



# **SCOPING OPINION:**

## **Proposed M60/M62/M66 Simister Island Interchange**

**Case Reference: TR010064**

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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

**August 2021**

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# 1. INTRODUCTION

## 1.1 Background

- 1.1.1 On 02 July 2021, the Planning Inspectorate (the Inspectorate) on behalf of the Secretary of State (SoS) received a scoping request from Highways England (the Applicant) under Regulation 10 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) for the proposed M60/M62/M66 Simister Island Interchange (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 M60/M62/M66 Simister Island Environmental Scoping Report (the Scoping Report). The Applicant also provided the scoping information in a digital format as a web-based interactive report.
- 1.1.4 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.
- 1.1.5 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.
- 1.1.6 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.*
- 1.1.7 This Opinion has taken into account the requirements of the EIA Regulations as well as current best practice towards preparation of an ES.
- 1.1.8 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).
- 1.1.9 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).

- 1.1.10 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.
- 1.1.11 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.*
- 1.1.12 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.
- 1.1.13 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)*'.
- 1.1.14 As set out at paragraphs 5.5.2, 6.3.25 and 9.7.7 – 9.7.8 of the Scoping Report, the Inspectorate notes the potential need to carry out an assessment under The Conservation of Habitats and Species Regulations 2017 ('the Habitats Regulations') (HRA) as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Any HRA must be co-ordinated with the EIA in accordance with Regulation 26 of the EIA 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.

## **2. THE PROPOSED DEVELOPMENT**

### **2.1 Introduction**

2.1.1 The following is a summary of the information on the Proposed 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.

### **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 Chapter 2 of the Scoping Report.

2.2.2 The proposed junction improvement works are located at Junction 18 of the M60 motorway (M60 J18, commonly known as 'Simister Island'), north of Manchester as shown in Figure 1.1 of the Scoping Report. M60 J18 provides the interchange between the M60, M62 and M66 motorways to the north of Manchester, connecting areas within Greater Manchester, Lancashire and Leeds. The Proposed Development falls within the administrative boundary of Bury Metropolitan Borough Council (BMBC) and is close to Rochdale Borough Council (RBC), Salford City Council (SCC) and Manchester City Council (MCC).

2.2.3 Within the Greater Manchester City Region, it has been predicted there will be over 55,000 additional homes and 50,000 additional jobs by 2031 leading to extra pressures on the M60 J18. Both employment and residential developments are proposed in the vicinity of M62 Junction 19 and other road developments and improvements are also proposed as part of the Manchester North-West Quadrant (MNWQ) scheme. The wider objectives of the Proposed Development are set out in section 2.2 of the Scoping Report, primarily supporting these employment and residential development opportunities and improving the operation and efficiency of the existing transport network.

2.2.4 The Proposed Development is situated between several urban areas and settlements including Whitefield, Prestwich, Simister and Middleton in an 'urban fringe' landscape, with settlements to the west, north and south and predominantly low-lying Grade 3/4 agricultural land to the east. The majority of the Proposed Development site area falls within the Green Belt boundary, albeit in the context of the existing motorway network and urban areas. The locational context of the Proposed Development is set out further in section 2.3 of the scoping report.

2.2.5 Environmental constraints to the Proposed Development are set out in respective environmental aspect chapters of the Scoping Report, and these matters are considered further (as relevant) in section 4 of this Opinion. However, paragraphs 2.3.6 – 2.3.10 set out some of the key environmental designations and features close to the Proposed Development including Local Nature Reserves (LNR), Ancient Woodland Inventory (AWI) sites, Prestwich



Country Park, Heaton Park Registered Park and Garden and numerous main rivers and surface watercourses within 1km (as well as the important Haweswater Aqueduct underbridge). The Proposed Development is also located within an Air Quality Management Area (AQMA) and there are several Noise Important Areas (NIAs) covering J17 and J18 and sections of the adjacent motorways.

2.2.6 Section 2.4 and figure 2.1 of the Scoping Report set out the key elements of the Proposed Development:

- M60/M62 Mainline J17-J18 – upgrades of existing motorway to dual 5-lane motorway (D5M) with All Lane Running (ALR);
- Creation of a new free flow link (“the Northern Loop”) for M60 eastbound to M60 southbound (including 3-span structure and a single-span structure to carry the new link over the M66);
- Alterations to the existing alignment of:
  - M66/M60 mainline;
  - M66 southbound;
  - M60 eastbound to M66 northbound;
  - M60 northbound to M60 westbound;
  - M62 westbound to M60 southbound;
  - M60 J18 circulatory carriageway; and
- Six new overhead gantries (likely to be steel lattice type).

2.2.7 Paragraphs 2.4.8 – 2.4.21 of the Scoping Report provide additional details as to provisions for pedestrians, watercourse crossings, drainage design, lighting, ALR technologies, utilities diversions and other environmental design aspects of the Proposed Development.

2.2.8 Section 2.5 of the Scoping Report describes a phased construction programme of up to 3 years, with an opening date in 2027. This comprises elements of ‘online’ (working on and directly adjacent to the existing motorway) and ‘offline’ (located remotely from the road alignment) works.

## 2.3 The Planning Inspectorate’s Comments

### Description of the Proposed Development

2.3.1 The Inspectorate notes references in section 2.4.3 that “*the source of potential material for earthworks has not yet been determined*” and that “*there is still expected to be a significant shortfall of material, estimated at approximately 163,000m<sup>3</sup>. Various options will be explored to obtain this material from local sources, including other nearby construction projects which have a surplus of suitable fill, as well as local quarries*”. The ES should describe the land use requirement of the Proposed Development and the nature and quantity of materials and natural resources to be used during construction and operation, including water, land, soil and biodiversity. This should include materials to be

imported (and their source), exported, excavated or stored on site and a description of any topographical and landscape changes as a result of the Proposed Development.

