then goes on to include that the Project Promoters are considering the scope for consolidating the other airport related development (para 3.6.44) without further detail. It is difficult to assess the impacts from this or the potential scope required.

### 3. Methodology

Officers support the 'Source / Pathway / Target' methodology.

### 4. Sustainability

Officers support the principles of sustainability, recycling, energy conservation and the circular economy.

## 5. Cumulative Effects Assessment

Paragraph 4.6.4 states that ‘cumulative effects with other development’ but does not reflect other NISP’s anticipated in the wider area such as the River Thames Scheme and the Southern Rail Heathrow Extension. Officers suggest that while these projects are not at an advanced stage of maturity, sufficient information exists in the public domain to integrate a minimal assessment of their potential positive and negative impacts on the Applicants DCO proposals – especially with regard to surface access, off airport land uses including warehousing, accommodation and parking. Officers request that the scoping report is revised to reflect this.

## 6. Study Areas

Runnymede is a non-host authority – included in some Study Areas and excluded from others. Officers request the following revisions for the reasons stated, regardless of where these fall within the report format:

<b>Environmental Impact</b>	<b>EIS RBC Included / Excluded</b>	<b>Proposed Revision</b>
Air Quality & Odour	Not included	Included – air quality re: transport & surface access during construction and operation. RBC requests that the whole of the Borough is included or at least to the maximum extent of the AQMA’s positioned on the Strategic Road Network – details can be found on the Councils RMap System. The Applicants vision states that in the future reliance will be placed in improved public transfer – but until such times as the infrastructure is in place, increased traffic volume must be managed via current infrastructure
Biodiversity	Not included	<p>RBC support adoption of the precautionary principle which is not reflected in the report and consider that the study area should be extended to include Runnymede. The Applicant accepts that the Proposed development is in its early development and therefore subject to change. Officers therefore consider that the cumulative effects of Nitrogen deposition associated with Traffic movements on the local and strategic network along with the impact of an increase in temporary and permanent homes should be considered for the full extent of European sites including the SWLondon waterbodies SPA and The Thames Basin Heath SPA both in Runnymede.</p> <p>Officers consider that sufficient detail should be provided in the ES regarding Biodiversity offsetting including where proposed compensation areas would be and subsequently reflected in the DCO. Details are requested of how the Applicants proposal and mitigation is integrated with the Local Plan Biodiversity Opportunity Areas and habitat corridors. Officers suggest that Surrey Wildlife Trust is consulted as well as the London Wildlife Trust.</p> <p>In the aquatic environment – consideration of linkage into the River Thames is requested – regarding possible impacts on migration of native and alien species e.g. the Signal Crayfish. Officers would welcome an occasion to discuss what opportunities there may be within Runnymede to assist</p>

<b>Environmental Impact</b>	<b>EIS RBC Included / Excluded</b>	<b>Proposed Revision</b>
		Biodiversity offsetting if appropriate.
Carbon & Greenhouse Gases	Not included	Included – air quality re: transport & surface access during construction and operation.
Climate Change	Not included	Included – indirect affects re flooding, vehicle emissions, modal shift.
Community	Scoped In Wider Area	<p>Agreed – Officers request that this be kept under review pending details of the construction phase are known including impacts of migrant workforce, worker accommodation and transport are known.</p> <p>While the principle negative impacts on RBC of the Expansion are likely to arise from the HAL DCO (aircraft noise &amp; Air Quality) – the mitigation for the Borough will be likely to be community related. Since the Applicants and HAL DCOs are an integrated whole – this offers an opportunity for the Applicant to mitigate some of the negative impacts of the Expansion program without requiring direct intervention.</p> <p>The scoping report offers a very narrow view of the community impact with a perceived bias towards London Boroughs and West London. Potential effects of the community impacts on the wider study area are to be identified.</p> <p>The cumulative impact of other NISPs and the River Thames Scheme, which enable the Expansion programs of the Applicant and HAL are also unconsidered in their community impact.</p>
Economics & Employment	Neither Scoped In or Out	<p>Assurance is requested that RBC will be included in the impact assessment. While the principle negative impacts on RBC of the Heathrow Expansion are likely to arise from the HAL DCO – the mitigation for the Borough will be partially through employment and access to a broad spectrum of employment opportunities. Higher end employment opportunities are likely to accrue to the HAL DCO – nevertheless there is scope within the Applicants DCO to offer a broader spectrum of opportunities to RBC residents. Since the Applicants and HAL DCO are an integrated whole – RBC expects access to employment to be considered.</p> <p>Officers note that the Applicant plans to establish a consultation group with members of HSPG and given that Runnymede is one such member, Officers await for the opportunity to be consulted on the matters.</p>
Historic Environment	Not included	Agreed – as a non-host authority we have not comment
Landscape & Visual Amenity	Included at specific locations	Officers understand that the proposed design is insufficiently advanced for the study area to be identified. Officers recommend that the baseline should include the Borough of Runnymede and especially the key viewpoints at Coopers Hill, Englefield and the

<b>Environmental Impact</b>	<b>EIS RBC Included / Excluded</b>	<b>Proposed Revision</b>
		Royal Airforce Memorial.
Health	RBC included in the wider study area	RBC request that this aspect is kept under review pending more detail being available on the construction and operational phase as a consequence of potential influx of work force, increased traffic, etc.
Land Quality & Waste	Not included	RBC request that this aspect is kept under review pending more detail on the construction phase, landfill excavation / waste disposal.
Major Accidents & Disasters	Not included	Included as a consequence of effects of major incidents on the major road infrastructure during construction and enhanced traffic levels during operation, spillage of waste during construction, proximity to airport re: communicable disease, alien species, etc. The summary scope of major accidents and disasters assessment as at table 15.8 appears reasonable.
Noise & Vibration	Not included	Scoping Report identifies "Construction traffic on existing roads will be studied where the increase or decrease in road traffic volumes or traffic types caused by the construction of the DCO Project would be likely to cause a change in noise level". On the basis of potential increased traffic levels through the Borough as a result of the DCO Project, RBC should be included in the Study Area.
Traffic & Transport	RBC included in wider study area	Agreed – subject to revision pending more details of the construction and operational phases regarding passenger and employee transport. Opportunities for 'sustainable transport interchange' are addressed within the red line of the DCO – but the scoping report provides no details with regard to impacts beyond this.
Water	Included	Agreed.

Officers acknowledge the duty on the LPA under Regulation 11(3) of the EIA Regulations, if so requested by the Applicant, to make available information in our possession which is considered relevant to the preparation of the ES.

Yours faithfully



**Ian Maguire**  
Corporate Director of Planning and Environmental Services

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12<sup>th</sup> March 2019

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Dear Mr Sir/Madam

**Re: Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017(the EIA Regulations) – Regulations 10 and 11**

**Application by Arora Holdings Limited (the Applicant) for an Order granting Development Consent for the Heathrow Western Hub (the Proposed Development)**

**Scoping consultation and notification of the Applicant's contact details and duty to make available information to the Applicant if requested**

Thank you for your letter dated 15<sup>th</sup> February confirming the applicant Arora Holdings Limited has asked the Planning Inspectorate on behalf of the Secretary of State for its opinion (a Scoping Opinion) as to the information to be provided in an Environmental Statement (ES) relating to the Proposed Development.

The Planning Inspectorate would be grateful if Slough Borough Council (a consultation body) informs the Planning Inspectorate of the information it considers should be provided in the Environmental Statement. **The request deadline is Friday 15<sup>th</sup> March 2019.**

*This response relates specifically to Slough Borough Councils 'Environmental Quality Team' specialist areas (air quality, noise and vibration, contaminated (land quality) and carbon management (carbon and other greenhouse gases and climate change). All other topic areas sit outside the remit and expertise of the EQ Team and therefore no comments are attached.*

**Section 3: The Proposed Development**

For the purposes of this response, the 'Proposed Development' refers to the Heathrow Western Hub DCO Project.

**3.1 Background & 3.4 Integration with the HAL DCO Project**

Section 3.1 describes the relationship between the Proposed Development and the HAL DCO Project. The report states that the "definition of the Proposed Development is being drawn widely for the purposes of EIA scoping". The HAL DCO has not yet been fully defined, so the applicant cannot determine the level of additional components that need to be included in the Proposed Project DCO. It is expected that after Stage Two consultation of the HAL

DCO Project (June 2019), the scope of the Proposed Development could be significantly reduced.

### **3.7 Development Programme and Construction**

Section 3.7 describes the approximate timeline for works. The construction programme is expected to last 10 years, which provides a large time scale for potential air quality and noise impacts that need to be considered. Disruption to traffic through road alteration is expected to cause an impact on air quality and noise levels, as Section 3.6 states "*The principal access and egress to Heathrow Western Hub is proposed to be from J14, via the A3113 with a short sub-surface link entering Heathrow Western Hub from the south. Improvements to J14 which may include dedicated entry and exit slip roads from the M25 will improve capacity and function at J14 and will bring benefits to local traffic as well as airport traffic.*" Potential air quality and noise impacts will need to be considered as a result of these adjustments.

## **Section 4: Approach to EIA**

A range of guidance used to inform the EIA is quoted throughout Section 4, which is suitable for the development. The Rochdale envelope methodology will identify the maximum likely significant effects of the development during construction and operation. The envelope will define worst impacts as such no impacts of higher significance will occur, if conducted correctly. This is a suitable approach to highlight the worst case scenario.

### **4.6 Cumulative Effects Assessment**

Cumulative impacts have also been included in this scoping assessment, discussed in Section 4.6 and reiterated in many sections throughout the report. The report states that "*where separate consent applications are made for developments which may be linked or are components of a wider scheme or overall project, then case law at the UK and EU level makes clear that a cumulative assessment is required of those developments*". However, the HAL DCO Project has not yet been confirmed. It will be difficult to conduct a cumulative effects assessment when many elements of the HAL DCO Project are still in discussion, such as connecting road networks. It will be difficult for a worst case assessment to be produced when elements have not yet been confirmed, which could lead to an underestimation of the impacts and this needs to be acknowledged. The exact components of the HAL DCO Project that are to be included in the cumulative effects assessment and how it will be conducted will also need to be specified.

The report highlights complexities in separating effects of the HAL DCO Project with the Proposed Development. This will be explained fully in the Environmental Statement. The report states "*It is recognised that where the Applicant is unable to clearly identify the effects related to each constituent element of the HAL DCO Project that is no longer required, this may result in the possibility of the assessment predicting likely effects that are greater than worse case*". Therefore, the worst case prediction is likely to overestimate the effects and will represent the worst possible outcomes.

### **4.8 Engagement**

Section 4.8 discusses engagement, which is reiterated and developed in each Section discussed in the EIA Scoping Report. This is comprehensive, and includes "*the London Airlines Consultative Committee, individual airlines, and the Civil Aviation Authority. The Applicant has hosted two briefings for host and neighbouring local authorities in 2017 and 2018 as well as briefings for local MPs. In November 2018, the Applicant carried out an extensive consumer survey of airline passengers which is being used to inform design development*". Engagement plans for early 2019 are also discussed, including "*members of*

*Heathrow Strategic Planning Group, Heathrow Community Engagement Board and Heathrow Transport Forum*". Surrounding Local Authorities, including Slough Borough Council, were also contacted in November 2018, in regards to the Proposed Development and timescales for further consultation. The applicant will include plans and documents of nature and location of Proposed Development, including a PEIR.

## **Section 5: Air Quality**

The overview of legislation discussed in Section 5.2 is extensive. This is a consistent element of each Chapter in the report.

### **5.4 Approach to Scoping**

Section 5.4 describes how the study area is defined. The report states that the Proposed Development study area is flexible and can evolve, and will be informed by locations of pollution sources. This is a suitable approach to ensure air quality in Slough impacted by the Proposed Development is considered. The study area should include Brands Hill and M4 AQMAs to ensure works do not contribute to a worsening of air quality within these areas.

In Section 5.4.5 "*Construction phase dust and fine particulate matter assessment*", the report references IAQM guidance for dust and PM assessment. This guidance defines the study area as those which contain human receptors within 350m of the boundary of construction works and within 50m of routes taken by construction vehicles. This approach is favoured, as impacts on residential areas outside the immediate development area are included.

The applicant will be using DMRB guidance to assess air quality impacts and to determine the assessment study area. Human or ecological receptors within 200m of affected roads which match DMRB classification will require consideration. This is used in conjunction with IAQM and EPUK guidance (2017), for the assessment of traffic movements on the urban road network. All relevant road links which are used in Defra's Pollution Climate Mapping (PCM) are also considered in the assessment. This is a suitable approach.

### **5.6 Scoping of Potential Effects**

Table 5.3 displays all potential likely significant air quality and odour effects. It is recognised that operational and construction impacts have been scoped into the assessment. An additional effect that should be included under construction-generated vehicle movements is the impact of alteration and adjustments of Junctions 14 and 14A, A4 amendments, northern perimeter road, A3113 amendments, Stanwell Moor Junction amendments and A3044 relocation. Traffic disruption is a concern and modelling of congestion should be conducted, and the impact that this will have on air quality in Slough. Modelling of operational traffic flows will also be required to determine congestion levels and therefore impact on Slough's air quality.

Very little is scoped out of the EIA in terms of air quality. Combustion activities during operation have been scoped out, specifically their contribution to secondary pollutants and resulting impacts. As this can occur through transboundary pollutant migration, it is out of the applicant's control. However this suggests no combustion activities will be occurring during operation and this will need to be verified.

### **5.7 Approach to Assessment**

Section 5.7.20 – 5.7.28 discusses “*construction and operational phase plant, combustion source, rail and vehicle emissions*”. The applicant will carry out detailed screening assessment and dispersion modelling (ADMS) once details of Proposed Development have been confirmed. Further information regarding which scenarios will be considered is required.

The Proposed Development will be implemented from 2022-2030. Section 5.7.37 states that “*pollutant concentrations associated to the Proposed Development are expected to reduce over time, due to improved vehicle and emission reduction technologies*”. There is no acknowledgement of issues associated with over optimistic reduction assumptions related to emission standards. Reduction is expected to be much slower with real world driving conditions, which will need to be considered within modelling scenarios. To achieve a worst case scenario, a situation where emission reduction does not occur should be modelled.

### **5.8 Approach to Mitigation**

Mitigation measures are identified within the ANPS and reiterated in Section 5.8.2. The recommendation for a Construction Traffic Management Plan is included in the construction phase. This will need to include HGV routing to ensure that construction traffic does not impact Slough’s AQMAs, and that road adjustments will not cause disruption to areas within Slough.

It is also mentioned that low emission construction plant and fleet will be used. In line with Slough’s Low Emission Strategy (2018), construction vehicles that require access via Slough require to be Euro VI.

A range of operational phase mitigation measures are provided by ANPS. The applicant will need to refine these to specific measures once the level of impact has been defined. As stated in Section 5.9.2, proposals for mitigation will be considered during consultation with relevant stakeholders, which includes Slough Borough Council.

## **Section 7: Carbon and Greenhouse Gases**

Several key points have been raised throughout the response. The section that the comments relate to is identified by the sub-heading. Key issues highlighted include; assumptions and uncertainties of data and projections, the impact to GHG emissions on displaced uses of land within the Proposed Development area and the assessment of Scope 3 emissions.

### **7.3 Stakeholder Consultations**

In section 7.3.2 the list of national level stakeholders that were contacted in November 2018 were provided. Given the national level greenhouse gas emission targets, any national level public organisation that plays a role in achieving the UK’s targets outlined by the Climate Change Act 2008 should be considered a stakeholder. Therefore this list should be reviewed to include any national level public organisation that will play a role in achieving this target.

### **7.4 Approach to Scoping**

Relating to the displaced uses of land from the Proposed Development area all sources, both emitting and sequestering greenhouse gas emissions should be included. This should include changes to land use, land-use change and forestry. In addition, this should include changes to areas of residential, public or commercial activity. Baseline data will be required for this assessment.

## **7.5 Baseline Conditions, 7.6 Scoping of Potential Effects and 7.7 Approach to Assessment**

Regarding assumptions that will be made in the assessment, section 7.5.1 states: “*Aviation accounts for approximately 6% of the UK’s current GHG emissions: This is likely to increase over time as other sectors decarbonise more quickly (DfT, 2013). There are however anticipated to be improvements in efficiency and in technology, and the future fleet is expected to be less carbon intensive.*”, and section 7.7.11 states: “*There is anticipated to be an improvement in the efficiency of aircraft and road transport fleet over the temporal scope of the assessment, which is likely to result in a reduction in GHG emissions associated with specific activities. These improvements will be included as part of the assessment, based on approved guidance and databases*”. All assumptions that will be made must be clearly outlined and justified. Uncertainty of these assumptions must also be clearly explained due to varying degrees of reliability. For example section 7.7.25 states: “*Emission factors will be derived from the most appropriate data source at the time of assessment, and will account for future changes to the UK transport fleet and travel mode*”, however it should be noted that there is a high degree of uncertainty with regards to the exact mix of the future UK transport fleet and travel modes. In addition, the uncertainty of the overall cumulative assessment scenario and uncertainty of each aspect of the cumulative assessment scenario should be stated.

It is noted that the explanation of assumptions are acknowledged in section 7.7.12, which states: “*The HAL Scoping Opinion advises that the assumptions and uncertainties regarding future improvement scenarios, including any sensitivity analysis should be clearly set out in the ES (PINS, 2018). This will enhance the understanding of the reliance placed on such measures in assessing likely significant effects, and will be incorporated into the assessment.*” It also states in section 7.7.14: “*Appropriate assumptions will be justified and clearly stated as to improvements in the efficient of aircraft, the UKs future road fleet mix and the rate that the UKs energy mix will be decarbonised. The scenarios will draw on published and credible future projections, and where appropriate will be agreed with key stakeholders.*” Stakeholders should be given the opportunity to challenge any assumptions used.

Table 7.2: “*Existing Heathrow Airport GHG Emissions – Obtained from Heathrow Carbon Footprint 2017 (HAL, 2017)*” lists Scope 1, 2 and 3 Emissions from existing reports. The table footer notes existing limitations in reporting supply chain emissions. The baseline assessment should encompass the full Scope 3 emission data. Table 7.4, titled: “*Potential likely significant sources of GHG emissions*” lists a series of activities and effects. These should include all Scope 3 sources. In addition, the process of identifying likely significant sources of GHG emissions should not rule out sources without a sufficient analysis and justification. For example, this should include all displaced uses of land, for instance changes to displaced areas of residential, public or commercial activity.

Section 7.7.9 states: “*The Proposed Development will be implemented across an anticipated timeframe of 2022 – 2030. The carbon and GHG assessment will consider a number of different assessment scenarios which will consider the construction and operational phases, and the activities which would give rise to the most significant carbon and GHG impacts as a result of the Proposed Development*”. Calculations for the construction phase should incorporate where possible the impact of changes in scheduling or unplanned delays on greenhouse gas emissions.

Relating to ‘Additional baseline data collection’; section 7.7.18 states: “*In addition, relevant stakeholders such as the local authorities will be contacted to determine if there is any*

*additional relevant baseline information that can be used in the assessment*". The expectations of what baseline data could be provided by local authorities should be explained in more detail.

When considering efficiency improvements of surface based aircraft movements and aviation fuel, the full lifecycle costs of such measures should be incorporated. Section 7.7.27 states: *"There are anticipated to be efficiency improvements in surface based aircraft movements, which will be considered in the assessment. In addition, the use aviation biofuel within the fleet and airspace will be considered in the future scenarios"*. Taking this example when looking at the lifecycle GHG emission cost (Scope 3) of biofuels, emissions can be high in the production and distribution stages. In addition, indirect effects such as impacts on demand for agricultural land and the use of intensive agricultural practises that can be environmentally damaging should be incorporated into such an assessment.

Greenhouse gas emissions of Land use, land-use change, and forestry should be included in the assessment. It is noted that section 7.7.30 reaffirms this, stating: *"Land uses within the Proposed Development will be considered in the assessment but are expected to be minor. The main land use change associated with the NRS will be at the area where the new Northwest Runway will be located, which is currently made up of a mixture of open agricultural land, industrial and built environment uses, which will be considered as part of the cumulative assessment."*

Given the large scale of the Proposed Development, comparatively small GHG sources in the context of the Proposed Development should not be omitted on the basis that they do not form a significant proportion of the overall project. It is noted that section 7.7.32 states: *"IEMA guidance advises that all releases of GHGs might be considered to be significant, but professional judgement should be used to contextualise a project's GHG budget (IEMA, 2017)"*.

## **7.8 Approach to Mitigation**

The full list of mitigation measures proposed should be provided. It is noted that section 7.8.2 states: *"The type and level of mitigation measures required will be informed by the expected level of impact. The ANPS lists a number of mitigation measures relevant to the construction and operational phases which could be put forward to minimise impacts associated with the Proposed Development."*

## **Section 8: Climate Change**

The section that the comments relate to is identified by the sub-heading. Key issues highlighted include; emission scenario projections used, and impacts relating to climate change in conjunction with the Proposed Development for example potential exacerbation of the Urban Heat Island effect.

### **8.2 Policy and Legislation**

Local policies should be accounted for. It is noted that section 8.1.3 states: “*Due regard will also be given to local policies and the Government’s 25 Year Environment Plan where they are relevant*”.

In Table 8.1 “*Policy and legislation relevant to the climate change assessment*” the box on the relevance to the assessment with regards to the Airports National Policy Statement states: “*The ANPS outlines the planning policy for airport NSIP applications in the south east of England. The document advises that new airport infrastructure will be a long-term investment, and will remain in operation when the predicted effects of climate change will take place*”. This statement fails to acknowledge that the impacts of climate change are already being experienced across the UK.

### **8.4 Approach to Scoping**

The projected impacts of climate change on the site of the Proposed Development may be exacerbated by the Proposed Development itself. A greater built up environment may add to the existing Urban Heat Island effect of Greater London and the surrounding areas further exacerbating temperature extremes. Periods of extreme heat exacerbated by the Urban Heat Island effect have been attributed to premature deaths. The impact of this Proposed Development on this effect should be incorporated into the assessment.

Relating to ‘Additional baseline data collection’; section 8.4.6 states: “*The CCR Assessment will also draw on design data for the Proposed Development. Any relevant climate baseline data will be requested from key stakeholders such as the relevant local authorities*”. The expectations of what baseline data could be provided by local authorities should be explained in more detail.

### **8.5 Baseline Conditions**

Climate projections are provided without emissions scenarios. This occurs in section 8.5.3: “*It is anticipated that temperatures in the UK will increase, with a range of warming from 0.7°C to 4.2°C in winter, and 0.9°C to 5.4°C in summer (Met Office, 2018). For precipitation, ranges of UK average changes are -1% to +35% during winter, and -47% to +2% during summer relative to a 1981 – 2000 baseline (Met Office, 2018).*” and section 8.5.4 where the outputs of the HAL Climate Change Adaptation and Resilience Progress Report in 2016 are discussed. When stating climate projections, baseline time period and emission scenarios should be stated.

### **8.7 Approach to Assessment**

Relating to the ‘Stage 1 In-combination Climate Change Impact Assessment’, prior to elimination of any potential climate change effects before ‘Stage 2 Climate Change Impact Assessment’, all climate change scenarios under different emissions pathways should be considered.

## **8.8 Approach to Mitigation**

The terminology with regards to avoiding the impacts of climate change focusses on the word 'mitigation'. In the context of climate change mitigation is a term normally associated with the reduction of greenhouse gas emissions. When discussing actions taken to minimise the impacts of climate change it is usually referred to as 'adaptation' or 'climate resilience'. Section 8.8.1 states: "*Mitigation to minimise the potential impacts of climate change will be embedded into the design of the Proposed Development. The assessment of impacts will be made with these primary mitigation measures in place, as detailed in Section 4.5 of Chapter 4 'Approach to EIA'*". To avoid confusion, the terminology used with regards to these actions should be considered.

## **Section 14: Land Quality and Waste**

Table 14.3 presents a summary of the potential effect scoped in to the land quality assessment. These are suitable for the Proposed Development, and encompass all the likely significant effects on land quality.

It is also acceptable that non-BMV agricultural land will be scoped out.

The proposed methodology for the assessment of land quality is suitable and follows the approved guidance and principles set out in the Policy and Legislation summary set out in Table 14.1.

## **Section 16: Noise and Vibration**

### **16.4 Approach to Scoping**

Section 16.4.4 discusses the construction assessment and references BS5228:2009. The study area is restricted to 300m from any construction activity as noise levels beyond this distance are greatly affected by meteorology. Piling operations and reverse beepers on construction vehicles may be audible from over 300m, therefore the study area should be wider to represent a worst case scenario. However it is recognised that the report states that if significant effects are predicted to occur outside study area as defined, the study area will be revised. The operational noise study area of 1km from ground or airfield operations and existing roads where there is an increase in traffic volume is acceptable.

Construction vehicles on existing roads can contribute to noise levels. The report states that construction traffic on existing roads will be studied where the increase or decrease in road traffic volumes or traffic types caused by the construction of the Proposed Development would be likely to cause a change in noise level exceeding 1 dB (LAeq) during the day or night. Noise levels at night should also be measured as L<sub>Amax</sub>, to determine the loudest night time noise event which could lead to sleep disturbance. This should be compared to thresholds specified within WHO Guidelines for Community Noise (1999).

Potential mitigation measures should include a Construction Environmental Management Plan which outlines scheduled work hours and restrictions, to ensure noise at night does not increase above ambient background levels, or cause sleep disturbance for residents in Slough.

### **16.6 Scoping of Potential Impacts**

Environmental noise induced hearing loss has been scoped out, due to noise levels of 75-85 dBa being deemed unlikely to occur within the apron of the airport. This should be scoped

into the assessment, as cumulative noise from future flight increase impacts may contribute to hearing loss and should be scoped in as a precaution.

### **16.7 Approach to Assessment**

The study area is the same as the air quality assessment area and can be reviewed in the future. The assessment methodology outlined for the construction and operational phases are suitable, however there are some additional standards that should be considered, such as:

- BS 7445 “Description and Measurement of Environmental Noise”
- BS8233:2014 “Guidance on sound insulation and noise reduction for buildings”
- Department for Transport – Calculation of Road Traffic Noise

Section 3.7 states that the Proposed Development will include a ‘Construction Area’ to the west of Terminal 5, however the exact location is not indicated. Temporary accommodation for construction workers will also be provided, but there is no indication of where this will be situated, or noise mitigation which relates to this specifically. The noise impact from these areas will need to be included in the noise impact assessment.

This section also states “*To reduce the number of activities happening on site at the same time, use of supporting facilities alongside careful construction management planning would be employed to minimise disruption*”. The term ‘supporting facilities’ needs clarification so the potential noise impact can be determined.

### **16.8 Approach to Mitigation**

A brief description of the mitigation approach is provided. The report states that “*the applicant will ensure most appropriate and effective measures are taken forward in consultation with local communities and other stakeholders*”, therefore Slough will have an opportunity to suggest further measures during the consultation period.

Table 16.5 which outlines the potential impacts is very vague. This needs to be refined and should identify certain areas to be considered.

## **Section 17: Traffic and Transport**

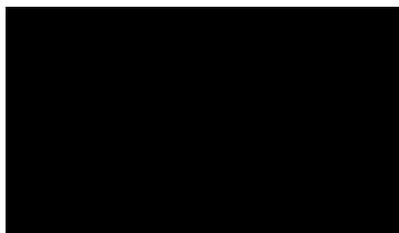
Slough are supportive of measures described in Section 17, including “*a road user charging zone is being considered for the main routes to and from the Heathrow Western Hub, to discourage car travel and be complemented by improved public transport provision*”. Park and ride sites are also being considered, but there is no further detail where this will be situated and needs clarification. This Section also proposes a new public transport interchange at Heathrow Western Hub, but exact upgrades have not yet been specified.

To date, HAL have not indicated clear road layouts to allow Slough access to Heathrow. For employees of Heathrow living in Slough, a suitable transport option which promotes modal shift is required.

The report states that “*bus routes, cycle lanes and public footpaths will be available*”. The only aspect that has been scoped out is hazardous loads, which can be avoided through safe working practices and preventative measures.

I trust these comments have proved useful. Should you wish to discuss these points further, please contact the Environmental Quality Team, [environmentalquality@slough.gov.uk](mailto:environmentalquality@slough.gov.uk).

Yours faithfully,



Savio DeCruz  
Service Lead, Major Infrastructure Projects

# **Heathrow Western Hub Environment Impact Assessment Scoping Report 2019**

*Summary of responses from Spelthorne Borough Council  
(March 2019)*

## General Comments

The Heathrow Western Hub Environmental Impact Assessment (EIA) Scoping Report benefits from coming after Heathrow Airport Ltd (HAL) Scoping Opinion, and some attempts have been made to include/ take account of the Inspector's comments in the Scoping Opinion for HAL's Development Consent Order (DCO) scheme. The expectation of Spelthorne Borough Council (SBC) is that the applicant's EIA should by default include all the points of the Inspector's Scoping Opinion for the HAL expansion scheme, the HSPG EIA scoping comments on the HAL scheme and SBC's comments on the HAL EIA, with the only exceptions being those that relate solely and strictly to the Runway and the M25 tunnelling.

Within each topic area it is stated that stakeholders were contacted in November 2018 and delivered a presentation providing an overview of the Proposed Development. SBC was not invited to this meeting and has not had the opportunity to comment on initial scopes to topic assessments. The Council was contacted by the applicant in December 2018 to request baseline information, but due to the unreasonable timeframe set for response, the Council were unable to respond.

For each topic area there is a lack of baseline data and clarity on the components of the HAL DCO scheme to be delivered by the applicant. This has serious implications for stakeholders such as Spelthorne Borough Council to understand whether the applicant has included sufficient information about scope, methodology, potential impacts, significance, mitigation and cumulative effects to satisfy the EIA Regulations.

Throughout the topic chapters cumulative effects are restricted to consideration of cumulative impacts with the HAL DCO Project. The applicant needs to collect further background information about other nationally and regionally important infrastructure projects that are likely to overlap spatially and temporally with the applicant's and HAL's DCO schemes, e.g. Western Rail Link to Heathrow, M25 Junction 10 improvements, M25 J13 improvements, M25 smart motorway J10-J16, Southampton to London Pipeline replacement, and potentially the Southern Rail Link to Heathrow.

There does not seem to be any mention within topic chapters to consultation (past or future) with County Councils for Buckinghamshire and Surrey, who perform Highways Authority functions, are the Local Education Authorities, adult and social care providers, waste and minerals Local Planning Authorities, waste disposal authorities, hold local expertise relating to archaeology and the historic environment, Sustainable Urban Drainage Systems (SuDS), and strategic flood assessment. They will be able to provide the applicant with baseline information for many of the topic areas.

## Chapter 1 Introduction

Paragraph 1.1.5 claims *“the Proposed Development provides an integrated solution with the HAL DCO Project.”* Given the assumptions made within the report and the uncertainties over areas such as the Cemax site it is not clear how the proposed development represents an integrated solution. It fails to consider the integration of a light railway scheme within the “Principal Works Area”

Paragraph 1.1.12 the aim to provide a sustainable transport interchange is noted and this should take into account the southern light railway scheme supported by this Council.

Paragraph 1.1.21 *“the Proposed Development has therefore been designed so that, should the Applicant's DCO application be granted, it would be compatible with the HAL DCO Project and the wider NRS.”* Given the proposed development is based on a number of assumptions, does it have a Plan B if one or more of these assumptions does not come to fruition. Moreover, how it would respond to any material alterations to the HAL DCO project.

Local Planning Policy needs to have due regard to the Council's development plan and its emerging local plan.

It is noted at paragraph 1.5.3 that *“HAL has not yet consulted on its preferred proposals for terminal capacity”* however at 1.1.11 it is claimed *“the Applicant believes there is a better way to deliver the increased capacity at Heathrow Airport identified in the ANPS.”* There appears to be tension between these two statements which needs exploring and reconciling.

## Chapter 2 Description of Existing Site and Surroundings

This chapter appears to wander off track and includes possible future projects and elements of planning history.

Paragraph 2.2.3 seems to ignore the existence of the “near” major urban areas of West Drayton and Hayes

It is not unknown for passengers to make their way from arrivals to departures to be picked up. (Paragraph 2.3.16)

As mentioned above this section relates to the existing situation yet references “future” extensions which may or may not happen. Notwithstanding, there are a number of schemes for southern rail access under consideration at present on which no decisions or commitments have yet been made favouring any specific route.

It was not the previous Government that ended the Cranford Agreement. (Para 2.4.6)

It is understood that the night flight cap is 5150 atms.

## Chapter 3 Proposed Development

The illustrative boundary (Figure 1.2) for the development includes land to the south west of the current airport boundary known as the Cemex site, Stanwell Quarry. The principal works area under consideration for the Heathrow Western Hub (Figures 1.2, 2.2, and 5.1) does not include this site. The Principal Works Area is given to include terminal facilities, airfield expansion, surface access infrastructure and works to watercourses. The Cemex site is being proposed under the HAL scheme as land for inter alia consolidation of parking with a transit system to the western terminal. As it is not included in the applicant's Principal Works Area it is unclear whether they are proposing a different land use for the site and it is unclear and uncertain how it would be integrated.

Para 2.3.17 included in chapter 2 (Description of Existing Site and Surroundings) states that future rail line extension is planned from Heathrow through to the south west suburban line near Staines Station (as the Southern Rail Link to Heathrow). This proposal is though currently only at concept stage which no guarantee of delivery.

Paragraph 3.1.1 refers to the ANPS, bullet point 4 states: *"It is possible that an applicant for development consent in respect of the preferred scheme will promote more than one application for development consent, dealing with different components individually"* It is noted that reference to applicant is in the singular and appears to suggest that the applicant may promote alternatives.

Paragraph 3.3.9 it is important to understand what weight and reliance the applicant is placing on this consultation document.

Paragraph 3.3.11 there is no context/comparison provided when these bland statements are made.

Paragraph 3.3.15 states that the applicant has a community focus with reference to being a good neighbour and delivering "improvement in the local communities, nearby London Boroughs and West London more generally". This community focus does not acknowledge the location of the Proposed Western Hub creating a new airport gateway facing Slough, Spelthorne and South Bucks areas. This is equally concerning as a focus in the Economics and Employment topic chapter.

3.4.2 The applicant should prepare its DCO application and its EIA on a worst-case scenario, taking into account further iterations of HAL's scheme.

3.5.8 The location of the terminal has dictated how other elements fits around it, such as the realigned Airport Way, the adverse impacts of this on the community of Stanwell Moor appear to be unknown. Phase 3 should have been considered in an earlier phase.

3.6.3 It is claimed *"the Applicant's solution will fit seamlessly with the Northwest Runway location and configuration in the HAL DCO Project."* If the applicant's premise is based on this and it is being stated as a fact - as is well known major development projects without complications are rare, let alone one of this magnitude – this needs to be demonstrated and take into account every possible eventuality.

At 3.6.11 the M25 is considered, concluding that the alterations *"bring benefits to local traffic as well as airport traffic"* It is unclear how this conclusion has been reached, moreover it is noted that no environmental benefits are highlighted for the residents of Stanwell Moor.

3.6.12 the assumptions and uncertainty of the proposal are highlighted here. Other road diversions are an unknown and it appears that the DCO is reliant on these. What happens if one piece of the assumed jigsaw is not forthcoming? It is essential that the worst-case scenario is presented.

The applicant proposes to enhance the local environment through a less dispersed development strategy, maximising land use efficiency by making better use of existing airport boundary land. No detail or justification is provided about how the applicant's scheme would achieve this objective, particularly as no added terminal capacity is proposed at the Central Terminal Area (paragraph 3.6.20).

The applicant's proposals for surface access lack sufficient detail in describing the proposed scheme:

- Paragraph 3.6.13 outlines that the A4 would be retained in the applicant's scheme on the current route for longer than in the HAL DCO Project, and the realigned A4 would pass beneath the Northwest Runway (NWR) taxiways and redoing the original alignment to the west of the M25 and beyond the western end of the NWR. Meanwhile the Northern Perimeter Road is proposed to be mostly retained (and connected to the realigned A4, maintaining current connectivity), allowing local access to staff and long-term passenger parking, and tying into a new 'rationalised' Western Perimeter Road. No plans are provided to illustrate the proposed local road realignments, making it exceptionally difficult for stakeholders to visualise the proposals and consider the potential environmental impacts.
- Paragraph 3.6.16 states that the A3113, Airport Way, is to be relocated to the south to allow space for new taxiways. No descriptive detail is provided about how far south the A road would be displaced and no plan accompanies the section. This leaves us unclear about the proximity of the taxiways and realigned road to the community of Stanwell Moor in the applicant's scheme, and questions about potentially significant impacts on the community from noise, air quality, traffic, vibration and visual amenity for example. At paragraph 3.6.17 it appears that the applicant is not proposing to re-provide the A3044 north of the Stanwell Moor roundabout junction. *"The Stanwell Moor Junction will be more heavily trafficked. To address this and minimise traffic congestion impacts, the Junction is proposed to be upgraded."* This is another example of a vague statement and there appears to be tension with the "High-level objective" of being community focused and not merely mitigating adverse effects.
- The applicant appears to be considering road user charging zone for the main routes to and from the Heathrow Western Hub (paragraph 3.6.20), but no definition of plans are provided as to which routes these might be and what mitigation would be provided to prevent significant impacts on local roads by road users seeking to avoid the charging zone.

3.6.21 should factor in all public transport initiatives linking to the public transport interchange.

3.7 relates to the development programme and construction. More information is required in respect of the number of construction workers, where these are likely to be sourced, where they will. Consideration needs to be given to surface access and noise/air quality relating to construction workers vehicles as well as those bringing in materials and exporting waste. A minerals and waste strategy should be produced. 3.7.9 is vague and needs further detailed work.

## Chapter 5 Air Quality (AQ) and Odour

A plan of the air quality study area is referenced to Figure 1.1, but this is the Proposed Development Plan and does not show any subject study areas.

The applicant's proposals are at an early stage of development. As such the full spatial extent of the non-road study area has not yet been defined and will be presented in the ES. Engagement with stakeholders should take place ahead of preparation of the final ES so stakeholders are consulted on the setting of both the non-road and road air quality study areas.

Paragraph 5.4.12 states that all relevant Pollution Climate Mapping (PCM) road links will be considered in the assessment. No definition is given for determining relevance - those links currently exceeding, predicted to exceed at DCO decision, at construction or opening? The PCM model does not include road links on motorways, including the M25 and the M4, nor the perimeter roads around the airport that are airport-controlled. Therefore compliance with air quality objectives should not be solely focuses on compliance on PCM links. The air quality assessment in the environmental statement must model all main roads across the wider area (all around the airport) and local roads in the immediate vicinity of the scheme. The PCM model baseline projections significantly underestimates nitrogen dioxide levels in comparison to local monitoring. The assessment must therefore take account of air quality monitoring data from the local authority networks across the Heathrow area, and not just the HAL continuous monitoring stations.

No baseline data for air quality has been sourced from Slough, Spelthorne, South Bucks or Hounslow Councils. This excludes continuous monitoring stations at Colne brook, Brandshill, Hounslow Hatton Cross and Hounslow 2 Cranford, all of which are reported in real-time on the Heathrow Airwatch website ([www.heathrowairwatch.org.uk](http://www.heathrowairwatch.org.uk)). No reference is made to local authority networks of diffusion tube monitoring or collecting this data to supplement the baseline Information. Despite this the applicant considers that the spatial and temporal coverage of existing monitoring datasets are sufficient to provide a robust baseline. Insufficient justification has been provided for this conclusion. When all available monitored points are plotted the spatial coverage is steeply skewed to the north and north east of the airport and yet the application area and new airport gateway are to be provided to the west and south west respectively.