- 2.3.2 The Inspectorate also notes the current uncertainty in the locations for the main construction compound and smaller satellite compounds, with the state locations only "*likely to be*" those stated. The ES should present fixed locations and specifications for these compounds or otherwise present an assessment of effects of specified options that are under consideration and for which consent is sought under the DCO.
- 2.3.3 The Proposed Development "*would result in an additional paved area of approximately 1.27ha, which would require additional attenuation storage to reduce the risk of flooding*". It is explained that this additional increase would be met by balancing ponds, ditches, swales or online storage in pipes. The description of the Proposed Development in the ES should clearly define and identify the locations and parameters of such features as part of the description of the design so that they can be properly considered across relevant aspects of the ES.
- 2.3.4 Paragraph 5.2.4 of the ES defines the assumptions around 'opening year' and 'design year' for the purpose of the construction and operational assessment in the EIA. No reference is made in the EIA scoping report to the design life of the Proposed Development or any approach to the assessment of effects of decommissioning. The Inspectorate understands that the road would likely remain a permanent and integral part of the strategic road network, but the approach to the assessment of decommissioning should be set out in the ES.

### **Alternatives**

- 2.3.5 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'.
- 2.3.6 The Inspectorate acknowledges the Applicant's intention to consider alternatives within the ES, and that an outline of such considerations to date is provided in chapter 3 of the Scoping Report. The ES will provide a full description of the alternatives considered and should include justification as to why the preferred options were selected taking into account environmental effects.

### **Flexibility**

- 2.3.7 The Inspectorate notes the Applicant's desire to incorporate flexibility into their draft DCO (dDCO) and its intention to apply a Rochdale Envelope approach for this purpose, as set out in section 2.6 of the Scoping Report. 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'<sup>1</sup> in this regard.

- 2.3.8 However, 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 should 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.
- 2.3.9 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.

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<sup>1</sup> Advice Note nine: Using the Rochdale Envelope. Available at:  
<https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/>

## **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>2</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 consultation bodies 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 dDCO requirements (or other suitably robust methods) and whether relevant consultation bodies 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 in respect of the Proposed Development is the NPS for National Networks (NPSNN).

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<sup>2</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/>

### 3.3 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;
  - Identify and collate the residual effects after mitigation for each of the aspect chapters, including the relevant interrelationships and cumulative effects;
  - Set out the proposed mitigation and/ or monitoring measures including cross-reference to the means of securing such measures (eg a dDCO requirement);
  - Describe any remedial measures that are identified as being necessary following monitoring; and
  - Identify where details are contained in the Habitats Regulations Assessment (HRA report) (where relevant), such as descriptions of National Site Network sites and their locations, together with any mitigation or compensation measures, that inform the findings of the ES.
- 3.3.2 The Inspectorate considers that where a DCO application includes works described as 'Associated Development', that could themselves be defined as an improvement of a highway, the Applicant should ensure that the ES accompanying that application distinguishes between; effects that primarily derive from the integral works which form the proposed (or part of the proposed) NSIP and those that primarily derive from the works described as Associated Development. This could be presented in a suitably compiled summary table. This will have the benefit of giving greater confidence to the Inspectorate that what is proposed is not in fact an additional NSIP defined in accordance with s22 of the PA2008.

#### Baseline Scenario

- 3.3.3 The ES should 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.
- 3.3.4 In light of the number of ongoing developments within the vicinity of the Proposed Development site, the Applicant should clearly state which developments will be assumed to be under construction or operational as part of the future baseline. The Inspectorate makes these comments particularly in respect of the "*Significant road developments and improvements*" proposed as part of the Manchester North-West Quadrant (MNWQ) scheme and the 55,000 additional homes and 50,000 additional jobs by predicted by 2031 within the Greater Manchester City Region. The ES should distinguish between developments in the future baselines that form part of any cumulative impact assessment or are inherent in traffic forecasting and any other assumptions.

### **Forecasting Methods or Evidence**

- 3.3.5 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.
- 3.3.6 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.
- 3.3.7 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**

- 3.3.8 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.

### **Mitigation and Monitoring**

- 3.3.9 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 dDCO requirements or other legally binding agreements, particularly making clear distinctions between mitigation that is assumed as embedded in the design and any proposed as additional measures in response to significant adverse effects identified.
- 3.3.10 There are also references to a "*1<sup>st</sup> Iteration of the Environmental Management Plan (EMP)*" being provided as part of the Application, containing all measures, including a Register of Environmental Actions and Commitments (REAC). Although the Inspectorate acknowledges that the 1<sup>st</sup> iteration EMP will provide framework for the future production of a "*more detailed 2<sup>nd</sup> Iteration*", the EMP that supports the DCO Application should be sufficiently detailed so as to understand the reliance being placed upon it as mitigation in avoiding potentially significant adverse effects.
- 3.3.11 The ES should identify and describe any proposed monitoring of significant adverse effects and how the results of such monitoring would be utilised to inform any necessary remedial actions.

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

- 3.3.12 Paragraphs 5.2.9 – 5.2.13 of the Scoping Report sets out the Applicant's approach to consideration of major accidents and disasters. The Applicant has undertaken a risk assessment in Appendix C to the Scoping Report, concluding that there are two residual risks remaining that would need to be addressed through the design of the Proposed Development;
- Inland floods; and
  - Mass movements and ground hazards.
- 3.3.13 The Inspectorate notes that consideration of these matters will be given in the following proposed chapters within the ES:
- Chapter 10: Geology and Soils
  - Chapter 13: Population and Human Health
  - Chapter 14: Road Drainage and the Water Environment; and
  - Chapter 15: Climate.
- 3.3.14 The Inspectorate acknowledges the assessment provided in Appendix C of the Scoping Report and is content that the ES does not need to include a standalone major accidents and/or disaster aspect chapter, on the basis that such impacts which have the potential for significant effects are to be assessed in the relevant aspect chapters.
- 3.3.15 The ES should ensure that the consideration of major accidents and/or events reflects the Proposed Development for which development consent is being sought, acknowledging that some of these matters will be addressed through further design iteration post-EIA scoping.
- 3.3.16 The Applicant should make use of appropriate guidance (e.g. that referenced in the Health and Safety Executives (HSE) Annex to the Inspectorate's 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. Any measures that will be employed to prevent and control significant effects should be presented in the ES.
- 3.3.17 Relevant information available and obtained through risk assessments pursuant to national legislation may be used for this purpose. 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.