Paragraph 5.5.2 refers to the air quality management areas (AQMAs) intersected by the associated works area but does not include bordering AQMAs such as the Iver AQMA, Slough Brandshill AQMA, and the Wraysbury AQMA.

Traffic and transport topic assessment years are proposed in paragraph 17.9.6 and should be replicated in the AQ assessment.

Table 5.9 (Summary of AQ Assessment Impacts) includes a potential impact of "Local reductions in emissions associated with the removal of displaced uses". This should be "change in emissions" and not an assumption of a local reduction – if displaced uses are relocated in the land considered for associated works or elsewhere within the core AQ study area, there may not be a net reduction in emissions.

Insufficient justification has been provided for scoping out exhaust emissions resulting from movements of aircraft on taxiways. The HAL DCO and applicant's schemes are likely to have some impacts on availability of current taxiways/ aircraft stands, particularly at T5, but potentially at other terminals as additional capacity is added, exacerbating airfield congestion during periods of construction.

The DCO scheme is to include a proposal for an immediate increase in flights of up to 25,000 ATMs per year off the two existing runways. However there is minimal reference to this within the EIA Scoping Report. In addition, though not explicitly detailed it would seem probable that the infrastructure to implement the end of the Cranford Agreement would be enacted in advance of the third runway. This change would impact on how the runway alternation is done under easterlies, with an increase in take offs from the northern runway, which a commensurate increase in landings on the southern runway. These components could bring both positive and negative AQ benefits for different geographical areas. They should be considered explicitly within the ES and likely significance discussed.

## **Chapter 6 Biodiversity**

Desk based studies are to be undertaken to determine baseline habitat and species concerning construction and operational phases. HAL 2017 surveys will be used for further input, and in-house surveys to commence spring 2019. Table 6.6 outlines the expected ecological effects but reference later made of 'no effects have been scoped out of the assessment'. Future surveys and stakeholder engagement need to follow, and the overall displacement of species and loss of habitat should be highlighted.

Ecological Impact Assessment (EclA) and Habitat Regulations Assessment (HRA) will be employed for future assessments. Methodology of assessment seems robust but information will be required from the 2019 surveys to provide further clarification and mapping of species and habitat value. Greater evidence of avoidance and mitigation will be required in future reports. Although a standalone Proposed Development assessment a linkage between the Northwest runway and M25 realignment should be drawn upon for mitigation measures. All waterbodies (not just the designated sites) which are relevant to the integrity of the South West London Waterbodies SPA must be considered in the HRA.

Table 6.5 does not include any of the locally designated sites within Spelthorne/Surrey. These are designated as Sites of Importance for Nature Conservation (SNCI) and should be added to the Table and the relevant maps.

## **Chapter 7 Carbon and Greenhouse Gases (GHG)**

The aspects set out for assessment under carbon and greenhouse gas emissions for both the construction and operational phases appears comprehensive.

GHG emissions from the construction phase will encompass 'cradle to completed construction' for raw materials including extraction of materials, manufacturing and transportation. There is no reference to any disposal of materials through this process or from onsite. This should be included in the assessment.

In regards to emissions from surface access, including the travel of construction staff, freight and increased airport passengers and visitors, clarity is needed on whether the full extent of journeys is to be assessed, not just within the area of the proposed development.

## Chapter 9 Community

Paragraph 9.1.2 sets the scope for the community assessment as considering the people, their homes, community facilities/ public services, public open space and recreational routes. This does not capture the characteristics of each community and how these might be changed positively and or negatively. This impacts on social interaction and community cohesion. Whilst this has been captured in Table 9.4 (Potential likely significant community effects) this is not reflected in the text throughout Chapter 9.

Section 9.3 highlights that the applicant is at a very early stage of consultation. They have made an initial outreach to some of the local authorities immediately adjacent to the development site but this does not encompass the authorities for all communities that may be impacted by the development, as highlighted by Table 9.2. Furthermore it should not be left to the Local Authorities to consult communities directly on the applicant's proposals. The applicant will need to engage with both community groups and local residents themselves directly. Paragraph 9.7.1 sets out that the applicant will need to engage with local groups to disseminate key findings of draft assessments, but the applicant should be consulting with communities at an earlier stage to inform assessments as demonstrated by what the applicant hopes to identify from the engagement listed in paragraphs 9.7.2 and 9.7.8.

From the communities listed in Table 9.2 (Study areas for the assessment of community effects) and Figure 9.1 (Population assessments study area) it appears that the geographical reach of the communities to the South east, north east, and north west is more extensive than that being considered in the south west quadrant, where the new gateway to the airport (with all the construction and traffic impacts) is being positioned. The Inner Study Area for population assessments (e.g. Figure 9.2) does not encompass all of the land being considered for associated works and no justification has been provided as to why this does not align. The study areas for the community assessment is given to be based on those developed for the HAL DCO project, and further informed by the HAL Scoping Opinion received from the Planning Inspectorate (PINS) (para 9.4.3) but this is not further explained.

The potential impacts on communities is stated to arise from displacement due to land requirements, changes to access and environmental effects (noise, vibration, air quality, dust, traffic and visual change) - paragraph 9.4.6. This does not take account of changes to the composition of the communities by socially mobile residents moving away taking up the HAL's Wider Offer Property Zone (WPOZ) and an influx of new residents particularly temporary construction workers for the runway and M25 realignment/ tunnelling up to 2026, but also construction workers for adding terminal capacity, airport supporting facilities and airport related development (both that included within the DCO and that market led) over the medium term. It is noted that displacement of residents due to compulsory purchase and WPOZ is included in Table 9.4 (Potential likely significant community effects) against operational phase impacts - in reality these impacts while start to happen during the construction phase ahead of both runway opening (HAL scheme) and terminal opening (the applicant's scheme). Contrastingly within Table 9.7 (Summary of potential impacts scoped in to the assessment) relocation of residents in the operational phase is scoped in for the construction phase but scoped out for the operational phase. This confliction also carries forward to Table 12.9 (Summary of scope of health assessment), Chapter 12 Health, which scopes out changes to residents living conditions resulting from relocation in the construction phase, and includes it for the operational phase.

Paragraph 9.4.9 refers to a recreational study area and how some boundaries may be physical demarcations such as the River Thames or Railway lines, but there is no plan provided with the EIA Report to support this. The River Thames lies to the south west of the land being considered for associated works, and beyond the extent of the communities listed in the Inner Study Area the section. At its closest point to the south west of the airport the area bounded

by the River Thames encompasses additional communities such as Wraysbury, Horton and Staines. Figure 9.3 (Greenspace, sport and recreation facilities within the inner study area) only includes facilities within the Inner Study Area and not those in the land being considered for associated works, nor to an area bounded by railway lines (north or south of the airport) or the River Thames.

The Inner Study Area proposed by the applicant includes 18 distinct communities. These communities are very varied in their characteristics and demographics. While baselines for each community are provided in Appendix 9.1 care should still be taken in 'averaging' the individual community data for the whole inner study area when large variations exist between communities. An inner study area can be used to distinguish approach for these individual communities to that which will be applied to communities in the wider study area, but not to aggregate communities. It is not clear from the section on determining significance (paragraphs 9.7.28 - 9.7.38) what scale significance will be considered at, i.e. could the receptor be an individual group or community, or just the inner study area?

Users of recreational assets (paragraph 9.5.9) should also include commuters engaged in active travel (i.e. walking and cycling). Whilst impacts in terms of delay and amenity can also be considered in the Traffic and Transport Assessment, they should not be excluded from the baseline. Communities' opportunity for walking and cycling should not be restricted to leisure time and benefits to health and socio-economics from active travel should be recognised.

Within Table 9.4 (Potential likely significant community effects) we are concerned that construction phases impacts should not be lessened or dismissed due to being 'temporary' - the construction phase for the northwest runway (HAL's scheme) is likely to be around 5 years, while construction of the components included within the applicant's proposals are likely to realistically span a period of up to ten years. Therefore construction phase impacts could meet the applicant's definition of 'medium term', effects measured in years, and approach 'long term', effects measured in decades (paragraph 9.7.15).

The potential requirement for temporary worker accommodation during construction (paragraph 9.7.26) is not reflected in Table 9.4 (Potential likely significant community effects) where impacts could be different to those arising from construction workers (and their families) residing in permanent accommodation.

The assessment methodology is separated into construction and operational phases. The assessment should recognise that in reality there is likely to be some overlap as the HAL and the applicant's scheme are built out in phases with some components becoming operational while others are still being developed.

The applicant's scheme appears to be insufficiently mature to enable any forecasting of potential assessment years. Discussion of likelihood, receptors sensitivity and magnitude of effect (paragraphs 9.7.30-9.7.35) appear to relate to the Economics and Employment Chapter and not the Community Chapter. Meanwhile paragraphs 10.7.9 and 10.7.10 of the Economics and Employment Chapter appear to correspond to community asset assessment.

The method focuses heavily on recreational spaces and routes; there is very little information on how effects of other types of community facility will be assessed (e.g. schools, places of worship etc). The applicant should set out the approach to assessing the effects of the scheme on community facilities such as schools etc, and also including displacement, severance and viability of facilities. The onus should be on the applicant to undertake user surveys and these should include other community facilities, not just recreational spaces and routes. The open space assessment should include consideration of the quality and value of recreational spaces, to ensure that there is a clear understanding of which are the best quality and highest valued recreational spaces.

The receptors include use by businesses (personal trainers/ fit camps/ sports groups) but should also include workers at local businesses who are also likely to be users of recreational spaces and routes.

Walkover surveys (para. 9.7.19) are proposed to assess the condition and context of the resources, but no further detail is given about what information will be gathered. They should consider the quality of the site, the value, accessibility, amenities (cycle and car parking, toilets, cafes), and physical attributes (such as courts, play areas, picnic areas).

Figure 9.1 Population Assessments Study Area depicts the proposed Inner and Wider Study Areas. It is noted that the Inner Study Area (on Figures 9.1-9.3) does not include all the areas of associated works. Further there are residential properties within the green line that are therefore excluded from the Inner Study Area for the population assessment.

## **Chapter 10 Economics and Employment**

Within the Airports NPS there is a HAL commitment to ensuring 10,000 apprenticeships before 2030 (Table 10.2, Policy and Legislation relevant to the economics and employment assessment). Insufficient information is provided in the EIA Scoping Report about if and how the applicant will play a role in meeting this commitment.

Sustainable surface access modes of travel for residents to the south west of the airport are currently restricted. It is unclear from the assessment methodology how the applicant will consider the current geographic inequalities to employment opportunities at the airport. If not positively actioned these inequalities are likely to grow during Heathrow Expansion as further constraints are placed on staff vehicle trips and parking. Paragraph 10.1.7 states that the assessment will also include measures to secure and enhance positive impacts of the proposed development. Insufficient information is provided about what such mitigation measures might include.

The geographic extent (paragraph 10.7.35) is to be considered in determining the magnitude of effect but geographics of receptors is undefined (paragraph 10.7.33). Further severance of communities to the south of the airport from employment opportunities could have a significant impact on those local communities, and the locality of such issues needs to be recognised in impact significance and not hidden in regional benefits/ impacts.

## **Chapter 12 Health**

Comments on Approach to Scoping and baseline conditions under Chapter 9 Community also apply to Chapter 10 Economics and Employment and Chapter 12 Health, particularly in relation to aggregating communities into an averaged Inner Study Area.

In consideration of baseline conditions the applicant has determined 8 themes relating to health that span the scope of construction and operational impacts of the scheme: noise; air quality; ground/water contamination; physical activity; journey times and /or reduced access; employment; and electromagnetic fields (EMFs). These themes do not include communicable diseases (not just outbreaks but general levels in local populations), existing health levels and or constraints, nor access to health care which should also feature in the baseline consideration and impacts.

Table 12.4 (Potential likely significant effects scoped in to the health assessment) should include health impacts from changes to local air quality due to surface access to the applicant's scheme, particularly including those below the EU Compliance limits which will impact on

mortality and morbidity (and health care costs) in local populations which will be outside the scope of the Air Quality Chapter.

Health effects from flooding are scoped out of Table 12.5 (Effects to be Scoped Out of the Health Assessment). This section of the EIA should recognise the health risks that can be associated with the fear of flooding. The Lower Thames catchment was subject to serious flooding in 2014. Stress and anxiety is high in the local population about when such flooding could reoccur, and public perception about flooding risks may not match those concluded within a flood risk assessment. In its Scoping Opinion on the HAL scheme the Planning Inspectorate recognised that there is a perceptual risk of flooding along local communities that could lead to impacts on health, and the need for further information to demonstrate that there are no likely significant effects in this regard. The current applicant has not provided any additional justification for scoping out flooding issues with respect to effects on human health.

Paragraphs 12.9.16-22 on receptors outline that two types of receptors will be considered the general population (for a defined area) and relevant vulnerable groups. However, the scale of the 'defined areas' lacks clarity. Will this include individual or groups of communities or LSOA/MSOA/ Ward level (Diagram 12.2) within the Inner Study Area or just the whole Inner Study Area? Similarly, quantitative analysis is to be undertaken to allow potential health outcomes to be modelled in a proportionate manner - what is the applicant proposing as proportionate? Sensitivity is to be judged on the basis of levels of deprivation, health status, life stage and outlook (paragraph 12.9.30 and Table 12.7). There is no definition provided by the applicant as to what would be considered a high or low level of these criteria.

Outbreaks of communicable diseases were proposed to be scoped out of the HAL scheme but within the Scoping Opinion the Planning Inspector stated that in sufficient justification had been provided and that to do so "The Applicant must provide an in- depth justification for such scoping out, including an explanation of the current systems, controls, procedures and requirements that are currently in place to address these matters". The applicant for the Western Hub scheme has also not provided this level of detail to justify scoping out communicable diseases.

The Applicant states that the study area will vary depending on which determinant is being assessed. Clarity will be needed in the Environmental Statement about which study area is being applied to each determinant and effect in the assessment of health impacts, supported by plans to illustrate geographically the study areas.

No indicative assessment years are provided at paragraphs 12.9.8-9 (Assessment Scenarios), only referring to assessment of key stages in construction and operation, ranging from the (undefined) baseline year to the year of predicted maximum environmental effects during the operational phase. For the health assessment, assessment years need to mirror those in the air quality, noise and traffic and transport assessments as closely as possible - and consider that the year of maximum effects may differ between sources of health impacts and receptors at opposing geographical locations, even within the Inner Study Area.

## **Chapter 13 Landscape and Visual Amenity**

Paragraph 13.5.2 states that the only nationally valued landscapes in the study area are Registered Parks and Gardens. However, the landscape value and scenic aspects of some SSSIs and other wildlife habitats in the study area, such as Burnham Beeches and Staines Moor SSSI, should not be discounted.

Paragraph 13.5.3 states the area is well-populated with a large resident population living mostly in urban areas. The landscape assessment though should recognise the important role

of all the open land within the Green Belt and the Colne Valley Park (and its enhancements secured via the Terminal 5 planning permission) around the airport, including at the proposed application site, and between the communities both within the inner and wider community study areas.

Table 13.3 details the effects to be scoped out of the landscape and visual amenity. These should be included in the assessment to allow for an informed view of whether or not significant effects are likely. Turing to the issue of “tranquillity” this too should be included as there will be noise associated with the construction activity, with its visibility making the receptor location more aware of where the noise is coming from.

Table 13.5 identifies the effects to be scoped out of the cumulative landscape and visual amenity assessment, including operational use overhead aircraft as the receptors are already affected by these and also reliance is placed on the assumption that the CAA’s rules would ensure planes are not visually aggressive. However, overhead aircraft should form part of the cumulative assessment given the increase in number of flights and to establish whether or not the planes are/would be visually oppressive.

## **Chapter 14 Land Quality and Waste**

The proposed scope of the assessment (paragraph 14.4.4) considers all land within the DCO boundary plus a 500m buffer which is considered to be appropriate. The study area for agricultural land quality and minerals safeguarding considers only the land required for the proposed development. However sterilisation of both agricultural and mineral resources due to viability and accessibility issues created by the loss of land being taken for development should also be considered, i.e. the study area should include complete land parcels of operational farms and mineral reserves.

The sources of desk-top baseline data (paragraph 14.4.5, 14.7.3 and Table 14.5) should include consultation with Local Authorities for details of past potentially contamination land uses, particularly historic landfills. These datasets are likely to be more comprehensive and detailed than the Environment Agency public register dataset. For example, figure 14.5 is given to depict historic landfill sites from baseline information. However there are a number of omissions/ errors relating to the south west quadrant of the airport. Historic landfills known as Land at Leylands Lane, Land south of Horton Road, Gibbs Nursery, Yeoveney and Land at Wraysbury Road are not included on the plan. An active landfill site at Homers Farm on the A30 at Ashford is not included. The full extent of the historic land filling at St David’s (Welsh Girls) School Tip is not shown, which extends up to the A30 and across the Harrow Road.

Further baseline data collection will also be required by the applicant to identify all the historic landfill sites still undergoing restoration (e.g. Cemex Stanwell II and III, and Hithermoor Quarry in Spelthorne); mineral processing sites (e.g. also at Hithermoor Quarry and Cemex in Spelthorne, and Kingsmead Quarry in Horton); and Waste management facilities (e.g. soil bioremediation at Hithermoor and material recycling facility at Oakleaf Farm, Stanwell Moor).

Potential receptors (paragraph 14.5.24) should include human health at future on-site construction phase depots and on-site operational phase commercial/ industrial premises. Whilst generic and site specific screening levels for contaminants of concern will be higher for commercial/ industrial end uses on the development, trigger levels do exist as there are potential risks to future occupants, particularly from volatile contaminants.

With respect to the Magnitude of Impact Criteria (Table 14.8) there is insufficient information about how the applicant will assess unacceptable risks to receptors over the medium term. Human health generic assessment criteria apply to short- term (acute) risks and long-term

(chronic) risks. UK land contamination guidance does not provide for assessment of medium term risks.

Evaluation of impact significance (paragraphs 14.7.20-21 and Tables 14.9 and 14.10) do not accord with best practice guidance for risk assessment of land contamination as set out in CIRIA C552, Contaminated land risk assessment: A Guide to good practice. Established methodology for identification of unacceptable risks from contamination involves classification of the:

- Magnitude of the potential consequence (severity) of risk occurring (Table 6.3, CIRIA C552)
- Magnitude of the probability (likelihood) of the risk occurring (Table 6.4, CIRIA C552).

There can be a medium classification of consequence but this relates to chronic harm. Comparison is then made of consequence against probability (Table 6.5, CIRIA C552) to derive a risk classification and definition of likely action required: ranging from very high risk, high risk, moderate risk, low risk to very low risk. No justification has been provided for deviation from this best practice approach to risk evaluation for contamination.

With respect to mitigation of land contamination (paragraphs 14.8.1-2) the applicant's scheme presents an opportunity for a number of sites impacted by contamination to be remediated, including multiple dilute and disperse landfill sites. Spelthorne Borough Council would like to see remediation of these sites incorporated into the mitigation package to bring net environmental gain.

### **Appendix 14.1 Waste Appraisal Methodology**

The Local Context discusses the development plan for the London Borough of Hillingdon, the West London Waste Plan and the London Plan. The Lakeside Energy from Waste facility has a catchment that extends up to Hertfordshire, through Berkshire and across northwest Surrey. Waste Plans for these areas should also be reviewed as part of the baseline information.

Insufficient information is provided (e.g. paragraph 1.5.6) on how the loss/ displacement of the Lakeside Energy from Waste facility will be assessed. No detail is provided about the scope, approach, significance criteria or possible mitigation for this aspect of the waste assessment.

The applicant's proposal is relatively immature and no information is provided about the scale of waste arisings anticipated from the construction phase, whether a mass balance may be achievable, or whether (and how) waste arisings will need to be exported off-site for reuse or disposal. No baseline information is provided about the current operational waste arisings from the airport.

### **Chapter 15 Major Accidents and Disasters**

Within Table 15.4 (Potential likely significant major accident and disasters effects) the hazard of anthropogenic hazards - Major accident: Legacy issues from unexploded ordnance (UXO) and historic landfill wastes has omitted construction workers who would have geographic immediacy to this risk. This hazard attributed to the construction phase in Table 15.4 has been changed to applying for both construction works and site operations and subsequently scoped out by the applicant in Table 15.5 (Effects to be scoped out of the major accidents and disasters assessment). Then within Table 15.8 legacy issues for the construction phase has been scoped in, but scoped out for operation of the development. Whilst UXO risk will be considered within the Land Quality Assessment, conducting desk-top research and site investigations by their nature will not wholly mitigate against the risks of encountering unexploded ordnance. Similarly site investigations provide borehole logs and discrete

sampling, but the scale of the earthworks required, the heterogeneity of landfill materials and the age of historic landfills (relative to the introduction of National waste management licensing controls) mean that hazardous waste materials are likely to be encountered during the earthworks.

Airport operations in terms of bulk fuel storage (both aviation fuel and hydrogen fuel) and fuel pipelines is not obviously referred to within Tables 15.4 and 15.5. These anthropogenic hazards through accidents or intentional malicious acts present potential incidents through explosive risks and subsequent fires.

The bands of Hazard severity (Table 15.6, Magnitude of change matrix) of catastrophic, Major and severe are not defined. A hazard severity of catastrophic suggests loss of life. It is therefore unclear the justification for scoping out short duration catastrophic hazards for example. No rationale has been provided for scoping out all short duration effects.

## **Chapter 16 Noise and Vibration**

### **16.2 Policy and legislation**

Table 16.1 refers to the Civil Aviation Act 1982. Further Civil Aviation Acts came into force in 2006 and 2012 which widened and modernised the powers available to the government to control noise at airports and also permitted airport operators to impose differential charges based on aircraft noise emission.

Some relevant UK legislation and planning guidance is not referred to in Table 16.1:

- *Airports Act 1986*: giving powers to the Secretary of State to regulate runway utilisation, allocate airport capacity and limit the number of occasions on which aircraft may land or take off.
- *Aeroplane Noise Regulations 1999*: dealing with noise certification for aircraft, referencing the noise limits issued by ICAO and restricting operations to properly certified aircraft.
- *Professional Practice Guidance on Planning and Noise (Pro PG)*: published jointly by the ANC, IOA and CIEH<sup>1</sup>, this document is guidance for acoustic practitioners, planners and developers with the aim of protecting home dwellers from excessive levels of noise through good design. This has relevance for new development in areas around Heathrow airport that are affected by aircraft noise.

### **16.3 Stakeholder Consultation**

The stakeholder plan is in the process of being developed. It is stated that all key stakeholders with views and concerns regarding noise and vibration are provided with sufficient information, although who these are is not listed; full listing to be provided.

Formal and informal consultations need to be arranged to discuss and agree the methodology of the noise assessment.

### **16.4 Study areas**

#### **Construction noise assessment**

We agree with the principle that study areas must, as a minimum, encompass all areas within which construction noise is likely to be above the LOAEL.

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<sup>1</sup> Association of Noise Consultants (ANC), Institute of Acoustics (IOA) and Chartered Institute of Environmental health (CIEH)

The proposed study area extends to 300m from any construction activity; this is likely to be insufficient in instances where, for example, substantial night time works or piling works are envisaged and some areas outside this may be subject to adverse effect. This will need to be checked and verified against the overall objective of including any location likely to experience an adverse effect from noise.

### **Construction vibration**

Vibration from construction sites up to 300m from any construction activity will be assessed.

If significant effects are predicted to occur outside of the defined study areas, the study areas will be revised to ensure that all areas are covered where exposure is predicted to exceed the relevant LOAEL (onset adverse effects).

### **Operational noise**

We agree with the principle that study areas should, as a minimum, encompass all areas within which operational noise is likely to be above the LOAEL.

For operational noise the assessment the study area is defined as the Heathrow Western Hub and any permanent ancillary or associated development, up to 1 km from any ground or airfield operations. This appears to be a reasonable figure.

For changes in road or rail traffic noise, DMRB advice will be followed in relation to routes affected by new or altered highways.

If significant effects are predicted to occur outside the defined study area. The study area will be revised to ensure that all areas are covered where exposure is predicted to exceed the relevant LOAEL (onset of adverse effects).

### **Operational vibration**

The scoping report must confirm the extent of the study area to ensure this is adequate extent to cover ground-borne noise which can often lead to perceptible effects in certain environments at energy levels below which the associated vibration is perceptible. Ground-borne noise effects may be adverse over a greater distance from the source than feelable vibration, and the extent of the study area needs to reflect this.

## **16.5 Baseline conditions**

Baseline data will be collected at residential and non-residential sensitive receptor locations close to the proposed development site. Information for other sources will also be taken into account where appropriate; such sources include the Noise Expert Review Group and information obtained as part of the HAL DCO project.

Where data sets to be used in the baseline are more than two years old and are crucial to the definition of baseline conditions, proposals for updating the data to ensure they reflect current baseline conditions must be made.

Details have not been provided regarding the date against which baseline will reflect conditions. This must be reflective of 2018-2019 as the majority of baseline data will be collected at this point. Also, further baseline data will need to be gathered, which supports baseline data reflecting 2019 conditions.

Modelling of noise sources that generates baseline data will need to reflect appropriate operation conditions for the source(s) in question, particularly if those conditions change over the baseline period.

## 16.6 Likely significant effects requiring assessment

A formal Health Impact Assessment will need to form part of the application

## 16.7 Assessment methodology

### Construction phase

Standards and guidance to be used in the noise and vibration assessment (direct and indirect effects) are listed.

Noise limits for night time working (2300 till 0700) are provided. Any potential night time disturbance to residents and noise sensitive receptors need agreement through discussion with the relevant local authorities.

Currently there is little or no information available on the timescales and nature of the construction activity to be undertaken, as such, it is not entirely reasonable to discount the necessity or advisability of assessing construction noise using additional shorter term metrics such as  $L_{Aeq,1h}$  or  $L_{Amax}$  at this time because the same value of  $L_{Aeq,x-time}$  at two receptors may mask quite different noise experiences if one is subject to relatively steady state noise and the other is exposed to a time varying series of transient or impulsive noise events.

When further information on the construction methodology is available this issue must be revisited so that a comprehensive approach to assessing noise effects is adopted, this must quantify the full range of effects likely to occur and the types of mitigation best suited to dealing with them.

### Operation assessment methodology:

#### *Aircraft ground noise*

Does this include engines being run, sometimes at high power, for test purposes and against what standards would this particular source be assessed? The Scoping Report does not provide information on this. Further clarification will need to be made between noise generated by main engines and noise generated by APUs. Not only will these have different noise characteristics but they are sources at different heights above ground level, which affects propagation.

For new generation aircraft not yet in operation, how will noise levels from main engines at low power (sufficient only to manoeuvre the aircraft around the airfield) be determined as compared to those generated by existing, noisier variants? This is a very important issue with regard to air noise, particularly on departure when engines are operating close to maximum power, but it can also be expected to materially affect ground noise calculations.

### Identifying of effects

Reference is made to the evaluation of LOAEL and SOAEL for different noise sources. It is stated that significant effects on health and quality of life are identified in line with government noise policy.

No reference is made in defining the UAEL (Unacceptable Adverse Effect Level) nor identify actions required to prevent this from occurring. UAEL is defined in government policy and is an important concept in that noise effects on people at this level are to be prevented from occurring.

## 16.8 Approach to Mitigation

The EIA Scoping report states that minimisation of noise and vibration effects will be embedded into the design of the proposed development where possible following the application of the hierarchy of mitigation set down in chapter 4 of the scoping report. Where minimisation of noise and vibration effects is not possible full justification needs to be given.

The scoping report states that the applications will ensure that the most appropriate and effective measures are taken forward in consultation with local communities and other stakeholders.

## **Chapter 17 Traffic and Transport**

Use of off-Road footpaths and cycle routes has been scoped out of Chapter 17 (paragraph 17.1.5) and reference is made to Chapter 9 Community. The scope of the traffic and transport assessment is given to cover walking and cycling adjacent to the public highway only. However in Chapter 9 Community commuter walking and cycling is scoped out for recreational spaces and routes, referring to Chapter 17 for consideration of delay and amenity. How and where impacts on walking and cycling will be assessed is consequently unclear, with inconsistent signposting within the EIA Report.

A Transport Assessment (TA) is to be prepared by the applicant but will be separate to the Traffic and Transport ES Chapter (paragraphs 17.2.6 and 17.2.7). The TA will assess how the proposed development impacts on the operation of the surface access network and while sharing the same technical base will have differing objectives and outcomes. The scope of the TA is not outlined in the EIA Scoping Report. However within the ES Chapter the wider assessment of traffic and transport should be fully explained and justified.

The public pledge by HAL for no more airport-related traffic following expansion is recorded in the Airports NPS. Given that the applicant is proposing to build out an unspecified number of the components of the HAL scheme, who will bear responsibility for meeting surface access targets, and if this is to be shared across the two scheme providers how will the targets be achieved?

To assess the surface access impact of the proposed development a programme of modelling assessments is to be undertaken. Any modelling studies need to be compatible with that being prepared by HAL for their scheme. The applicant's scheme is proposed to be complimentary to the HAL scheme relies upon the HAL DCO scheme to deliver the Northwest Runway and M25 tunnelling as a minimum. As such the Heathrow Western Hub cannot deliver all the ANPS requirements on its own, and the DCO applicants and stakeholders require consistent data collection, methodologies and modelling for traffic and transport issues. HAL have been omitted from sources of baseline data. This will be appropriate to ensure that the two schemes dovetail as intended.

For the traffic and transport topic the list of potential receptors (paragraph 17.8.2) does not include businesses that may be impacted by highway network delay, changes to public transport provision/ amenity or severance. Chapter 17 on traffic and transport is to cover all modes of surface transport including private hire vehicles and taxis. On-street parking of private hire vehicles (PHVs) is already a problem in our communities of Stanwell Moor and Stanwell. With proposed consolidation of parking to south west of the airport and improved access into the terminals, the problem could be further exacerbated. There is no mention in the EIA Scoping Report about parking issues in Stanwell, or any other communities around the airport. This issue needs to be accounted for in the traffic and transport assessment and possible mitigation options developed for how the problem will be dealt with in a holistic manner so as not to transfer the problem around the airport as has occurred in the past.

Proposed assessment years (paragraph 17.9.6) should include those proposed by the HAL DCO scheme in order to allow comparison between the environmental impacts of the schemes and cumulative effects.

The scope of the assessment includes air quality (Bullet 8, paragraph 17.9.11). The other potentially significant effects are justified in following paragraphs, except air quality and there is no signposting to other chapters of the ES.

Further justification of magnitude criteria is required (paragraph 17.9.32) – distinction between magnitudes is not currently provided, e.g. moderate magnitude has “some departure from baseline conditions” and minor magnitude has no “great change from baseline conditions”. These definitions are too vague and unquantified, particularly as moderate or above is the threshold for significant impacts.

Further detailed information will be required within the ES on the proposed mitigation for construction and operational phases including the routes, vehicles, geographic areas to which they apply; who will be responsible for delivering them; how they will be secured; and sensitivity testing to estimate the level of mitigation that will be afforded as a result.

## **Chapter 18 Water**

There is no reference within the Chapter (particularly at paragraphs 18.7.17-19, Cumulative Effects) to the Lower Thames Flood Relief scheme. The scheme comprises three proposed flood relief channels between Datchet and Sunbury Lock of the River Thames. Specifically Channel 1 will divert water downstream of Datchet in a channel through Wraysbury 1 and Wraysbury 2 lakes. The lakes at Wraysbury do provide some existing flood storage capacity and it is not clear why lakes have been scoped out with respect to construction phase impacts on provision of flood storage (Table 18.8, Summary of potentially significant effects considered for each receptor).

In addition whilst the lakes around Wraysbury were created artificially through mineral extraction they are not lined and could therefore be impacted by ground disturbance during construction impacting on groundwater flows/ levels. Further justification should be provided on scoping out of Lakes and the Lower Thames Gravels aquifers as receptors for ground disturbance during construction (Table 18.8, Summary of potentially significant effects considered for each receptor).

The description of the existing foul drainage networks from the airport outlines that there are four catchments: the eastern catchment flowing through the Eastern Balancing Reservoirs prior to discharge into the River Crane; the southern and western catchments flow into Clockhouse Lane Pit lake, which in turn discharges to Portlane Brook and subsequently the River Thames; and the north-western catchment which drains to the North West Balancing Pond and overtop into the Wraysbury River. No details are provided by the applicant about anticipated drainage catchments for the proposed development - i.e. whether surface water run-off and foul drainage from the development will feed into one or more of the existing catchments or be dealt with by entirely new infrastructure. No justification is given for why the lakes and reservoirs, and the water bodies of the River Crane, Portlane Brook, Wraysbury River and River Thames are not potentially significantly affected by water use and disposal of foul waters in Table 18.8 (Summary of potentially significant effects considered for each receptor). No justification is provided either for scoping out lakes and reservoirs from significant effects from the presence of new infrastructure given their role in receiving/ conveying existing foul drainage.

The northwest Runway component proposed in the HAL scheme is not included in the applicant's proposed development. However the runway development has potentially significant impacts on the surface water environment, requiring four rivers to be combined into two channels and fed through a long covered river corridor. The applicant's scheme will be required to resolve/ mitigate the resultant changes to flow apportionment and hydrology within a complex surface water system so as not to create significant impacts on downstream habitats. The cumulative effects of the two schemes are therefore especially key for this topic area.

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Our Ref: EIA Case 019-006



The Planning Inspectorate  
Major Casework Directorate  
Temple Quay House  
2 The Square  
Bristol BS1 6PN

14 March 2019

Dear Sir or Madam,

**Response to Consultation under Regulation 10 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017**

**Application by Arora Holdings Limited (the Applicant) for an Order granting Development Consent for the Heathrow Western Hub (the Proposed Development)**

**PINS Reference: TR020004\_ 31095887**

1. We write in response to your letter dated 15 February 2019, seeking the views of Surrey County Council on the information to be included in the Environmental Statement (ES) that will be submitted by Arora Holdings Limited as part of the application for a Development Consent Order (DCO) for the proposed development of a western hub at Heathrow Airport. The County Council has reviewed the information presented in the prospective applicant's environmental scoping report, and has a number of recommendations to make in respect of the proposed scope of the Environmental Impact Assessment (EIA) for the scheme.
2. The County Council has focussed its detailed comments on those topics which impact most directly on its areas of regulatory responsibility in respect of planning for the supply of minerals and for the management of waste (covered by Chapter 14 of the Scoping Report), in respect of the management of the highways network (covered by Chapter 17 of the Scoping Report), and in respect of the management of flood risk from surface waters and groundwaters (covered by Chapter 18 of the Scoping Report). The County Council has also reviewed and made comments in respect of those other topics covered by the Scoping Report in which it has particular expertise (e.g. ecology, archaeology and heritage), or for which it has particular concerns (e.g. air quality, noise).

## **Part A: 'Introduction' Chapter 1 (pp.1-11) of the EIA Scoping Report**

3. Paragraphs 1.2.13 to 1.2.18 (pp.5 to 6) of Chapter 1 of the Scoping Report identify and discuss the local planning policy context applicable to the area within which the proposed DCO project would be situated. At paragraph 1.9.21 (p.1.15) reference is made to the operational land occupied by the airport being situated within the London Borough of Hillingdon, but also being close to land that falls within the jurisdiction of eight other local planning authorities (LPA). The County Council would draw the applicants attention to the need for the review of relevant Local Plans to include the minerals and waste plans adopted by Surrey County Council in respect of the county of Surrey and by Buckinghamshire County Council with reference to the county of Buckinghamshire.

## **Part B: 'Description of Existing Site & Surroundings' Chapter 2 (p.14-16) of the Scoping Report**

4. The principal works area for the proposed DCO and the area occupied by the existing airport, as described in paragraphs 2.1.1 to 2.1.3 (p.12) of Chapter 2 of the scoping report do not appear to include any land situated within the county of Surrey. The area of land identified as being considered for associated works, shown in green shading on Figure 1.1 of the scoping report includes land situated within Surrey including the settlement of Stanwell Moor, land to the east of the settlement of Stanwell, four areas of land with extant planning permission for minerals and/or waste development, and the Staines Moor Site of Special Scientific Interest (SSSI). The County Council would expect the EIA process to include consideration of the impact on land and communities in Surrey of all associated works that could arise from the proposed DCO scheme.

## **Part C: 'The Proposed Development' Chapter 3 (p.17-32) of the Scoping Report**

5. Section 3.6 (Principal components of the proposed development) (pp.24-31) of the Scoping Report (Volume 1) provides an account of the main components of the development, in terms of the physical infrastructure that would be constructed. Of particular interest to the County Council are the changes that are proposed in respect of the highways network to the south of the principal works area. Paragraph 3.6.16 (p.26) indicates that part of the A3113 (Airport Way) would need to be relocated to the south to provide space for new taxiways within the proposed HWH development, which would impact on land and communities within Surrey. Paragraphs 3.6.17 and 3.6.18 (p.26) discuss the changes that would need to be made to the Stanwell Moor junction, which links the A3113, the A3044 and the Southern Perimeter Road, and indicate that the junction would be more heavily trafficked under the proposed development. The proposed changes to the A3113, junction 14 of the M25 and the junction of the A3113, the A3044 and the Southern Perimeter Road could have impacts on the accessibility of the communities of Stanwell Moor and Stanwell, and of the established waste operations at Hithermoor Quarry in Stanwell Moor, Stanwell Quarry in Stanwell and Oakleaf Farm in Stanwell Moor.

6. Paragraphs 3.6.39 to 3.6.42 (pp.3.7-3.21) includes a discussion of a number of established developments and existing land-uses that would be displaced as a result of the proposed DCO project. That discussion is focussed solely on the area of land that would be affected by the construction of the proposed western hub, and consequently does not address any of the established land uses that would be displaced as a result of associated supporting facilities being developed on land within the county of Surrey. From the perspective of the County Council, in its capacity as Minerals and Waste Planning Authority for Surrey, there are a number of existing waste management facilities and/or existing minerals sites (see below for details) that coincide with land that has been identified as being considered for associated works (as shown in green shading on Figure 1.1). The County Council would expect the description of the development provided as part of the ES to include a full account of all the areas of land, including those within Surrey, at which the established or existing land-uses would, or could, be displaced as a consequence of the DCO project.

6.1 Hithermoor Quarry, Leylands Lane, Stanwell Moor, Surrey TW19 6BG – the area of land identified as being considered for the development of associated works as part of the DCO project (see Figure 1.1 the scoping report) is comprised of a closed landfill that forms the southern part of the 73 hectare site known as Hithermoor Quarry. In March 2011 planning permission (SP10/0657) was granted for the construction of an engineered clay cap (made of imported clay and topped with soils) to the closed landfill. That permission was subject to a variation of a Section 278 Agreement (linked to planning permission SP03/1212) relating to highway works at the site access off Leylands Lane and the Leylands Lane and Horton Road junction. The clay capping is to be completed and restored by 13 April 2023. The northern part of the Hithermoor Quarry site, which currently hosts an aggregate recycling facility and a soil remediation facility, is also identified as the preferred location for the processing of sand and gravel should extraction come forward from the King George VI reservoir (Preferred Area K – with an estimated reserve of 3.24 million tonnes) which is allocated for mineral working in the adopted Surrey Minerals Plan (Primary Aggregates DPD, 2011). The site is accessed from Junction 14 of the M25 via Horton Road.

6.2 Stanwell Quarry, Stanwell Moor Road, Stanwell, Surrey TW19 6AB – the area of land identified as being considered for the development of associated works as part of the DCO project (see Figure 1.1 the scoping report) is comprised of a former mineral working (32.3 hectares) that is being restored to a predominantly agricultural end use by means of infilling with inert waste. The former quarry site also hosts a temporary aggregate recycling facility. In May 2018 planning permission (SP17/00118/SCC) was granted for operations to continue until 26 October 2027, and for changes to the previously approved restoration and phasing plans. In July 2017 planning permission (SP17/00113/SCC) was granted for the retention of an existing recycling operation on an area measuring some 5.3 hectares for a period of 10 years with restoration to agriculture. The site is accessed from the Southern

Perimeter Road, via the junction of the A3113, the A3044 and the Southern Perimeter Road.