### **Climate and Climate Change**

- 3.3.18 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) and the vulnerability of the project to climate change. This is acknowledged by the Applicant at Chapter 15 of the Scoping Report. 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. Further comments on this aspect are provided in section 4.10 of this Scoping Opinion.

### **Transboundary Effects**

- 3.3.19 Schedule 4 Part 5 of the EIA Regulations requires a description of the likely significant transboundary effects to be provided in an ES.
- 3.3.20 Paragraphs 5.2.16 – 5.2.18 and Appendix D of the Scoping Report set out the Applicant’s position that the Proposed Development is not likely to have significant effects on a European Economic Area (EEA) State.
- 3.3.21 Having considered the nature and location of the Proposed Development as set out in the Scoping Report, the Inspectorate is not aware that there are potential pathways of effect to any EEA states.

### **A Reference List**

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

## **3.4 Coronavirus (COVID-19) Environmental Information and Data Collection**

- 3.4.1 The Inspectorate understands government enforced measures in response to COVID-19 may have consequences for an Applicant’s ability to obtain relevant environmental information for the purposes of their ES. The Inspectorate understands that conducting specific surveys and obtaining representative data may be difficult in the current circumstance.
- 3.4.2 The Inspectorate has a duty to ensure that the environmental assessments necessary to inform a robust DCO application are supported by relevant and up to date information. Working closely with consultation bodies, the Inspectorate will seek to adopt a flexible approach, balancing the requirement for suitable rigour and scientific certainty in assessments with pragmatism in order to support the preparation and determination of applications in a timely fashion.
- 3.4.3 Applicants should make effort to agree their approach to the collection and presentation of information with relevant consultation bodies. In turn the Inspectorate expects that consultation bodies will work with Applicants to find suitable approaches and points of reference to allow preparation of applications at this time. The Inspectorate is required to take into account the advice it receives from the consultation bodies and will continue to do so in this regard.



- 3.4.4 The ES should include information to demonstrate how such further engagement has been undertaken and how it has influenced the scope of the assessments reported in the ES. The Applicant recognises these needs in paragraph 5.3.5 of the Scoping Report. The ES should clearly state where restrictions have impacted on proposed survey effort, the revised approach and any limitations to the assessment of likely significant effects.

### **3.5 Confidential and Sensitive Information**

- 3.5.1 In some circumstances it will be appropriate for information to be kept confidential. In particular, this may relate to personal information specifying the names and qualifications of those undertaking the assessments and / or 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.
- 3.5.2 Where documents are intended to remain confidential the Applicant should provide these as separate documents with their confidential nature clearly indicated in the title and watermarked as such on each page, and a narrative as to the particular nature of sensitivity of the information. 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.
- 3.5.3 The Inspectorate adheres to the data protection protocols set down by the Information Commissioners Office<sup>3</sup>. Please refer to the Inspectorate's National Infrastructure privacy notice<sup>4</sup> for further information on how personal data is managed during the Planning Act 2008 process.

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<sup>3</sup> <https://ico.org.uk>

<sup>4</sup> <https://www.gov.uk/government/publications/planning-inspectorate-privacy-notice>

## 4. ASPECT BASED SCOPING TABLES

### 4.1 Air Quality

(Scoping Report Section 6)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.1.1	Paragraphs 6.2.1 and 6.4.2	Air quality effects of changes in road traffic during construction	<p>Paragraph 6.2.1 states <i>"it is assumed that road traffic assessment of changes in road traffic during construction is scoped out"</i>.</p> <p>Paragraph 6.4.2 appears to be contradictory, stating that <i>"construction traffic screening will be undertaken for the worst-case construction year as per DMRB LA 105...it is unlikely that any road will meet the screening criteria and therefore further assessment is likely to be scoped out"</i>. The same paragraph also states that <i>"a construction traffic assessment should be completed if the construction duration is longer than 2 years"</i>.</p> <p>For the avoidance of doubt (and as the construction traffic screening exercise remains to be carried out), the Inspectorate does not agree that this matter can be scoped out of the assessment at this stage.</p>
4.1.2	Table 6.3	Construction dust during operation	The Inspectorate agrees that the assessment of construction dust effects on human and ecological receptors is, by definition, limited to the construction phase and that this matter can be scoped out.
4.1.3	Paragraph 6.7.4	Modelling of PM <sub>2.5</sub> concentrations	The Applicant states that as per DMRB LA 105 paragraph 2.21.4, it is not proposed to model PM <sub>2.5</sub> concentrations. The DMRB paragraph in question states that <i>"modelling of PM10 can be used to demonstrate the project does not impact on the PM2.5 air quality threshold"</i> .