- 6.3 Homers Farm, London Road, Staines-upon-Thames – the area of land identified as being considered for the development of associated works as part of the DCO project (see Figure 1.1 the scoping report) is comprised of a permitted mineral working (10.5 hectares), where operations have recently commenced. Planning permission (SP/13/00141/SCC) was granted in January 2015 for the extraction of sand and gravel from land at Homers Farm together with the construction and operation of an associated wheelwash, site office, cabin for a generator and car parking, the provision of a new access from Short Lane, and restoration to agriculture involving the importation and deposit of inert materials. Permission was granted subject to 46 conditions and a unilateral legal agreement concerning the routing of lorry vehicles. Sand and gravel extracted from Homers Farm would be transported along the A30 by HGV to an existing processing facility at Hengrove Farm.
- 6.4 Oakleaf Farm, Horton Road, Stanwell Moor – the area of land identified as being considered for the development of associated works as part of the DCO project (see Figure 1.1 the scoping report) is comprised of a site with permanent planning permission (SP08/0992) for waste related development, that is allocated for waste development in the adopted Surrey Waste Plan (2009), and is proposed for allocation in the emerging Surrey Waste Local Plan (Regulation 19 version, 2019). The site is accessed from the A3044 via Horton Road.

#### **Part D: 'Approach to EIA' Chapter 4 (pp.33-51) of the Scoping Report**

7. Section 4.4 (p.37) of Chapter 4 of the Scoping Report explains how the spatial and temporal scopes of the assessment have, or will be, determined. For the spatial scope SCC is broadly content with the approach set out in paragraphs 4.4.1 and 4.4.2 (p.37) which report that the spatial scope of the assessment will vary by topic (i.e. that the spatial scope for the biodiversity assessment will differ to that for the historic environment), and advise that further details are given in each of the technical chapters. For the temporal scope of the assessment, the County Council is broadly content with the approach set out in paragraphs 4.4.3 and 4.4.4 (p.37), which indicate that the assessment will consider the effects of the development at key stages of the construction and operational phases, with full details of the temporal scope for each topic set out in the relevant technical chapter of the ES.
8. The County Council is broadly content with the proposed approach to the assessment of likely significant effects set out in Section 4.5 (pp.37-43) of the scoping report. The approach outlined follows accepted practice in terms of the general principles that underpin assessment, which is determination of the sensitivity and value of receptors and the determination of the magnitude of impacts, and the combination of those characteristics to determine the significance of effects. It is noted that information is also

provided in respect of the competence of the parties involved in the preparation of the ES, and that account is taken of the role of mitigation and embedded mitigation.

9. Section 4.6 (Cumulative Effects Assessment) (pp.43-47) of Chapter 4 of the Scoping Report (Volume 1), provides an account of the way in which the assessment of cumulative and in-combination impacts would be addressed. Our principal concern with respect to the cumulative effects assessment is that the criteria by which projects would be identified as potential sources of in-combination impacts do not appear to capture minerals or waste related development within the county of Surrey. Paragraph 4.6.6 (p.45) lists those categories of development that are considered to be likely to give rise to contribute to cumulative impacts in-combination with the proposed DCO project. Two sites allocated for either minerals or waste development in the County Council's adopted Minerals Plan (King George VI Reservoir near Stanwell Moor with an estimated yield of 3.24 million tonnes of sand and gravel, mineral from which would be processed at the Hithermoor Quarry site) and Waste Plan (Oakleaf Farm, Stanwell Moor) are located in close proximity to the principal works area for the DCO project, and would be served by those elements of the local highway network (A3113, A3044 and M25 Junction 14) that would be subject to alteration as part of the proposed scheme. Further development at those two allocated sites would, assuming that such proposals came forward within the same timeframe as the proposed DCO project, contribute to in-combination effects across a range of environmental topics. (e.g. traffic and transport, air quality, noise, materials and waste, etc.)

#### **Part E: 'Air Quality & Odour' Chapter 5 (pp.52-74) of the Scoping Report**

10. The County Council is broadly content with the proposed scope of the assessment, in terms of the matters to be covered (as set out in Table 5.3, pp.61-63) and those to be excluded (as set out in Table 5.4, pp.64-65), with the approach to baseline data collection, and with the approach to the assessment of construction and operational phase impacts.
11. The County Council would expect the EIA to cover the impact on air quality of the proposed change to the alignment of part of the A3113, which it is reported would be moved to the south bringing it closer to a number of residential properties and business premises located on Horton Road and Sprout Lane in Stanwell Moor. The change in the alignment of the road, coupled with an anticipated increase in the volume of traffic making use of the A3113 to access the proposed western hub could have implications for local air quality within the village of Stanwell Moor.
12. The County Council would expect the EIA to cover the impact on air quality of the changes in traffic volume that would be expected to affect the road network in the vicinity of Stanwell Moor and Stanwell as a consequence of the proposed DCO project. That assessment should cover both the construction and operational phases of the scheme, and should capture the impacts of development within the principal works area and on land being considered for associated works.

## **Part F: 'Biodiversity' Chapter 6 (pp.75-98) of the Scoping Report**

13. The County Council is broadly content with the proposed scope of the assessment in respect of biodiversity as set out in Chapter 6 of the Scoping Report, which appears to be comprehensive. The baseline assessments appear to be relatively accurate, and can be subjected to more rigorous checking at the Preliminary Environmental Information Report (PEIR) stage of the DCO process. The methodologies and data gathering all seem to be following accepted guidance and standards, in terms of general approach and species or habitat specific studies.
14. The County Council notes that SNCIs designated within the county of Surrey and falling within the 2 kilometre buffer zone for associated works have not been included in Figure 6.3 (Non-Statutory Designated Sites for Nature Conservation) nor listed in Table 6.5 of the scoping report. A map (Map A) showing locations of SNCIs in Surrey that fall within the 2 kilometre buffer zone for associated works is appended to this letter, and is accompanied by a table (Table A) providing information about those SNCIs held by the County Council. For definitive information on SNCI designations within the study area in Surrey the applicant should contact the Surrey Biodiversity Information Centre ([www.surreybic.org.uk](http://www.surreybic.org.uk)).
15. With reference to the assessment of impacts on Sites of Nature Conservation Importance (SNCIs), the County Council is concerned that implementation of the proposed project, including the use of land for associated development (as shown by green shading in Figure 1.1), could have impacts on a number of the county's SNCIs (listed below). The County Council also notes that a number of areas of priority habitat (woodland) are concentrated around the western end of the A3113, which could potentially be affected by the realignment of that road, or by changes to Junction 14 of the M25.
  - The River Colne (from County boundary to Staines Moor) Stanwell Moor SNCI – which could be impacted by the partial realignment of the A3113 to the south, and by the use of land to the west of Stanwell Moor for associated works.
  - The Greenham's Fishing Pond SNCI – which could be impacted by the partial realignment of the A3113 to the south, and by the use of land to the west of Stanwell Moor for associated works.
  - The Stanwell II SNCI – which could be impacted by the use of land to the west of Stanwell Moor for associated works.

## **Part G: 'Carbon & Greenhouse Gases' Chapter 7 (pp.99-115) & 'Climate Change' Chapter 8 (pp.116-130) of the Scoping Report**

16. The County Council welcomes the inclusion of chapters in the Scoping Report that address the question of emissions of carbon and other greenhouse gases (Chapter 7, pp.99-115, Scoping Report), and the question of the project's contribution to in-combination climate

change impacts, and its resilience to the likely effects of climate change (Chapter 8, pp.116-130, Scoping Report).

16.1 With reference to the question of carbon and other greenhouse gas emissions, the County Council is broadly content with the proposed scope of the assessment set out in Chapter 7 of the Scoping Report, which covers both the construction and operational phases of the project, and takes into account all major sources of greenhouse gas emissions. The County Council welcomes the decision to not scope out from the assessment any class of impacts with respect to carbon or greenhouse gas emissions.

16.2 With reference to the question of the project's contribution to in-combination climate change impacts, and its resilience to the effects of climate change, the County Council is broadly content with the proposed scope of the assessment set out in Chapter 8 of the Scoping Report. It is recognised that such assessments are a developing area of practice, and that consequently the methodology cited in the scoping report may be subject to alteration as the DCO process progresses. The County Council welcomes the decision to not scope out from the assessment any class of impacts with respect to in-combination climate change impacts, or climate change resilience.

**Part H: 'Community' Chapter 9 (pp.131-152) & 'Economics & Employment' Chapter 10 (pp.153-173) of the Scoping Report**

17. The County Council welcomes the inclusion of chapters in the Scoping Report that address the question of impacts on communities (Chapter 9, pp.131-152), and the question of the impacts of the development on the local and wider economy, and on employment opportunities (Chapter 10, pp.153-173).

17.1 With reference to the question of the impacts of the development on communities, the County Council is broadly content with the proposed scope of the assessment set out in Chapter 9 of the Scoping Report, which covers both the construction and operational phases of the project, and takes into account the principal mechanisms by which communities could be impacted by the DCO project. The County Council is particularly concerned that potential direct and in-direct impacts on key elements of community infrastructure, including schools, libraries, and health and social care facilities, are considered as part of the assessment.

17.2 With reference to the question of the impacts of the development on the local and wider economy, and on access to employment, the County Council is broadly content with the proposed scope of the assessment set out in Chapter 10 of the Scoping Report which covers both the construction and operational phases of the project. With reference to the displacement, loss or change of established land uses or businesses identified as an impact to be assessed in Table 10.4 (pp.163-165), the County Council would expect to see the potential

effects on established minerals and waste operations located within Surrey addressed as part of the assessment.

**Part I: ‘Historic Environment’ Chapter 11 (pp.174-200) of the Scoping Report**

18. Chapter 11 (Historic Environment) of the Scoping Report reports on the main consultations undertaken to date, the baseline data collected, and provides a broad evaluation of the surrounding heritage resources, and identifies likely key impacts. The County Council is broadly content with the proposed approach, but has a number of specific concerns that would need to be addressed. The proposed approach does fall into a number of the same pitfalls as that proposed for the HAL DCO scheme. As currently proposed (in paragraphs 11.4.5 and 11.4.6, p.179) the assessment would focus on too limited an area of impact (a 1 kilometre radius around a ‘core area’ for the operational phase of the development and a wider study area of 3 kilometres radius for construction phase). The proposed extent of the study area is problematic for a major project such as this as the operational impacts will extend beyond the 1 kilometre radius of the new development due to the effects on noise, air quality and traffic at least. A wider area will need to be covered, encompassing Windsor Great Park, a Grade I Registered Park & Garden, which could be subject to impacts as a consequence of the proposed development.
19. The scoping report includes an assertion that non-designated assets are “...sometimes considered to be of likely lower significance than those that are designated...” (paragraph 11.5.10, p.182), an unwise assumption when considering unknown archaeological material within the context of a nationally-significant prehistoric landscape such as that which exists in the area affected by the proposed development. Such an approach would be inconsistent with the guidance set out in paragraph 197 (p.56) of the NPPF. The proposed partial realignment of the A3113 could have implications for an identified Area of High Archaeological Potential (AHAP) located within Surrey – the SP043 ‘Neolithic or Bronze Age activity site, south Airport Way, Stanwell’ AHAP lies immediately to the south of the current alignment of the A3113 and could be affected if the road is relocated to the south. The County Council would expect the assessment to cover the effects of the proposed development on non-designated heritage assets, particularly where such assets may be subject to direct effects.
20. Table 11.11 (p.199) indicates that the applicant is of the view that there would be no direct impacts to designated and non-designated heritage assets resulting from the operation of the site. The County Council is not wholly convinced that this is the case and would like to see the evidence on which that conclusion is based set out as part of the EIA.
21. Due to the nature and scale of the scheme there are some areas of wider concern that the County Council would wish to see considered, as for a development of the kind proposed there are possible implications for heritage in a much wider context that might usefully be investigated. Such considerations could include (but are not limited to):

- 21.1 Additional congestion on the surrounding road network that could impact on the numbers of visitors attending at heritage sites in the area, with consequent impacts on the longer-term sustainability of regional heritage assets.
- 21.2 Additional visitors to regional heritage sites as a consequence of increased connectivity, resulting in higher rates of tourist trips (potentially a positive effects on the county's heritage sites in terms of viability and financial sustainability), but with increased risk of attrition caused by greater footfall and erosion, or other forms of physical damage.
- 21.3 Increased incidence or redistribution of pollutants caused by additional or new areas of traffic congestion could also be detrimental to the fabric of certain heritage structures, to veteran trees and/or to Ancient Woodland, particularly along the principal arterial routes, of which Surrey has a number.
- 21.4 There is also potential for impacts on the setting of wider region sites and monuments (including noise impacts), and nearby and regional views and vistas that might be affected by the airport development and other future development related to the expansion. A high level strategic appraisal of the regional historic (and potentially natural) environmental implications of the proposals situated outside the immediate environs of the proposed development site and the geographical search/development impact areas would be welcome.

**Part J: Health – Chapter 12 (pp.201-230) of the Scoping Report**

- 22. The County Council is broadly content with the proposed scope of the assessment set out in Chapter 12 of the Scoping Report, in terms of the matters to be covered and those to be excluded, with the approach to baseline data collection, and with the approach to the assessment of construction and operational phase impacts. It is noted that assessment will draw on information from other parts of the EIA.
- 23. Given that the DCO project would have impacts on the levels of traffic experienced on roads within the county of Surrey the County Council would expect the assessment to include consideration of the effects of those changes on the health and well being of local communities. The settlements of Stanwell Moor and Stanwell lies within the borough of Spelthorne, which is subject to a borough-wide designation as an Air Quality Management Area (AQMA) for nitrogen dioxide pollution, and changes to the intensity and distribution of traffic on the road network around those settlements could increase the risks of adverse effects to which susceptible members of the community are exposed. The risk of exposure to significant noise disturbance could also be affected by changes in established traffic patterns.

## **Part K: Landscape & Visual Amenity – Chapter 13 (pp.231-243) of the Scoping Report**

24. The County Council is broadly content with the proposed scope of the assessment in respect of landscape character and visual amenity as set out in Chapter 13 of the Scoping Report. The County Council notes that the proposed study area extends to some 5 kilometres beyond the full extent of the land being considered for development as part of the DCO project (paragraph 13.4.2, p.233). It is noted that Zone of Theoretical Visibility (ZTV) studies will be prepared (paragraph 13.4.1, p.233) once the design of the scheme has advanced to a stage where the location, height and scale of key elements is more certain.
25. The County Council notes that the Landscape Character Assessment for the county of Surrey, which was published in 2015, has been listed as a source of baseline information that will be drawn on by the assessment (paragraph 13.4.6, p.234). The County Council would expect the baseline to also take account of all relevant borough level character assessments, where such have been prepared, and of all relevant published Conservation Area management plans, as these may offer insight into the townscape character of potentially affected communities.
26. The County Council would expect the assessment to cover the landscape and visual effects of the proposed realignment of part of the A3113 to a route south of that which it currently follows, with particular focus on the settlement of Stanwell Moor. To the west the area of land that may be affected by the realignment of the A3113 lies within local character area RF1 (Colne River Floodplain) and to the east within local character area RV1 (Colne River Valley Floor). The County Council would also expect the assessment to address the potential impacts of associated works on land surrounding the settlements of Stanwell Moor and Stanwell, including at Hithermoor Quarry, at Stanwell Quarry and at the Oakleaf Farm waste management facility.

## **Part L: Land Quality – Chapter 14 (pp.244-264) of the Scoping Report**

27. The County Council has a number of specific comments to make in respect of the baseline information presented in the Scoping Report with reference to mineral safeguarding areas (MSAs), and to allocated and permitted mineral sites in Surrey. Paragraph 14.7.13 (p.256) of the scoping report states that information on minerals safeguarding areas, on permitted minerals development and proposed mineral sites will be sourced from the relevant Minerals Planning Authorities. The County Council would draw the applicant's attention to the following permitted and potential minerals sites, and to the MSAs shown in Map B.
  - 27.1 Homers Farm, London Road, Staines-upon-Thames – Identified as Preferred Area G in the Surrey Minerals Plan Primary Aggregates DPD. Planning Permission (SP/13/00141/SCC) for mineral working was granted on 12 January 2015. The Homers Farm quarry lies within the area of land identified as being considered for 'associated works' as part of the DCO project.

- 27.2 King George VI Reservoir, Stanwell Moor – Identified as Preferred Area H in the Surrey Minerals Plan Primary Aggregates DPD. To date no application has been made in respect of this preferred area. The material extracted from the reservoir would be worked at the established processing facility located at Hithermoor Quarry (which lies within the area of land identified as being considered for 'associated works' as part' of the DCO project).

**Part M: Major Accidents & Disasters – Chapter 15 (pp.265-284) of the Scoping Report**

28. The County Council is broadly content with the proposed scope of the assessment as set out in Chapter 15 of the Scoping Report, in terms of the matters to be covered and those to be excluded, with the approach to baseline data collection, and with the approach to the assessment of construction and operational phase impacts. The County Council welcomes the inclusion of both human receptors (including residents and local businesses, and users of the local transport networks) and environmental receptors (including sensitive ecological sites, habitats and species, and water and soil resources) within the scope of the assessment.

**Part N: Noise & Vibration – Chapter 16 (pp.285-301) of the Scoping Report**

29. The County Council is broadly content with the proposed approach to the assessment of noise and vibration impacts arising from the proposed DCO project during construction and operation. The inclusion of the assessment of changes in noise exposure associated with the alteration of roads is welcomed (paragraph 16.7.9, p.296), as is the inclusion of assessment of the operational impacts of the scheme on road noise (paragraphs 16.7.24 to 16.7.31, pp.297-298).

**Part O: Traffic & Transport – Chapter 17 (pp.302-325) of the Scoping Report**

30. The County Council is broadly content with the proposed scope of the assessment as set out in Chapter 17 of the Scoping Report so far as it relates solely to the impacts of the proposed scheme, in terms of the matters to be covered and those to be excluded, with the approach to baseline data collection, and with the approach to the assessment of construction and operational phase impacts on the highways network, on traffic levels and on other modes of transport. It is noted however that the impact of the proposed scheme on off-road footpaths and cycle routes is to be covered in Chapter 9 (Community) of the ES (paragraph 17.1.5, p.302), but the County Council would suggest that as such assets form part of the highway network they should be covered in the traffic and transport assessment. It is also noted that different study areas are proposed for the assessment of impacts on road based traffic and public transport users, compared with non-motorised users of the highway network (paragraph 17.6.5, p.311), but the County Council would suggest that the same study areas should be used in both cases as impacts on motorised users may give rise to indirect or induced impacts on non-motorised users.

31. The County Council is concerned that it has not been identified as a relevant stakeholder (section 17.5, pp.308-311) given that the primary access to the proposed development would be via the realigned A3113, with implications also for the A3044. The County Council would welcome the opportunity to actively engage in the preparation of the traffic and transport chapter of the ES, as the local highway authority most impacted by the proposed DCO scheme.
32. The County Council is also concerned that the proposed approach does not fully capture the likely in-combination effects of the proposed HWH development and the wider redevelopment of Heathrow Airport proposed under a separate DCO by Heathrow Airports Ltd (HAL). A key concern for the County Council is whether the HWH DCO would result in fewer vehicle movements to and from the airport due to an increased amount of hotel accommodation being provided within the airport, it is recommended that the HAL scheme should be included in the list of NSIP schemes identified in Table 1 in Appendix 4.1 (Initial List of 'Other Development' for CEA).
33. The DCO project includes options for alterations to parts of the strategic road network (M25 motorway junction 14) and the local road network (realignment of part of the A3113 and changes to the A3044 / A3113 junction at Stanwell Moor) that are situated within, or adjacent to, the county of Surrey, and the County Council would therefore expect the assessment presented in the ES to cover each of those options and their associated impacts and effects for both the construction and operational phases of the scheme. The County Council would also expect the assessment to cover the likely effects on the capacity and condition of the local road network of any 'associated development' at the Stanwell Quarry site, at the Hithermoor Quarry site and at the Oakleaf Farm site.
34. The County Council recommends that the baseline data for the EIA include information relating to the different modes of transport by which current staff and passengers access the airport, as defined by the main mode of travel used. Such data would enable the EIA process to support and inform the development of the surface access strategy (SAS), as proposed in paragraphs 17.2.2 and 17.2.3 (p.303, Scoping Report) which is proposed as the principal means of mitigating the highways and public transport impacts of the proposed scheme.
35. For the assessment of impacts on public transport capacity paragraph 17.6.12 (p.312) of the scoping report indicates that the Transport for London (TfL) 'Strategic Cube Model' (TfL Model) would be used. The County Council would like to understand how the TfL Model will provide "...network-wide trip assignments..." across the wider area affected by the proposed DCO project, which extends beyond the confines of the TfL Model (i.e. into Surrey and other surrounding area).
36. For the assessment of impacts on non-motorised users paragraphs 17.6.15 and 17.6.16 (pp.312-313) indicate that the study area would be defined on the basis relevant Chartered Institution of Highways & Transportation (CIHT) guidelines for walking and cycling. Following those approaches would limit the assessment of the DCO project's impact on

NMU to a relatively small area. The County Council would recommend that the EIA should also assess impacts on existing and potential NMU in all areas potentially impacted by the DCO project.

**Part P: Water Environment – Chapter 18 (pp.326-363) of the Scoping Report**

37. The County Council is broadly content with the proposed scope of the assessment, in terms of the matters to be covered (Table 18.7, pp.342-345, Scoping Report), with the approach to baseline data collection, and with the approach to the assessment of construction and operational phase impacts on the water environment and flood risk. It is noted that assessment relating to aquatic ecology, water dependent designated sites, and fish is to be documented in Chapter 6 (Biodiversity) of the ES.
38. The County Council is concerned however that it has not been identified as a relevant stakeholder (section 18.3, p.330) with respect to the assessment of impacts on surface and groundwater flood risk. The County Council, in its role as Lead Local Flood Authority for the county of Surrey, is responsible for the management of surface and ground water related flood risk. Whilst the principal works area lies outside Surrey a number of areas of land within the county have been identified as potential locations for ‘associated works’ which could result in changes in the risks of flooding from groundwater and surface water sources.

**Part Q: Final Comments**

39. We hope that the above comments are of value to the process of defining the scope of the EIA for the proposed scheme, and would welcome the opportunity to engage further with the applicant as the development of the scheme and the associated assessment progresses. Should you require any further information, or wish to seek clarification of any of the comments that we have made please do not hesitate to contact us (Dr Jessica Salder, Principal Environmental Assessment Officer, [jessica.salder@surreycc.gov.uk](mailto:jessica.salder@surreycc.gov.uk)).

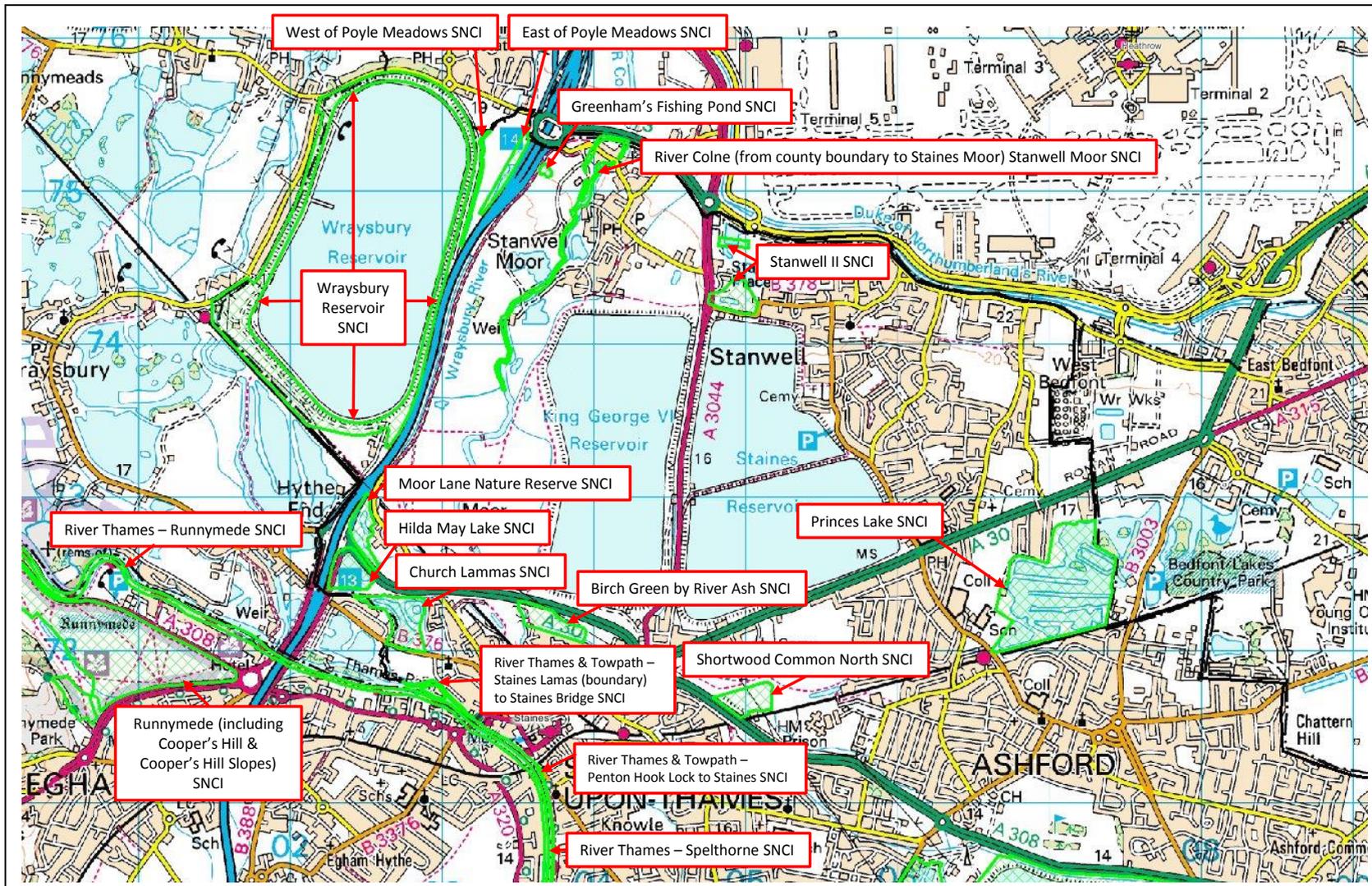
Yours sincerely



Caroline Smith  
**Planning Development Manager**

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**Map A: Locations & Names of Sites of Nature Conservation Importance in Surrey within the 2km buffer zone for associated works**



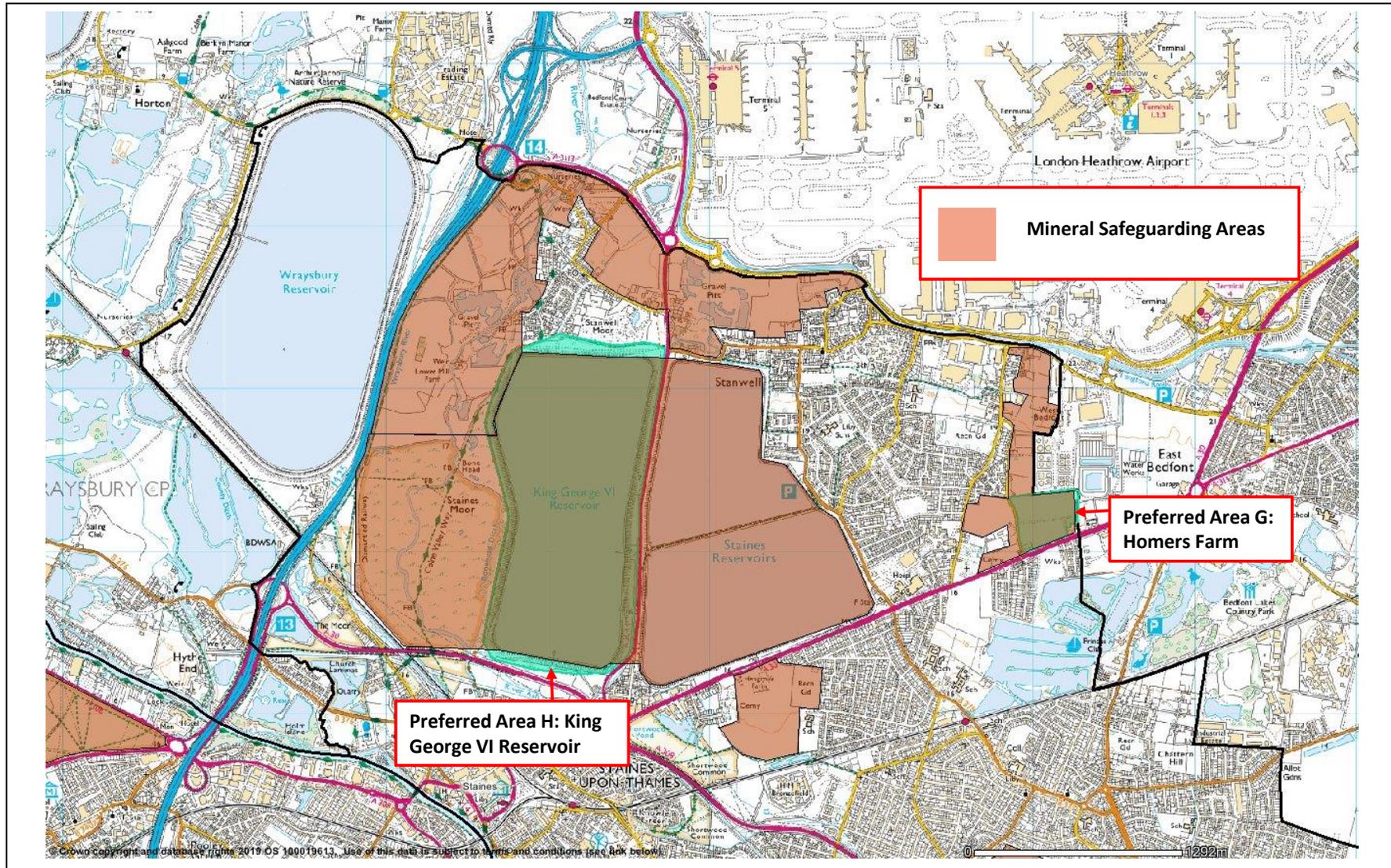
**Table A: Details of Sites of Nature Conservation Importance in Surrey within the 2km buffer zone for associated works**

SNCI	National Grid Reference	Ecological Interest Features
River Colne (from County boundary to Staines Moor) Stanwell Moor SNCI	503970;175006	Falls within the top 10% of watercourses nationally for macroinvertebrate fauna (1996). This section of river supports a diverse fish community including Eel and is a spawning site for Barbel. The site also supports a diverse macrophyte community (2009).
Greenham's Fishing Pond SNCI	503686;175118	The site is selected for its wetland habitat (NVC communities S13, S14 & S19 are present) which compliments the wider mosaic of wetland habitats present in the surrounding M25 corridor area.
Stanwell II SNCI	504943;174649 (N) 504963;174311 (S)	Mosaic of gravel pits and ditches supporting a range of marginal vegetation including fen
East of Poyle Meadows SNCI	503474;175204	Selected for its wetland habitats including NVC communities S4, S7 & S12. Species indicative of Thames Alluvial soils supported. The site is an important buffer between the M25 & Staines Moor SSSI.
West of Poyle Meadows SNCI	503263;175118	The site's position is important abutting Staines Moor SSSI and it therefore acts as a buffer. In addition it continues to support good emergent vegetation either side of the channel.
Wraysbury Reservoir SNCI	501662;174232	The grassland surrounding the reservoir is selected as an important buffer for the Wraysbury Reservoir SSSI which is also part of the South West London Waterbodies SPA Ramsar site.
Moor Lane Nature Reserve SNCI	502476;172790	Selected for its diverse wetland habitat. Species recorded on the site include Small Water-pepper & Whorled Water-milfoil (RDB) as well Lesser Water Parsnip & Thread-leaved Crowfoot (Surrey Scarce).
Hilda May Lake SNCI	502376;172492	Wetland Nature Reserve with two mesotrophic lakes, important for wildfowl and a pond with associated ditch
Church Lammas SNCI	502786;172201	Selected for species rich grassland, containing at least 16 species typical of grassland of conservation interest in Surrey. The site also supports swamp and reedbed habitats (NVC S4 & S14) and serves as Accessible Natural Greenspace within an urban area
Birch Green by River Ash SNCI	503693;172175	The site was selected in 1996 for the wet grassland with ant hills. This type of grassland is uncommon and declining in the County. Following the review in 2010, it was reselected for its diverse emergent flora including NVC communities S5 and S14.

<b>SNCI</b>	<b>National Grid Reference</b>	<b>Ecological Interest Features</b>
Shortwood Common North SNCI	505042;171685	Selected as a remnant of an important alluvial grassland contiguous to Shortwood Common SSSI. It supports Spiny Restharrow, <i>Ononis spinosa</i> described as 'Surrey Rare' on Surrey's Rare Plant Register.
Princes Lake SNCI	507126;172353	Large body of standing water with bare ground, tall grass, scrub and dense willows. Large island in centre of lake.
Runnymede (including Cooper's Hill & Cooper's Hill Slopes) SNCI	500981;171963	Unimproved, semi-improved grassland, Ancient Semi-natural Woodland
River Thames – Runnymede SNCI	501774;172029	River (Length 15.9Km)
River Thames – Spelthorne SNCI	503732;170600	Section of River Thames which falls within top 10% of UK watercourses due to macroinvertebrate diversity (1996). Supports range of BAP Priority species including Eel, Salmon, Sea Trout, Depressed River Mussel and Otter. Inc fringing habitats (2010).
River Thames & Towpath – Staines Lamas (boundary) to Staines Bridge SNCI	502945;171784	Section of River Thames which falls within top 10% of UK watercourses due to macroinvertebrate diversity (1996). Supports range of BAP Priority species including Eel, Salmon, Sea Trout, Depressed River Mussel and Otter. Inc fringing habitats (2010).
River Thames Towpath - Penton Hook Lock to Staines SNCI	503746;170739	Section of River Thames which falls within top 10% of UK watercourses due to macroinvertebrate diversity (1996). Supports range of BAP Priority species including Eel, Salmon, Sea Trout, Depressed River Mussel and Otter. Inc fringing habitats (2010).

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Map B: Permitted mineral workings, potential mineral workings & Mineral Safeguarding Areas in Surrey relevant to the DCO project



**From:** [Jonathan Partington](#)  
**To:** [Heathrow Western Hub](#)  
**Subject:** Heathrow Western Hub EIA Consultation TR020004\_31095887  
**Date:** 01 March 2019 14:58:24

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Dear Sir/Madam

Thank you for the ES scoping consultation. I can confirm that Surrey Heath has no comments to make.

Kind regards

**Jonathan Partington**  
Development Manager  
Regulatory Services  
Surrey Heath Borough Council  
Knoll Road  
Camberley  
Surrey GU15 3HD  
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**From:** [BCTAdmin@thameswater.co.uk](mailto:BCTAdmin@thameswater.co.uk)  
**To:** [Heathrow Western Hub](#)  
**Subject:** 3rd Party Planning Application - TR020004\_31095887  
**Date:** 28 February 2019 09:55:39

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The Planning Inspectorate  
Temple Quay House  
Temple Quay  
Bristol  
BS1 6PN

Our DTS Ref: 60905  
Your Ref: TR020004\_31095887

28 February 2019

Dear Sir/Madam

Re: HEATHROW WESTERN HUB, BATH ROAD, STAINES, TW19

#### Waste Comments

Thank you for giving Thames Water the opportunity to comment on the above application. Thames Water are the statutory sewerage undertaker for the area and would like to make the following comments: The EIA Regulations 2017 set out in Schedule 4 that water and wastewater issues may need to be covered in an EIA. Thames Water consider the following issues should be considered and covered in either the EIA or planning application submission: 1. The developments demand for Sewage Treatment and network infrastructure both on and off site and can it be met 2. The surface water drainage requirements and flood risk of the development both on and off site and can it be met. 3. Build - out/ phasing details to ensure infrastructure can be delivered ahead of occupation. 4. Any piling methodology and will it adversely affect neighbouring utility services. Should the developer wish to obtain information on the above issues they should contact our Developer Services department on 0800 0093921

#### Water Comments

With regard to water supply, this comes within the area covered by the Affinity Water Company. For your information the address to write to is - Affinity Water Company The Hub, Tamblin Way, Hatfield, Herts, AL10 9EZ - Tel - 0845 782 3333.

Yours faithfully  
Development Planning Department

Development Planning,  
Thames Water,  
Maple Lodge STW,  
Denham Way,  
Rickmansworth,  
WD3 9SQ  
Tel:020 3577 9998  
Email: [devcon.team@thameswater.co.uk](mailto:devcon.team@thameswater.co.uk)

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**Application by Arora Holdings Limited (the Applicant) for an Order granting  
Development Consent for the Heathrow Western Hub (the Proposed Development):  
Scoping Opinion**

## **Transport for London's Consultation Response**

March 2019

## Overview

TfL is the strategic transport authority for London and prepares and reviews the Mayor's Transport Strategy, the most recent version of which was published earlier this year and is one of the strategies the Mayor is required by statute to produce.

Working closely with GLA officers TfL is also responsible for preparing the transport section of the London Plan and is closely involved in the development of other related policies and supplementary guidance. The current London Plan was published in 2016. Following a complete review, the draft London Plan has recently been consulted. Whilst the draft already has material weight, once it has been through all necessary statutory processes, it will replace the current London Plan as part of the statutory development plan for the determination of planning applications for sites in London and against which local plans will be assessed for conformity.

There remains considerable uncertainty how, as the Applicant proposes, it would take forward a DCO application for the terminal infrastructure separate from a DCO for third runway promoted by a different party when the two are so linked. Separating out the impacts is not trivial and therefore this response errs on the side of addressing the impacts of both in conjunction.

The Applicant is considering using TfL's strategic models for the assessment, however, details of any modelling methodology have yet to be shared and the Applicant currently only has an agreement to use LTS (TfL's demand model) and not TfL's highway and public transport models.

The EIA for the Heathrow Western Hub should explicitly set out which works, measures and schemes are *indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects*. This includes measures (for example, highway improvements or surface access schemes) which are relied upon to deliver the scheme. Without this clarification and elaboration then any assessment will in our opinion inevitably be partial and confusing.

Furthermore the scope of specific chapters of the EIA set out in the scoping submission would generally appear to be neither broad enough nor detailed enough to enable full assessment and understanding of the impacts of the Applicant's proposals and necessary mitigation thereof. It should also take proper account of both indirect and induced impacts (negative as well as positive) and of the fact that many are inextricably linked. Thus for example commitments, failure to meet commitments, or subsequent revisions to, the proposed arrangements for surface access, as put forward at this stage, could fundamentally affect the actual air quality outcomes.

TfL as the strategic transport body for London is keen to work meaningfully with the Applicant to address these issues. We would expect the Applicant to seek to commence detailed, constructive engagement in good time, underpinned by an open sharing of its material in the run up to a DCO. This should allow the DCO submission to be properly and comprehensively assessed as part of the DCO process and the ultimate decision be founded on robust consideration of the full picture.

## **Baseline and Policy**

### **Baseline**

Across the study areas, it is essential that the appropriate current and future baselines are set, on the best available information, erring on the side of caution and agreed in consultation with stakeholders including TfL.