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			<p>Whilst the definition of the Affected Road Network (ARN), Traffic Reliability Area (TRA) and subsequent detailed modelling of PM<sub>10</sub> are to be confirmed and undertaken at a later stage in the EIA process, the Inspectorate does not agree that significant effects in terms of PM<sub>2.5</sub> increases can be entirely discounted at this stage.</p> <p>The ES should therefore demonstrate how PM<sub>10</sub> modelling allows significant effects in terms of PM<sub>2.5</sub> to be discounted or otherwise provide an assessment of such effects.</p>

ID	Ref	Other points	Inspectorate's comments
4.1.4	Figure 6.1	Affected Road Network (ARN)	<p>Figure 6.1 appears to show the alignment of the "Stage 2 Affected Road Network" nodes being somewhat distant from the actual alignments of the road as shown on the base map. This then potentially affects the inclusion / identification of receptors within the 200m buffer zone.</p> <p>The ES should present how the modelled nodes are more accurately representative of the road network and sensitive / representative human health and ecological receptors depicted on the same plan.</p>
4.1.5	Paragraph 6.2.3	Traffic Reliability Area (TRA)	<p>The ES should clearly present and define the extents of both the TRA (extent of the traffic model) and the ARN, particularly where the ARN extends beyond the TRA. The additional traffic data used to screen in additional links into the assessment of air quality effects (ie the ARN) should be referenced and justified as being fit for purpose in effectively necessitating and supporting an extension to the TRA.</p>

ID	Ref	Other points	Inspectorate's comments
			<p>These additional ARN links should be considered in terms of sensitive human health and ecological receptors.</p>
4.1.6	Figure 6.3	Extent of Greater Manchester AQMA	<p>Figure 6.3 shows an "AQMA study area" which is not defined in the text. It appears to show the extent of the ARN within the AQMA but does not show the AQMA in its entirety.</p> <p>The "AQMA study area" should be separately defined in the ES and the extents of the Greater Manchester AQMA shown in the context of the ARN and the DCO application site boundary as part of the assessment of significance of effects on the AQMA.</p>

## 4.2 Cultural Heritage

(Scoping Report Section 7)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.2.1	Paragraph 7.4.9, 7.4.10 and Table 7.2	Physical impacts on historic buildings and archaeological remains during operation.	<p>The Applicant concludes there is limited potential for significant physical impacts on historic buildings and archaeological remains during operation.</p> <p>Previously unknown archaeological assets that may be present within the footprint of the Proposed Development will be assessed as part of the construction phase assessment. Effects on setting of historic buildings will be assessed as part of the operational assessment.</p> <p>On this basis, the Inspectorate agrees that physical impacts on historic buildings and archaeological remains during operation can be scoped out.</p>
4.2.2	Table 7.3	New land take associated with the project	<p>Limited detail is given as to what is sought to be scoped out under a generic reference to "new land take" and the chapter goes on to state that further investigation of previously undeveloped areas will be carried out.</p> <p>For the avoidance of doubt, the Inspectorate does not agree that effects on archaeological remains due to new land take can be scoped out at this stage and that such matters should be considered as part of the construction phase assessment.</p>

ID	Ref	Other points	Inspectorate's comments
4.2.3	Paragraph 7.4.2	Potential physical impacts	<p>Whilst it is noted that there are no designated or non-designated historic buildings within the Proposed Development site boundary, Figure 7.1 indicates that there are a number of non-designated historic buildings immediately adjacent to the boundary, and therefore may be subject to construction works in close proximity. The ES should consider the effects of vibration or other construction activities on these non-designated assets immediately adjacent to the site boundary, in addition to the dewatering listed within paragraph 7.4.2.</p>
4.2.4	Paragraph 7.5.2	Archaeological mitigation	<p>Paragraph 7.5.2 states that additional mitigation is likely to include a programme of archaeological investigation and recording, prior to commencement of construction. Paragraph 7.7.5 states that trial trenching is considered but it is not clear whether this will inform the assessment in the ES or will be undertaken prior to construction. Where intrusive surveys have not been undertaken, the ES should appraise the limitations in the methodology in the absence of this data and set out how any mitigation measures that are to be agreed post-consent have been relied upon as part of the assessment of significance of effects.</p> <p>Any outline archaeological scheme of investigation should be agreed with the relevant local authority, and where required Historic England, in advance of works being undertaken.</p>
4.2.5	Paragraph 7.5.3	Archaeological mitigation	<p>Paragraph 7.5.3 states that enhancement measures could include provision of interpretation boards at key sites. Based on the location of known archaeological remains, consideration should be given as to whether public access is possible in these locations, and therefore the value / benefit of any interpretation boards may be questionable.</p>

ID	Ref	Other points	Inspectorate's comments
			The ES should also confirm the mitigation measures to be adopted in the event of discovery of archaeological remains of importance, either during pre-construction surveys or during construction.

## 4.3 Landscape and Visual

(Scoping Report Section 8)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.3.1	Paragraph 8.3.5	Conservation areas	<p>Paragraph 8.3.5 states that "<i>there are three Conservation Areas within the study area, located between 400m and 900m from the M60...The location of the Conservation Areas are beyond the influence of the Proposed Scheme and have therefore been scoped out of the LVIA</i>". Paragraph 8.2.11 explains that the LVIA study area will focus on potentially significant effects within a 2km radius.</p> <p>Figure 8.2 of the Applicant's interactive Scoping Report appears to show a total of 21 conservation areas as being 'Scoped In' on the basis that they are "Located within [the] overarching 5km study area". This would appear to contradict the Applicant seeking to scope out assessing effects on conservation outside of the 2km study area.</p> <p>Given the nature and location of the Proposed Development, the Inspectorate agrees that conservation areas outside of 2km from the Proposed Development are unlikely to be significantly affected and that this matter can be scoped out.</p>
4.3.2	Paragraph 8.7.11	Effects on the night sky	<p>Based on the existing environment (ie the presence of the M60 J18, wider motorway network and surrounding urban environments) the Inspectorate agrees that an assessment of effects on the night skies in their own right is not required. In addition, no dark skies have been identified by CPRE within the study area and that night-time changes for landscape and visual receptors will be considered as part of the construction and operational assessments.</p>