The future baseline should be a credible reflection of likely future measures in the interim between today and year of opening. Such future measures unrelated to expansion should be incorporated into the future baseline and not limited to the scenarios which include expansion. Indeed, the Applicant should not assume these are mitigation for the impacts of the proposed development. GLA forecasts of population and employment growth should be utilised.

### **Policy**

Mayoral policy remains an important consideration, both the current London Plan (March 2016 – consolidated with alterations since 2011) and the draft London Plan (December 2017), including Housing/Social Infrastructure/Economy policy and Transport policies.

## ***The Approach to the EIA scoping & Exclusions***

It is imperative that the Applicant does not narrow down the scope before the technical assessment has been consulted upon, nor exclude matters from the scope without it being fully justified. Substantial de-scoping should not be undertaken without engagement over technical matters. Prior to progression of the expansion proposals and their assessment, it is essential that TfL is engaged on these issues.

## **Assessment by topic, relating to the submission's relevant technical topic chapters**

### **Air Quality**

It remains to be demonstrated that the proposals can be achieved without worsening overall air quality. Previous vague assertions to this effect need to be rigorously demonstrated at the earliest possible opportunity, taking into account the full expected impact of the proposals and including full details of specific, committed, mitigation where this is necessary. Given the efforts being made by both national and London government to improve air quality to bring the earliest possible public health benefits, it would not be acceptable for the proposals to effectively 'consume' these benefits in order that they themselves can be achieved without endangering projected compliance with air quality limit values.

The comments on air quality need to be read in conjunction with the comments on the surface access aspects of the proposals. The assessment process for both, needs to be comprehensive and iterative, demonstrating appropriate responses to adverse indicated impacts and stakeholder representations. Where mitigations are relied upon to meet acceptability criteria, these need to be clearly specified, quantified, and committed to, with appropriate remediation and/or sanctions specified to guard against later default.

TfL has the following concerns about the assessment approach that is being proposed.

#### **Regard to London policy on air quality**

Given the likely substantial air quality impacts of the proposals in Greater London, the proposals need to demonstrate specific regard to GLA policy documents relating to transport and air quality. Specifically, these are the Mayor's Transport Strategy and London Environment Strategies, as well as the London Plan and the policies and proposals contained therein.

They need to demonstrate how they would contribute to the overall aim, common to these documents, of improving air quality and public health in London, in part through promoting a modal shift away from the car, rather than abstract from it. This is commensurate with the stated objectives that the proposals should 'contribute to an improvement in air quality and health'.

#### **Best assessment practice**

The proposals need to demonstrate best professional assessment practice, cognisance of the best available tools and datasets available for air quality assessment in London, and appropriate professional engagement with TfL as subject matter experts.

The air quality impacts assessment should include all activities on the airport that give rise to emissions – not just aircraft movements. Furthermore, the assessment must recognise the role of the airport as a significant traffic generator, and require careful and justified enumeration by the Applicant of the surface access impacts of the proposals themselves, as well as take into account secondary (induced) traffic generation associated with the wider economic impacts of the expansion proposals. Where aspirations are stated, such as 'no

overall increase in traffic', there needs to be a clear articulation of how this would be achieved. This should include details of assumptions and mitigation, with appropriate guarantees around implementation of the latter.

The assessment should consider all of: the amount of traffic, the traffic mix and the likely progress of technology on reducing emissions from individual vehicles, taking a conservative view of the latter. It should be extended, where appropriate, to capture impacts where relevant over a wider spatial area – 'relevant' being defined as any location outside the proposed study area where an increase attributable to the proposals, however small, could be significant in terms of the margin of compliance with limit values. It should consider the emissions/air quality impact of induced traffic likely to arise as a secondary effect of the proposals as an 'attributable' effect of the proposals.

The assessment needs to be iterative – identifying and responding to adverse effects – rather than a once-off statement of impact. This would help give assurance that the goal of minimising adverse effects was being taken seriously by the Applicant.

The assessment needs to be precautionary – recognising the particular uncertainties associated with future projections of emissions from vehicles, particularly in relation to current projections of emissions for the mid-2020s that suggest that compliance with limit values for NO<sub>2</sub> should be achieved around this time.

The assessment should be undertaken in the context of appropriate expert peer review, including relevant experts from TfL on surface access and air quality, to help ensure broad acceptance of the assessment and also to ensure that it is cognisant of wider developments relating to transport in London that will affect the feasibility and outcome of the proposals.

The assessment should be cognisant of the London Atmospheric Emissions Inventory (LAEI), as periodically updated, as the definitive quantification of emissions from all sources in Greater London. It may be necessary to go beyond the information and geographical resolution provided by the National Atmospheric Emissions Inventory (NAEI) to accurately quantify certain impacts and/or the specific impact in certain locations and/or receptors. The inventory is a public dataset, with specific advice and support available from TfL: <https://data.london.gov.uk/dataset/london-atmospheric-emissions-inventory-2013>.

The proposed ambient air quality monitoring should be cognisant of the wider ambient monitoring effort in London, currently mediated through the London Air Quality Network (LAQN: <https://www.londonair.org.uk/LondonAir/Default.aspx>). This is important as limit-value-critical effects might be expected on busy roads outside of the proposed study area.

### **Scale, scope and significance of air quality impacts**

It will be essential to demonstrate that the proposals are capable of being realised without having an impact on the ability of London to achieve compliance with air quality limit values. This cannot rely on an expectation of action by others, notably the Government's National Air Quality Action Plan and related action by the Mayor of London to improve air quality. Any mitigation to be undertaken by the Applicant to minimise adverse air quality impacts and intended to (at least partly) offset the additional air pollution arising from the proposals must be set out.

It is for the Applicant, therefore, to take a view on what additional mitigation measures are required over and above assumed gains from action at the national and London level, to specify these clearly with guaranteed commitments and itemised expected air quality impacts, and to include these in any assessment that purports to confirm what would need to be the broadly positive impact of the proposals in the vicinity of the airport.

In terms of determining the significance of likely effects, account needs to be taken of the impact of key air pollutants on public health, and of the particular features of different pollutants in this regard. Achievement of limit values does not mean that there are no adverse health impacts at lower concentrations. This is particularly the case for particulate (PM<sub>10</sub> and, especially, PM<sub>2.5</sub>) where there is no 'safe' level and exposure at any level is dangerous. Any overall increase resulting from the proposals should therefore be considered to have a negative public health outcome. Any delay to the common aim of reducing levels of air pollution as quickly as possible will also have a negative public health outcome. Consuming the benefits of policies designed to improve air quality from National or London action is especially to be guarded against, since these improvements, and the costs associated with them, borne by Londoners, are made with the specific intention of improving public health, rather than facilitating – through the provision of 'headroom' to add to the overall pollutant load without breaching legal limits – the expansion of the airport.

In terms of determining the significance of the likely effects, account should be taken of the criticality of the changes in ambient concentration of key pollutants in relation to the prevailing concentrations and the relevant limit value, as well as the magnitude of the impacts.

TfL's view is therefore that the Applicant needs to definitively demonstrate that the proposals can be achieved without worsening net overall air quality in the vicinity of the airport, at any prevailing concentrations. In other words, overall exposure to air pollution should not increase. Furthermore, consuming and therefore negating benefits to the health of Londoners otherwise gained through action at Mayoral or Government level are unacceptable.

### **Wider road traffic impacts of the proposals**

TfL's comments on the air quality aspects of the proposals need to be read in conjunction with our comments on the surface access proposals – the two are inextricably linked. It should be recognized that commitments, failure to meet commitments, or subsequent revisions to, the proposed arrangements for surface access, as put forward at this stage, could fundamentally affect the actual air quality outcomes. The possibility of inadequate achievement of surface access commitments, or default on commitments at a later date, must be explicitly guarded against.

Whilst it is accepted that there are limits to which the configuration of the proposals can be specified at this point, and that the assessment does not rely upon precise component location or detailed design information being available, it is important that this does not provide a degree of ambiguity through which vague commitments that 'sound good' at this stage are not, in the event, carried through. There is a need for the Applicant to specify, in more specific terms than currently, how its air quality commitments would be achieved, so that future compliance may be better judged.

The economic benefits of the scheme will manifest itself through increased economic activity, extending beyond the airport itself to activities and businesses in the wider airport hinterland and further afield (e.g. hotels, off-airport engineering/catering, general business agglomeration in the vicinity of the expanded airport). This increased economic activity will generate (induce) road traffic that will contribute to air pollution across a wide area and it is important that it is taken into account to avoid underestimating the total air quality impact of the proposals, perhaps significantly. The 'direct' air quality impacts of the scheme therefore need to be contextualised in terms of these 'wider' total attributable impacts, and assessments of the criticality of the impacts, for example on the ability to meet limit value thresholds at the earliest possible time, based on this wider total impact (i.e. indirect, secondary and cumulative effects).

### **Proposed study area**

Although the majority of the air quality impact of the proposals will be relatively close to Heathrow, it will likely be the case that those road links that are critical to the achievement of air quality limit values for NO<sub>2</sub> in the London agglomeration (zone) will be closer to inner/central London. This will include the major radial routes serving the airport area, the A4, M4 and A40, extending potentially to certain links around the edge of the current Congestion Charging Zone (e.g. Park Lane, Marylebone Road). Although the incremental change relating to additional traffic from the proposals at these points will be relatively small, it could be critical in determining compliance or otherwise at these locations, as they are expected to be among the last links within the London agglomeration to achieve compliance. The study area for air quality must include an assessment of change on these and other heavily-trafficked links, taking a precautionary approach to the definition of the area.

## **Community**

The scope of the Community study is neither detailed enough nor is it broad enough to properly assess the full impact Heathrow expansion is likely to have on communities across a wide area covering west London and areas to the west of London. For instance, the impact of housing tens of thousands of new employees working both on and off the airport site and their families is not being fully considered in terms of: community infrastructure and amenities, transport or availability of developable land. There is little description or scoping for studies to show how the Applicant will mitigate against any impact expansion will have on future communities. Furthermore, little consideration has been given to a thorough analysis of the loss of community in areas likely to be directly affected by expansion such as Harmondsworth.

### **Cycling and walking**

Cycling and walking needs more detailed analysis than has been proposed and should be considered alongside, not separately, with cycling/walking as a mode for commuting and other activities not considered recreational (e.g. education or shopping trip purpose). The public health implications of any impact on future cycling/walking provision and level of demand needs detail analysis and monetising as should the impact of the expansion proposals directly and indirectly on the propensity for active travel including other

environmental factors such as air quality and highway safety which have a bearing on pedestrians and cyclists.

### **Demographic change**

The large employment and population growth that is likely to accompany expansion is not accounted for in any local and strategic plans, including the MTS and London Plan. An assessment is required to agree with stakeholders mitigation measures that can counter any impacts on communities in the area in terms of public health, amenity, infrastructure, environment and transport.

Analysis of the impact of tens of thousands of new employees and their families moving to the area and the new housing, transport, utilities and community services and infrastructure required to accommodate them, needs to be sufficiently accounted for. For the EIA, there is a requirement for the Applicant to provide detailed analysis and proposals of how these new residents can be accommodated in west London and to the west of London, without impacting current plans to accommodate the growth in population and employment already being predicted for these areas without expansion.

For this Community section, the Applicant should clearly set out how it will demonstrate that current plans to accommodate the forecast population and employment growth and improve the quality and health of communities in west London and to the west of London will not be impacted by airport expansion. This analysis should be conducted in parallel with the Traffic & Transport and Economic & Employment sections of the scoping report. The Applicant should demonstrate that both the forecast population growth and the growth the Applicant is predicting can be accommodated in communities without affecting them negatively. The Applicant has to prove that the impact of expansion on communities is not significant and also show that Green Belt and other categories of land such as Strategic Industrial Land will not be required for housing and other changes of use (e.g. new communities' infrastructure and services and other employment sites to house the predicted indirect, induced and catalytic jobs). This not only applies to the GLA area but also to the towns and communities outside London.

The future baseline for demographic forecasts should be agreed with stakeholders; this is discussed further in the comments on Traffic and Transport.

### **Economics and Employment**

Tens of thousands of new employees working both on and off the airport site and their families will move to a wide area surrounding Heathrow and have a large impact on the area's economy and employment. The scope of the Economics and Employment study is not specific enough in defining what it is assessing, how it will measure the full assessment of the impact of Heathrow expansion and how it will define mitigation measures. The scope needs to look at the impact on both current communities and future communities, and link to the traffic and transport section and define what possible mitigation measures will be assessed and also how they will be assessed.

The Applicant should clearly set out how it will demonstrate that current plans for the economy intended to improve the quality of amenities and health of communities in the area will not be impacted by airport expansion. The Applicant should demonstrate that both the forecast population growth alongside growth the Applicant is predicting can be accommodated in communities without affecting them negatively. The Applicant should explicitly explain how it will assess any potential congestion and crowding on the transport network or air quality and other environmental issues and how this affects the overall assessment of the scheme.

The Applicant should show should show that Green Belt and other categories of land such as Strategic Industrial Land will not be required for additional employment purposes, housing and other changes of use. This not only applies to the GLA area but also to the towns and communities outside London such as Windsor and Slough.

The future baseline for demographic forecasts should be agreed with stakeholders; this is discussed further in the comments on Traffic and Transport.

A map should be presented to specify the study area. TfL should be included as a stakeholder and strong consideration of the London Plan should be made.

## **Noise & Vibration**

As stated above, given the lack of clarity as to whether a DCO for a new runway and the terminal infrastructure it requires can be separated, this response sets out the full noise approach for any expansion of Heathrow. Both construction and operational noise should be scoped into the environmental impact assessment. TfL comments below relate to the methodology for assessing aircraft noise.

The timeframes for the DCO process and the airspace change process means the airspace change application would not be submitted until a full two years after the DCO. TfL is concerned that a worst case scenario assessment would not be carried out and would result in a shortcoming of the assessment and thus an ineffective EIA.

### **Assessment and inputs**

TfL would expect to see comprehensive baseline monitoring (attended noise surveys and continuous) of existing noise environments where neighbourhoods are already overflowed and areas which will be newly overflowed. This should include residential areas and open spaces across the whole of London and to the west of the airport (outside London). Baseline noise monitoring should report all the noise metrics to be used within the ES assessment.

TfL's previous experience has shown that averaging noise masks the impact and effect of the event of a flyover and the frequency of events thus potentially giving a false representation of the actual impact. TfL therefore recommends a wide range of metrics, including but not limited to the additional metrics such as N65(16hr) and N60(8hr) when assessing residential and other noise sensitive receptors.

In addition, the LOAEL and SOAEL levels to be used in the assessment should also include the LAmax/number of events for daytime aircraft noise in addition to the night-time, which is currently proposed. This is required to understand the severity and frequency of events and contribute towards determination of annoyance impacts during the day to which mitigation measures can then be developed. As well as receptors above SOAEL, change in noise should also be reported for properties over LOAEL as this is the level at which health and quality of life will begin to be impacted.

Regarding the screening criteria for non residential receptors a screening criteria to identify noise sensitive non- residential buildings that require specific assessment should be included. Thresholds should be defined within the WHO Guidelines for Community Noise 1999. TfL considers that lowering the threshold for assessment to where the WHO state moderate annoyance begins is more appropriate to make sure that the assessment captures effects more accurately.

TfL would also like to note that given the type of aircraft the airport will operate is not secured for future baseline scenarios, the fleet mix assumptions for the assessment should be conservative and assume a worst case in terms of noise. TfL would like to see the assumptions the Applicant intends to use within the each of the future baseline scenarios.

TfL also expects that new technologies and operational measures which are unrelated to expansion (but which will be credibly delivered in the timeframe) should be included in both the do minimum and do something future baseline scenarios. This includes the flight routing optimisation which is unlocked by new performance based navigation technology.

### Significance

TfL is concerned about the thresholds that categorise the magnitude of change in noise levels. TfL would wish to see the significance of the impact revised in line with the noise level change used within the City Airport expansion Environmental Statement whereby >6dB change in noise constitutes a substantial significant impact.

Change in Level (dB)	Subjective Impression	Impact	Significance
≤ 2	Negligible	Negligible	None
2 to 3	Minor	Minor	Minor
3 to 6	Moderate	Moderate	Significant
6 to 9	Substantial	Substantial	Significant
>9	Very Substantial	Very Substantial	Significant

*City Airport Environmental Statement (2014) – Subjective importance of changes in noise level*

In addition, receptors already exposed to SOAEL are already significantly affected and therefore any further exposure should be considered significant and should be included within the health/quality of life assessment.

### Mitigation

Noise, and annoyance as a result, will not be contained to just within a dwelling or building. Outdoor space such as a private garden, local parks and anywhere a resident walks in their local neighbourhood will be affected by aircraft noise. Therefore mitigate should not just be

providing insulation at home but should include the character of an area and lifestyle of residents within their community.

Without sight of the proposed indicative or indeed an agreed airspace change, it is unclear whether the noise mitigation would continue to be effective once the airspace has been agreed.

If provision of noise insulation is to be relied upon as mitigation, there needs to be sufficient certainty of its deployment. Previous insulation schemes around Heathrow have been limited by the extent to which local residents have taken up such insulation, given requirements on residents to part fund any insulation and to source it from a single supplier specified by the airport. This compares poorly with schemes offered by other airports such as London City. Once operational, TfL would expect the Applicant to monitor the noise effects of the scheme to ensure compliance with the noise envelope set by the Environmental Statement.

### **Maps**

Maps need to be produced which should show the following information and should be shared with consultees:

- Proposed assessment boundaries
- Proposed airspace changes including flightpaths
- Updated noise contours
- Proposed monitoring stations
- Locations of sensitive receptors

### **PEIR**

To enable full transparency, TfL expects existing baseline and early modelled results of proposed aircraft noise to be published within the Preliminary Environmental Information Report (PEIR) to ensure meaningful consultation on noise impact is carried out ahead of the DCO submission.

## **Traffic and Transport**

It is paramount that the Applicant agree the approach to the traffic and transport assessment for the EIA with TfL. Particular issues are identified below but it is recommended that these are discussed further with TfL.

The Applicant needs to provide an analysis of total surface access airport demand and forecast airport mode share before then delving into detail of individual modes. Heathrow's future surface access mode share and split is not mentioned and is a key assumption in estimating how much extra traffic and demand for other transport (public transport, active modes) Heathrow will generate. Freight traffic is also key to understanding the amount of additional traffic the airport will generate. Analysis should be based on a forecast for a busy airport day, not an average day.

The comments raised under Communities in relation to demographic change also apply to this section. For this Traffic and Transport section, the Applicant should clearly set out how it

will demonstrate the additional travel demand generated by the new employment and housing (direct, indirect, induced and catalytic) will be accommodated and any additional congestion, crowding or air quality issues arising from the growth can be mitigated against. This analysis should be conducted in parallel with the Community and Economy and Employment sections of the scoping report. The scope of how to undertake this analysis should be described in detail in this section of the report.

Prior to looking at individual modes we need to understand changes in person trips associated with the airport. For passengers and staff, we need the EIA to assess timing, numbers, directions and modes. For goods and services we need the EIA to assess the types of material streams and time sensitivity and their divisibility/ ability to consolidate as well as numbers of vehicles and vehicle type – and how that changes with the proposed development.

There is a need to consider mobility-impaired users and other groups protected under the Equality Act for all modes of transport. The principle is that the airport should provide and be an inclusive part of London.

TfL publishes a Transport Assessment Best Practice Guidance, which is updated to reflect London Plan and national policy guidance. TfL would also expect the Transport Assessment to build upon TfL advice about Healthy Streets and promotion of active travel for both air passengers and airport workers and indeed all others directly or indirectly arising from the proposed development. This would be an important part of the transport input into the EIA. Furthermore, detailed assessments of transport modelling uncertainties should be undertaken with sensitivity tests carried out testing all key assumptions, e.g. airport size, staffing levels, mode share, average vs busy airport day, background transport demand etc.