ID	Ref	Other points	Inspectorate's comments
4.3.3	Paragraph 8.3.29	Key receptors	Figure 8.2 details that the Proposed Development is partially located within an area of green belt, however the approach to the assessment of greenbelt is not referenced anywhere within Chapter 8 of the Scoping Report (other than paragraph 8.3.4). The Inspectorate considers that the effect of increased urbanisation / built form on the Green belt should be considered within the ES.
4.3.4	Paragraph 8.4.11	Mature vegetation	Paragraph 8.4.11 of the Scoping Report identifies the loss of mature vegetation. The ES should clarify the definition of mature vegetation, and confirm whether any ancient woodland or veteran trees are to be affected by the Proposed Development (with cross reference to any arboricultural assessment) plus any assumptions made in that regard in relation to year 1 and year 15 assessments of effects. Although the legend on figure 8.2 shows sub-categories of woodland within " <i>Existing Significant Woodland Belts</i> ", there are no categories showing ancient woodland or veteran trees.
4.3.5	Paragraph 8.8.6	Screening effects of existing and proposed vegetation	<p>Justification should be provided as the validity of the assumption that the screening or filtering effect of existing vegetation outside the Proposed Development boundary will be as per its 'current condition', and at what point the 'current condition' will be defined for the purposes of the assessment.</p> <p>Whilst the Inspectorate appreciates that the management and retention of such vegetation is outside the control of the Applicant, key assumptions in this respect should be clearly set out such that the implications for the assessment of effects of the Proposed Development can be understood.</p>

## 4.4 Biodiversity

(Scoping Report Section 9)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.4.1	Table 9.4	Effects on European designated sites (SAC, SPA and Ramsar) and Sites of Special Scientific Interest (SSSI)	<p>There are no European sites or SSSI within 2km of the Proposed Development and no pathways of effect during the construction of the Proposed Development have been identified.</p> <p>As set out in item 4.1.1 of this Scoping Opinion, the Inspectorate does not agree that air quality effects of changes in road traffic during construction can be scoped out whilst the traffic screening exercise remains to be carried out. On this basis, the Inspectorate considers that there could be effects on the Rochdale Canal SAC and SSSI.</p> <p>For all other European sites and SSSI and other pathways of effect (with the exception of air quality), the Inspectorate agrees that these can be scoped out of the assessment of effects during construction.</p>
4.4.2	Table 9.4	Effects on National Nature Reserves (NNR) during construction and operation	No NNR have been identified within the study area or within 2km of the site or ARN. The Inspectorate agrees that these matters can be scoped out of the assessment.
4.4.3	Table 9.4	Introduction or spread of invasive non-native species (INNS) during operation	Paragraphs 9.4.8 and 9.4.24 explain that potential for INNS effects during construction will be considered. However, the Inspectorate agrees that significant effects during operation are not likely and that this matter can be scoped out of the assessment.
4.4.4	Paragraph 9.4.25	Specific surveys for water vole, great crested newt and white-clawed crayfish.	The Applicant states that " <i>Species scoped in for further assessment at this stage may be scoped out in future if the value assigned to them is reduced following additional surveys and data collection. Receptors</i>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			<p><i>will only be scoped out following consultation and agreement with statutory bodies".</i></p> <p>Paragraphs 9.3.10 – 9.3.12 identify protected and notable species within the study area, but that <i>"2021 surveys are ongoing and data sets are not sufficiently complete to contribute to this scoping report"</i>.</p> <p>The Inspectorate draws the Applicants attention to comments made in paragraphs 3.1.3 - 3.1.4 of this Scoping Opinion. Where matters are scoped in at this stage but later scoped out, further evidence which has been gathered to justify that approach should be clearly cited alongside agreement with relevant consultees and presented as part of the ES.</p>

ID	Ref	Other points	Inspectorate's comments
4.4.5	Paragraph 9.6.1	Habitats that will be lost	<p>Chapters 10 and 15 of the Scoping Report (sections 4.5 and 4.10 of this Scoping Opinion) describe the potential presence of localised peat deposits within the study area, and their potential removal. The ecological / biodiversity value of peat as a resource is not specifically considered as part of Chapter 9 of the Scoping Report, nor is the potential loss of peat (and any mitigation that may or may not be required) described as part of the scope of the biodiversity assessment.</p> <p>The biodiversity chapter of the ES should therefore specifically outline the potential ecological significance of effect of peat loss. In this regard the Inspectorate would expect cross reference to the assessments of Geology and Soils, Water Environment and Climate as appropriate.</p>

ID	Ref	Other points	Inspectorate's comments
4.4.6	Paragraph 9.7.7	Habitats Regulations Assessment (HRA)	<p>Paragraphs 9.7.7 – 9.7.8 of the Scoping Report note the potential need to carry out a HRA. There are other sections of the Scoping Report which refer to HRA and which appear to be somewhat contradictory. Paragraph 5.5.2 seemingly concludes that there would be no likely significant effects on any European sites, whereas paragraphs 6.3.25, 9.7.7 and 9.7.8 identify the Rochdale Canal SAC as requiring further consideration as part of the assessment of air quality effects.</p> <p>The ES should be clear in establishing pathways of effect to European sites and ensure that any HRA is co-ordinated with the EIA in accordance with Regulation 26 of the EIA Regulations.</p>

## 4.5 Geology and Soils

(Scoping Report Section 10)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.5.1	Paragraphs 10.4.1 and 10.4.14 and Table 10.2	Impacts to Geological receptors during construction and operation	<p>Impacts to geology are proposed to be scoped out on the basis that no sensitive geological receptors are identified within the study area.</p> <p>Considering the baseline geological information presented, and the description of the Proposed Development, the Inspectorate is content that this matter can be scoped out.</p>
4.5.2	Paragraph 10.4.15	Impacts to Soils during operation	<p>On the basis that impacts to soil will be assessed during construction (as permanent and temporary losses), the Inspectorate considers that effects on soils during operation can be scoped out.</p>
4.5.3	Paragraph 10.4.17	Impacts to Human Health during operation	<p>This matter is proposed to be scoped out as contamination is anticipated to be removed during construction therefore, contact with contamination from residents or construction workers during operation is unlikely to occur. Additionally, site-specific risk assessments and method statements will reduce exposure. The Inspectorate agrees to this matter being scoped out, with the exception of ground gas as set out below.</p> <p>However, impacts are scoped in for maintenance and residential properties located in close proximity to the Proposed Development due to the possibility of being affected by ground gas during operation. Elaboration on this is not provided.</p> <p>The ES should explain the type, extent and sources of ground gas contamination anticipated during operation and assess the significant</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			effects on receptors likely to be impacted by it. Any appropriate mitigation should be detailed and secured via the dDCO.
4.5.4	Paragraphs 10.4.18 and 10.4.19	Impacts to surface water and groundwater from contaminated land during operation.	Operational effects on surface water and groundwater from contaminated land are scoped out of further assessment on the basis that potential contaminated land linkages would have been assessed as part of the construction phase assessment and contaminated land would only be disturbed during construction.  The Inspectorate is content that this matter can be scoped out of the operational assessment.

ID	Ref	Other points	Inspectorate's comments
4.5.5	Paragraphs 10.4.10, 10.4.12, 10.6.1 and 10.8.2	Ground investigations	There are multiple references to a programme of ground investigations leading to production of a Ground Investigation (GI) report in Chapter 5 and Chapter 10 of the Scoping Report. Paragraph 10.5.2 states that a GI is to be completed in 2021. The Inspectorate understands that a GI report will be provided in support of the Application and as part of the ES.  The scope of the assessment presented in Chapter 10 of the Scoping Report is, in many places, caveated by the statement that no ground investigation data were available at the time of preparing the report (e.g. paragraphs 10.4.10, 10.4.12 and 10.6.1).  The location, extent and method of the proposed GI should be described in the ES and be supported by relevant figures. Effort should be made to agree these surveys with the relevant consultation bodies so as to ensure a robust baseline from which to assess the significance of effects. The ES should also be clear about any

ID	Ref	Other points	Inspectorate's comments
			<p>additional ground investigation that may be proposed as mitigation and which is to be delivered post-consent.</p> <p>Where "<i>ground investigation data are unavailable at the time of drafting the Environmental Statement</i>" (paragraph 10.8.2), the assessment should be clear as to methodological assumptions and inherent limitations and implications for the confidence of the assessment of residual effects.</p>

## 4.6 Material Assets and Waste

(Scoping Report Section 11)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.6.1	Paragraph 11.4.10	Impacts to Mineral Safeguarding Sites during construction	<p>The mineral safeguarding areas (MSA) identified in the study area are not resources that could be worked/extracted and therefore do not meet criteria to be defined as Mineral Safeguarding Sites required to be assessed by definition in DMRB LA110; this is supported through consultation with Greater Manchester Minerals and Waste Planning Unit and the Coal Authority detailed in Scoping Report paragraph 11.4.10.</p> <p>On this basis, the Inspectorate is content that impacts to MSAs can be scoped out.</p>
4.6.2	Paragraphs 11.4.8 and 11.4.10	Impacts to Peat deposits during construction	<p>The Applicant states that peat deposits present within the study area are not existing or potential peat extraction sites in terms of peat as material asset / resource.</p> <p>On the basis of the information provided, the Inspectorate agrees to scope out impacts to peat deposits as a material asset / resource. Comments have been made elsewhere in this Scoping Opinion about potential impacts on peat in terms of biodiversity, soils, carbon emissions and in terms of drainage.</p>
4.6.3	Paragraphs 11.4.11 to 11.4.15	Operational impacts (all material assets and waste)	<p>These matters are proposed to be scoped out of the assessment on the basis that maintenance activities would be undertaken in accordance with the requirements of DMRB LA110 and are not expected in the first year of operation (timescale defined by DMRB</p>



ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			LA110) or beyond. The Inspectorate is content to agree to scope this matter out on this basis.

ID	Ref	Other points	Inspectorate's comments
4.6.4	n/a	n/a	n/a

## 4.7 Noise and Vibration

(Scoping Report Section 12)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.7.1	Paragraph 12.4.11 and Table 12.2	Operational vibration	On the basis that the maintained road surface once complete will be free of irregularities under general maintenance provisions, the Inspectorate agrees that operational vibration can be scoped out of the ES due to the low likelihood of long-term significant effects. The Inspectorate also notes the presence of the existing road network in terms of future baseline conditions.

ID	Ref	Other points	Inspectorate's comments
4.7.2	Section 12.2 and paragraph 12.2.4	Study areas	<p>Figure 12.1 and section 12.2 refers to "<i>three study areas</i>" that are "<i>generally sufficient for most projects</i>". It is also stated that the assessment "<i>will not be limited to these distances if it is considered there is a risk of likely significant effects beyond 100m for construction vibration, 300m for construction noise, or 600m for operational noise</i>".</p> <p>The ES should provide a clear definition of the individual study areas and set out where potential for likely significant effects has been assessed beyond the "generally sufficient" study areas and the locationally specific circumstances under which additional receptors are considered beyond those areas.</p>
4.7.3	Paragraph 12.3.8	Existing noise barriers	Reference is made to the presence of existing noise mitigation along some sections of the M60 and M66, but that further details of