Cycling and walking are key airport access modes and should be considered alongside all other transport modes in this section, whether 'off-road' or not. Specifically, the walking mode requires an integrated approach from highway to terminal building or place of work and similarly cycling needs to be assessed from the surrounding network leading to the major Heathrow cycling parking points, to identify impacts (positive and negative) on cycling potential. Further comment on cycling and walking is provided under Chapter 9 above.

### **Wider assessment of transport**

The document should be clear that if it is only consulting on the EIA Scoping Report and not also consulting on the Transport Assessment, transport modelling and Surface Access Strategy, then that consultation will be at a later stage and through a separate exercise.

With regard to highway network delay, TfL would expect the Applicant to show no increase in bus journey time delay for all TfL bus routes (and those outside London run by other operators) within the study area during construction and operation of the scheme; if delay is forecast, mitigation should be proposed by the Applicant. No increase in stress to all road users, not just drivers, should be proven. There is a need to analyse pedestrian and cyclist delay at an appropriate spatial scale to be agreed with TfL and other stakeholders.

TfL Healthy Streets indicators should be used as a measure of amenity across the Study area. Pedestrian modelling will be required to assess impact on: rail/tube stations; bus

interchanges; public transport; gate lines and terminal buildings. Elsewhere pedestrian comfort levels can be used instead. Cyclists' amenity needs to be assessed against criteria of road speed and traffic volume and level pedestrian numbers or pedestrian comfort levels if on shared surfaces as set out in the London Cycle Design Standards.

MTS defines severance as barriers to pedestrian and cyclists due to road and other infrastructure (e.g. waterways, railways). It can be exacerbated by increase in volume of traffic or road speeds and other factors such as lack of natural surveillance, poor lighting and personal safety as well as new or altered rail lines which impose new barriers or exacerbate existing ones. The airport itself is another barrier to pedestrian and cycle movement and the proposed enlargement of the site without mitigation will also exacerbate this active transport amenity issue. Furthermore the proposed development will impact upon the quality of public transport and appropriate mitigation will be required. MTS policy 13 states:

*“The Mayor, through TfL and the boroughs, and working with stakeholders, will seek to make the public transport network easier and more pleasant to use, enabling customers to enjoy comfortable, confident, safe and secure, informed and stress-free travel.”*

Vision Zero is part of the MTS. This aims to reduce roads death and serious injury to zero on London buses by 2030 and over all highways by 2040. The EIA should consider the safety impacts that the proposed development will have on safety in terms of surface access (as well as in the air) and put forward sufficient and suitable mitigation which would ensure that Vision Zero can still be achieved notwithstanding the proposed development.

Air quality should be mentioned in this section as the results from the traffic and transport assessment will be key to informing the air quality assessment. It will be important that the traffic and transport assessment forecasts the correct level and vehicle types (freight, buses, cars, taxis etc.) for the air quality assessment. It is therefore important to explain in this section how this will be accurately done.

TfL is concerned at the exclusion of any reference to important documents including the London Plan, MTS, Inclusive London, Healthy Streets and other policies applicable within Greater London. Also, there should be a demonstration of compliance with Equality Act and Crime and Disorder Act as far as it relates to transport – and, indeed, other matters. Furthermore, the table does not mention any local planning policy and guidance produced by the London boroughs and authorities to the west of London. All these documents should be considered.

TfL would expect that in the future that all modes of transport serving the expanded airport would be step free and the Applicant will show how that approach to transport will continue through the Airport to and from the aircraft.

### **Highway Study Area**

Strategic highway modelling should use TfL's LoHAM model. This is a model which is readily available for use in major transport assessments in London and can be expanded to incorporate areas outside of London if required.

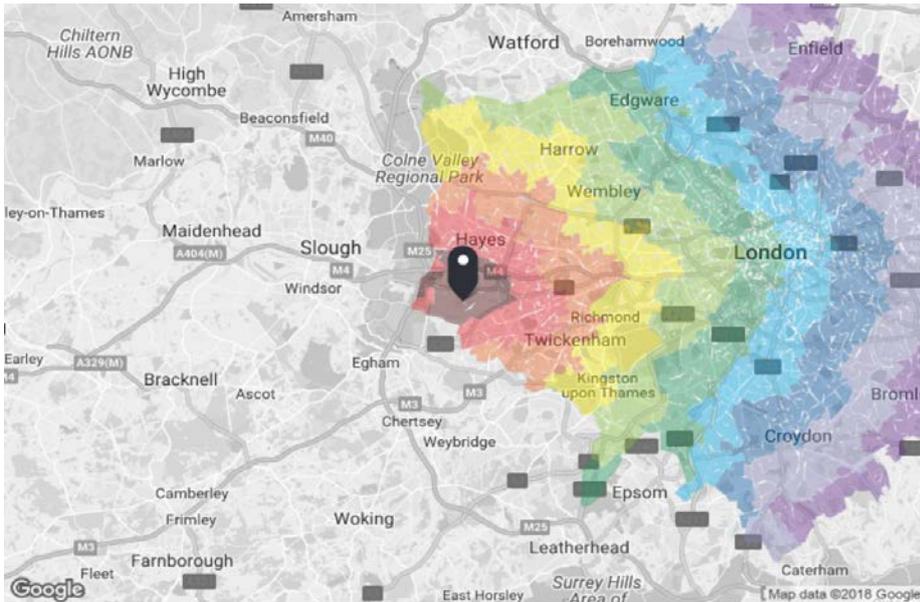
Before agreeing the scope of Transport Assessment and highway study area within EIA, TfL would need to see analysis of the sensitive network within London following the advice on the Future Baseline.

In addition to measuring direct and indirect/induced highway impacts of expansion such as congestion and air quality, the highway model also needs to be able to inform a Heathrow Airport Mode Share model with highway network travel time/cost changes.

The bus network that serves the airport is sensitive to delay caused by changes in airport traffic as well as increase passenger demand due to expansion. This is best assessed holistically – assessing impact on whole route and segments based on TfL's iBus data, which provides real time journey information along all TfL bus routes.

Increased passenger numbers can increase crowding at airport stations and elsewhere on the network (interchanges) causing impact on the wider community who use the transport system such as commuters getting to work or school or other users. Causing delays to buses increases the cost of the operation of the bus network which must be considered and mitigated. The Applicant should also work with TfL to review bus services that would serve the airport with the proposed development.

There is scant description of the study area for cycling and walking. TfL suggests the study area for cyclists should be based on isochronal data, which it publishes.

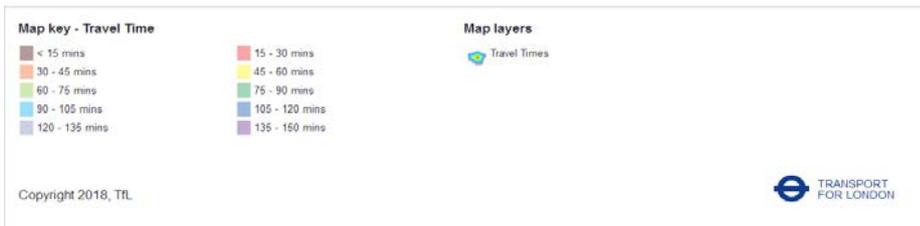


**TIM output for Base Year**

Scenario: Base Year Mode: Cycle only, Time of day: AM peak, Direction: From location

Central Terminal Area, Inner Ring W, Longford, Hounslow TW6 1BP, UK  
 Easting: 507464, Northing: 175753

Code: NWMAT001



TfL’s Cycling Network Model for London, Cynemon, should be used to assess how the scheme impacts on cycling.

**Public transport study area**

If Railplan is to be used to assess expansion, it will require greater detail and validation in the study area. TfL also recommends that the Railplan model is extended to the west of Heathrow, outside the GLA area. The exact study area should be agreed with TfL and other stakeholders.

Railplan includes the bus network in London. However, to understand the impact on bus journeys, use of TfL strategic London Highway Assignment Model (LoHAM) is required and use of iBus data to assess which routes to included in the baseline.

**Sources of data in scoping**

It is too large a task to list all the data required to be collected for the EIA, TA and SAS studies to be robust. TfL insists that all data obtained and used by the Applicant for these studies is made publically available. So far little data has been shared. This includes staff surveys (for calculating such factors as the proportion of staff who report in each day), future estimated flight profiles, stated and revealed preference surveys of passengers and staff that inform the airport mode choice model and air quality data.

TfL can advise on types of baseline condition survey needed for cycling and walking. This includes Healthy Streets assessments and specific construction related assessments such as Construction Logistics and Community Safety (CLOCS), which are nationally recognised and TfL Construction Logistics Plan Guidance published by TfL but nationally recognised and used on the Thames Tideway Project and HS2.

### **Baseline**

There will be a requirement for the Applicant to agree with stakeholders the specific surface transport interventions required to support its planning proposal. For this, in accordance with DfT WebTAG guidance, the Applicant will need to agree with its stakeholders a view on what surface transport infrastructure and operations will be like in the future, without any airport expansion. The Applicant will then test its expansion proposal on top of this agreed 'without scheme' scenario and show how it will mitigate against any impacts revealed in the 'with scheme' test.

The agreed future 'without scheme' scenario is often called a 'Core Future Baseline'. This Core Baseline will form a view against which the surface transport implications of new airport capacity can be assessed. The Applicant should also agree with stakeholders the likely future years the Core Baseline will represent, for example project completion date and subsequent years of operation, e.g. 2031, 2041 and 2051.

The baselines should consist of existing infrastructure and services, combined with those enhancements whose delivery the Applicant and stakeholders consider to be committed within the forecast timescales. Therefore the core baseline will include the Elizabeth Line, but not include schemes that are currently in a planning stage and not funded such as Western Rail Access and Southern Rail Access. WebTAG states other aspects need careful consideration such as economic growth and trends in fuel prices and car ownership. Guidance for the Technical Project Manager and TAG Unit M4 sections of WebTAG describe in detail how to construct future baseline scenarios. It is, therefore, important that the Applicant sets out in detail what the core baseline includes and excludes with justifications for the latter.

Importantly, the Applicant's future baseline should include changes in both airport and non-airport, background travel demand forecasts for London and areas outside London. For London, the GLA provides forecasts of population and employment growth which TfL uses to forecast changes in travel demand and behaviour for highway and public transport services. The Applicant should be working with TfL to obtain the relevant forecasts of London's background travel demand to inform its future baseline scenario.

There is a possibility that a future scheme may undergo an advancement in development status during the course of the planning process. Where such an event occurs, the Applicant should seek to discuss the implications with stakeholders.

Linked to agreeing the future baseline with TfL and other stakeholders, the Applicant should also agree the airport's 'area of transport influence' prior to undertaking any transport assessment or modelling work. The airport has a large geographical staff and passenger catchment area and a change in road congestion or crowding on public transport in this area

can have widespread implications as traffic and public transport passengers re-route. The future baseline scenarios will then include all planned changes within this 'area of influence'.

### **Baseline conditions**

The London road network includes the Transport for London Road Network (TLRN), which incorporates the A4 and A30, and covers over 600km of roads in London. TfL, through the Traffic Management Act 2004, also has oversight of another 600km of road known as the Strategic Road Network (SRN). TfL is also responsible for all traffic signals in London (circa 6,000) and most bus stops in London (over 8,000). TfL also regulates taxis and private hire vehicles and coaches that serve the airport. In addition there is highway for which the London boroughs and the counties and unitary authorities outside London or for which Highways England is responsible.

For rail, as well as use of Railplan, pedestrian modelling is likely to be required at the airport stations and key interchange stations that serve the airport. Therefore scope of impact is likely to include other rail lines that are not mentioned here.

As well as buses and coaches that serve the airport, the modelling will need to assess impact on routes that serve the wider community and induced growth. The Applicant needs to consider limits on coach capacity in central London.

Walking and cycling needs be considered as distinct. Taxi ranks should be considered separately from other drop-off and pick-ups, including by pre-booked private hire vehicles. Changes to taxi ranks within London including at Heathrow need TfL's approval.

### **Significant effects identified**

Issues which have not been identified which need to be considered include:

- Abnormal loads
- Collisions specifically between cyclists and HGV
- Air, light and noise pollution due to construction traffic
- Dazzle and glare increasing road danger
- Delays to buses which may increase social exclusion as well as operating costs and unreliability
- Increase severance during construction and subsequently causing community severance
- Air quality impact of construction

### **New highways**

The proposals lack detail but it clear that there are likely to be major impacts on key roads including the M25 and A4 which could include re-routing, lengthening and tunnelling. This needs detailed analysis, including capturing the construction, maintenance and operational costs for their lifecycle and how this is funded. Central to this will be understanding the function of these roads in the future and any change in land use along their route.

Increased road capacity can induce demand and traffic re-assignment, that impacts on TfL highway and bus network and its users.

### **Operators of freight, logistics, bus and taxi services**

These are other uses that could be impacted by the scheme and need to be included in the scope. Mobility impaired people, who may rely on particular part of the transport system to gain access to jobs and services, are important receptors.

As well as users of the network identified, the EIA should identify taxi users.

In terms of drivers, HGV and other goods and services vehicle drivers, bus drivers and taxi drivers should be identified – as they would be exposed to impacts on a more regular basis.

Other considerations should include:

- Highway assessment around bus, pedestrian and cycle network will need to be refined to be acceptable to TfL
- Public transport – for TfL services this will need to be agreed with TfL.
- Taxis – baseline data should include qualitative assessment; as a time-sensitive mode, it is important that taxi drivers are encouraged to serve the airport in the longer term
- Non—motorised – future baseline, as the policy context is to increase cycling and walking

### **Assessment year and data collection strategy**

The Applicant needs to explain and agree with TfL the assessment a base year.

The Data collection strategy for Transport Assessment and Transport Chapter should be agreed with TfL including the use of TfL data, which is critical to understanding the transport impact on the environment.

### **Construction and operation assessment methodology**

TfL has published up to date guidance on transport assessment, traffic modelling, design for all road users, bus services and road safety. As point of principle, where considering the operation of TfL roads and services, TfL guidance should be followed. Guidance from other authorities maybe relevant, however, how that is applied should be discussed and agreed with TfL. TfL is the Technical Approval Authority for TfL roads.

Highway network delay can be considered through strategic models for the EIA, however, TfL advice on mitigation will also require junction and microsimulation area network models such LINSIG, TRANSYT and VISSIM, in order to thoroughly assess mitigation.

It is for TfL, Highways England and others to advise if the strategic models are valid to be included in the EIA. TfL would require iteration between the strategic models and local highway models. For purpose of the EIA, TfL and other parties will require convergence.

A sensitive area for TfL is TfL bus services as these serve all parts of the community. Buses use the TLRN and SRN and other borough highways and as such congestion on these routes causes harm to the operation of London and to many Londoners – including businesses and residents – who need to travel or need goods delivered. At an initial

guidance any junction that is on the TLRN, SRN or bus network that operates at more 90% capacity with the proposed development should be deemed sensitive.

### **Mitigation during construction**

TfL Construction Logistic Plan Guidance sets out how TfL expects construction to be assessed at the planning stages. TfL would need to see forecast construction traffic (workers, and materials) for the entire build programme, and will need to consider any overlaps with other major construction projects. TfL would also need to understand about lane usage and track possessions during construction of the scheme and the associated mitigation. TfL would require construction phase transport modelling for each phase of construction not just a single peak as suggested. The impacts of induced and indirect construction need also to be considered.

These should be brought together in an Outline Construction Logistics Plan. This is in accordance with advice TfL provides to developers across London and TfL's wish to identify construction impacts and mitigation as part of the early stages of planning.

### **Mitigation during operation**

TfL advice is that it should aim to reduce freight-related traffic on London roads and we would assume that other highway authorities would share this objective for their highways, leading to a net reduction overall.

Measures to encourage mode shift among passengers and staff is likely to require increased public transport capacity in the form of new rail infrastructure, bus services and bus priority as well as improved pedestrian cycle network.

### **Pedestrian and cyclists amenity and delay**

This metric for delay will need to be agreed with TfL. TfL sets maximum cycle times at signal junctions and TfL aims is to reduce pedestrian and cycle wait times at junctions.

The evidence base used for average journey times proposed is unclear and this needs justification.

TfL through its Healthy Streets approach has identified a set of criteria and methodologies to assess pedestrian and cyclist amenity. This should be applied to all roads assessed in London. The professional judgement is TfL's to make as lead experts on transport in London.

TfL recommends this approach for roads outside London as well. TfL provides training on the application of this approach.

### **Public transport amenity**

For TfL services, TfL sets a level of service criteria which should be applied. The professional judgement again is TfL's to make, based on TfL's expertise as an operator of London's public transport system.

### **Magnitude, Sensitivity and Significance**

TfL recommends using qualitative and quantitative assessment methods proposed by TfL and working with TfL to identify magnitude of effect.

**Collision data**

For the Mayor of London and TfL there is no acceptable level of death or serious casualties on our networks. Therefore, where changes are proposed to the London road network, the Applicant will need to show how it will reduce the risk of death and serious injuries to zero in accordance with Mayoral policy. The professional judgement is TfL's to make on our network.

**From:** [Rupy Sandhu](#)  
**To:** [Heathrow Western Hub](#)  
**Subject:** RE: TR020004 – Heathrow Western Hub – EIA Scoping Notification and Consultation / Reg 11 Notification  
**Date:** 11 March 2019 11:19:41

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Dear Sir/Madam,

I can confirm that West Sussex County Council has no comments to make on the information to be provided in the ES.

Kind regards,

Rupy

**Rupy Sandhu**

Principal Planner - Planning Policy and Infrastructure, Planning Services | Economy, Planning and Place Directorate

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**From:** Heathrow Western Hub [mailto:HeathrowWesternHub@planninginspectorate.gov.uk]  
**Sent:** 15 February 2019 14:53  
**To:** info@westsussex.gov.uk  
**Cc:** Rupy Sandhu  
**Subject:** TR020004 – Heathrow Western Hub – EIA Scoping Notification and Consultation / Reg 11 Notification

Dear Sir/Madam

Please see attached correspondence on the proposed Heathrow Western Hub.

Please note the deadline for consultation responses is 15/03/2019 and is a statutory requirement that cannot be extended.

Kind regards

Major Casework Directorate

The Planning Inspectorate, Temple Quay House, Temple Quay, Bristol, BS1 6PN

Twitter: @PINSgov

Helpline: 0303 444 5000

Email: [HeathrowWesternHub@planninginspectorate.gov.uk](mailto:HeathrowWesternHub@planninginspectorate.gov.uk)

Web: <http://infrastructure.planninginspectorate.gov.uk> (National Infrastructure Planning website)

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## WRAYSBURY PARISH COUNCIL

### Response to the Heathrow Western Hub Scoping Report

#### Introduction

It has long been the Council's position that a third runway at Heathrow is inappropriate because of its significant negative impact on the local infrastructure and increased pollution, particularly NO<sub>x</sub>, increased noise levels and that a second runway at Gatwick would be a better alternative. We also consider that the consultative process is seriously flawed in that just over four weeks is far too short a time to give a considered response to a 600 page document and the relevant statute needs to be revisited. We have, therefore, confined our response to major areas of concern set out below.

#### 1.Flooding

This is a particularly sensitive issue for the Parish of Wraysbury as a result of flooding in the Parish in 2003 and 2014. The proposed development will result in changes to local watercourses. It is very important to this Parish that the effect of those changes to the water table and other watercourses be carefully investigated to see whether or not there is any likelihood of an increase in the flood risk in the Parish and how big that risk, if any, is. The River Colne Brook is especially important in this context.

#### 2.Infrastructure

We appreciate that this Scoping Report does not relate to changes to the M25. However, there do appear to be anticipated changes to local roads. The report needs to analyse whether there are likely to be any impact on traffic on roads within and adjacent to the Parish, particularly the B376, A30 and Stanwell Road.

#### 3.Wildlife

Within the Parish there are several protected sites for migratory birds. The Scoping Report needs to investigate whether or not the proposed development will have any impact on the migration patterns of the protected birds.

#### 4.Pollution

It is especially important that the environmental impact of pollutants is carefully examined, in particular the likely changes to NO<sub>x</sub> levels.