ID	Ref	Other points	Inspectorate's comments
			<p>location, length and height of these barriers are needed to inform the assessment.</p> <p>The ES should be clear about any assumptions made within the assessment and how they are taken into account at part of any modelling (eg assumptions around efficacy and condition of these features). The ES should be particularly clear about whether or not existing noise mitigation:</p> <ul style="list-style-type: none"> <li>• Will be removed / altered as part of the Proposed Development (and if not, how its retention will be safeguarded as part of the design)</li> <li>• Fits in as part of any wider mitigation package of new / extended noise barriers to be installed.</li> </ul>
4.7.4	Paragraph 12.3.12	Cumulative impacts	<p>Paragraphs 12.3.12 and 12.3.14 state that cumulative impacts are both implicit in the future "Do-Minimum" and "Do-Something" scenarios traffic modelling but also would need to be considered in terms of the introduction of any new noise sensitive receptors from future development.</p> <p>With reference to the transport assessment(s), the noise chapter of the ES should clearly present these distinct strands of the cumulative assessment and clearly identify representative "worst case" receptor locations for modelling of any future noise sensitive receptors, identify any mitigation needs for these future receptors and set out how they would be secured and delivered as part of the dDCO.</p>

## 4.8 Population and Human Health

(Scoping Report Section 13)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.8.1	Table 13.8	Connections to employment, services, facilities and leisure during construction	<p>It is unclear whether this is proposed to be scoped in or out of the ES assessment as Table 13.7 states that it will be scoped in for construction and operation but the scoping summary in Table 13.8 proposes to scope it out during construction.</p> <p>As the construction phase has potential to disrupt connectivity through traffic management and alterations of public rights of way, the Inspectorate considers that this matter should be scoped into assessment. Where the Applicant proposes to scope a matter out, sufficient evidence and reasoning must be provided.</p>
4.8.2	Table 13.7 and Table 13.8	Community severance during construction	<p>Community severance is defined as a "longer-term issue" and therefore, as the construction phase is temporary in duration (3 years) and phased, construction impacts would not constitute a long-term change. Therefore, this matter is proposed to be scoped out of the assessment during construction but will be addressed in terms of operational effects. Accessibility is scoped in as a different impact.</p> <p>Based on the information provided, and in particular the statements at paragraphs 13.6.4 and 13.6.5 that severance during construction has the potential to be significant, the Inspectorate does not agree that this matter can be scoped out at this stage and should be considered alongside longer term severance during operation.</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.8.3	Table 13.7 and Table 13.8	Employment opportunities during operation	No clear explanation is provided as to why employment opportunities during operation are scoped out of the assessment, however, due to the nature of the Proposed Development, the Inspectorate is content to scope this matter out.
4.8.4	Paragraph 13.3.24, Table 13.7	Access to / by public transport	Whilst there is potential for disruption to public transport services, the Applicant considers that these may reroute and the overall provision would remain unchanged by the Proposed Development and ultimately have limited effects on human health. Whilst there is no specific details of potential rerouting of coach and bus services (and there are 4 tram stops are located within the study area), the Inspectorate agrees that effects in terms of population and human health from rerouting and disruption to public transport is unlikely to be significant given the nature, location and objectives of the scheme.
4.8.5	Table 13.7	Wider determinants of health: <ul style="list-style-type: none"> <li>• Access to good quality affordable housing;</li> <li>• Access to healthy affordable food;</li> <li>• Local business activity;</li> <li>• Regeneration;</li> <li>• Tourism and leisure industries;</li> <li>• Community engagement; and</li> </ul>	For the reasons given in table 13.7 of the Scoping Report, the Inspectorate agrees that these matters can be scoped out during construction and operation in terms of the Proposed Development's potential effects to population and human health.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
		<ul style="list-style-type: none"> <li>Land use in urban and/or rural settings</li> </ul>	

ID	Ref	Other points	Inspectorate's comments
4.8.6	Paragraph 13.3.31 and Table 13.5	Health values	<p>Scoping Report paragraph 13.3.31 states that those values shaded in Table 13.5 are 'significantly worse' than the national average (also displayed in the Table). However, there is no explanation or set threshold provided to determine what above the national average is considered 'significantly worse'.</p> <p>Should these figures be used to inform the baseline of the assessment in the ES, there should be an explanation as to how these figures have been separated from others as 'significantly worse' than the national average and how this influences the assessment of significant effects under the EIA Regulations.</p>
4.8.7	Paragraph 13.7.13	Judgement of significance	<p>Scoping Report paragraph 13.7.13 states that no judgement of significance will be made for human health impacts.</p> <p>Regulation 14(2)(b) of The Environmental Impact Assessment (EIA) Regulations 2017 states that the environmental statement must include a description of the likely significant effects of the Proposed Development. Section 5(d) of Schedule 4 of the EIA Regulations states that information for inclusion in environmental statements includes a description of the likely significant effects of the Proposed Development on the risks to human health.</p>

ID	Ref	Other points	Inspectorate's comments
			Therefore, the ES should describe the methodology for determining the significance of effects and report the significance of effects on human health.

## 4.9 Road Drainage and the Water Environment

(Scoping Report Section 14)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.9.1	Paragraph 14.3.63	Impacts from Tidal Flood Risk	<p>Tidal flood risk is proposed to be scoped out on the basis that none of the watercourses within the study area are tidal rivers and the Irwell Catchment Flood Management Plan does not identify tidal flooding as a source of flood risk in the catchment; the nearest tidal point is approximately 28km downstream.</p> <p>Based on this information, the Inspectorate is content to scope this matter out.</p>
4.9.2	Paragraph 14.3.70	Impacts from Reservoir Flood Risk	<p>The Applicant highlights that the potential extent of reservoir flooding (in accordance with Environment Agency guidance) reaches residential areas in Prestwich and Whitefield to the west of the M60 J18 but on the basis that the risk of failure is considered to be very low (due to their monitoring and inspection regime), reservoir flood risk should be scoped out. The Inspectorate agrees that this matter can be scoped out on this basis and taking into account the prevailing baseline and future baseline environment in and around the Proposed Development.</p>
4.9.3	Paragraph 14.3.73	Impacts from canal flooding	<p>Canal flood risk is proposed to be scoped out of the assessment as no canals are identified in the study area with the closest canal located approximated 3km from the Proposed Development.</p> <p>Based on this information, the Inspectorate is content to scope this matter out.</p>



ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.9.4	Paragraph 14.3.88 and Table 14.8	Impacts to ponds	<p>Table 14.8 displays the value of receptors as based on the DMRB LA 113 guidance. Scoping Report paragraph 14.3.88 states that ponds will be assigned a 'medium' value of importance on a precautionary basis as ponds are unlikely to be more than low importance. Scoping Report paragraph 14.3.87 states that the majority of ponds will not be affected and can be scoped out but does not specify which ponds are proposed to be scoped out.</p> <p>Scoping Report Chapter 9 Biodiversity, paragraph 9.3.12 states that whilst surveys are ongoing, notable results to date include the presence of great crested newts which are a European Protected Species. 'Protected species' are not included as criteria for designating receptor value in Scoping Report Table 14.8 although they are included in the guidance used for assessment; DMRB LA113 Table 3.70 used presence of protected species as criteria for surface water receptors of high importance, therefore there remains potential for ponds to be high value receptors.</p> <p>The ES should provide an explanation where it diverges from appropriate guidance (that is referenced in the Scoping Report). The Inspectorate does not agree to scope out impacts to ponds based on the current information as there remains potential for the Proposed Development to impact high value receptors.</p>
4.9.5	Paragraphs 14.4.7 and 2.4.2	Impacts from construction compounds on groundwater	<p>This matter is proposed to be scoped out on the basis that the working area for construction is likely to be relatively small in comparison to the aquifers being crossed and therefore effects would be negligible.</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			<p>Scoping Report paragraph 2.4.2 states that currently, total areas required for temporary and permanent land take in the Order Limits will be defined in the DCO application.</p> <p>Whilst the Inspectorate cannot agree to scope out this matter due to a lack of evidence based on current information, should evidence be provided in the application to support this statement, the Inspectorate would be content to scope out this matter. Such evidence would include results of any site investigation to ascertain whether sand bands within superficial drift soils have the potential to provide a source of water, the value of such a resource and the extent to which there may or may not be impact pathways from the Proposed Development as the design evolves.</p>
4.9.6	Paragraph 14.2.3, Figure 14.5 and Table 14.10	Impacts on floodplains	<p>Table 14.10 proposes to scope out impacts on floodplains but provides little or no explanation as to why. There are multiple references to construction activities potentially taking place in floodplains Figure 14.5 identifies Parr Brook floodplain (zones 2 and 3) as located within the 1km study area where impacts to and from flood risk may occur.</p> <p>Based on this information, the Inspectorate considers that there is potential for impacts to floodplains and insufficient evidence has been provided to suggest they will not be impacted. Therefore, the Inspectorate does not agree to scope this matter out.</p>

ID	Ref	Other points	Inspectorate's comments
4.9.7	Section 14.4	Impacts from peat removal	Currently the extent of peatland within the study area and the amount of peat to be removed to construct the Proposed

ID	Ref	Other points	Inspectorate's comments
			<p>Development is unknown. Potential impacts listed in Scoping Report section 14.4 do not include potential hydrological impacts due to the removal of peat.</p> <p>The ES should provide baseline data as to the locations of the peat present within the study area and describe the extent that is proposed to be removed and the method by which this will be done. The ES should assess significant effects from disturbance to peat where they are likely to occur on hydrology, groundwater and flood risk.</p>

## 4.10 Climate

(Scoping Report Section 15)

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

ID	Ref	Other points	Inspectorate's comments
4.10.2	Paragraph 15.7.1	Definition of significance	Scoping Report paragraph 15.7.1 states that whether greenhouse gas (GHG) emissions will be significant against Government targets will be determined through professional judgement, acknowledging that construction and operational phases of the Proposed Development will extend over multiple carbon budget periods. The ES should set out how this judgement has been applied to changes brought about by the Proposed Development in relation to emission sources to reach conclusions to support the definition of significance.
4.10.3	Paragraph 15.5.3	Mitigation – avoiding peat disturbance	It is noted that there are a number of peat deposits within the red line boundary which are carbon stores. Effort should be made to avoid/reduce impact to these areas to avoid/reduce impacts from GHG emissions as part of the mitigation embedded into the design.
4.10.4	Paragraphs 15.5.3 and 15.5.7	Mitigation – traffic management measures during construction	Traffic management measures have potential to cause congestion/vehicles to find alternative, longer routes which may increase GHG emissions. The ES should consider this as part of the assessment of construction traffic effects and, where possible, set out traffic management measures for the Proposed Development to minimise these impacts.

ID	Ref	Other points	Inspectorate's comments
4.10.5	Paragraph 15.8.4	Uncertainty regarding the composition of the national vehicle fleet	Whilst the Inspectorate acknowledges there is uncertainty surrounding the future composition of the UK's vehicle fleet towards net zero(e.g. proposed ban on petrol cars), the ES should set out and justify a proportionate worst case scenario on which to base the ES assessment with appropriate cross referencing to the air quality assessment.

## 4.11 Cumulative Effects

(Scoping Report Section 16)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.11.1	Paragraph 16.3.12	Material assets and waste	<p>On the basis that the assessment proposed in the materials and waste aspect chapter will consider the impact of the Proposed Development on national material recovery targets, regional recycled aggregate targets, sub-regional minerals sterilisation and regional landfill capacity, the Inspectorate agrees that relevant consideration of cumulative effects will be inherent in that assessment. The Inspectorate therefore agrees that these can be scoped out of further specific consideration in the cumulative effects assessment.</p>
4.11.2	Paragraph 16.3.12	Climate	<p>The assessment proposed in the climate aspect chapter considers the Proposed Development's effect on the global climate and the effect of changes in climate on the Proposed Development (ie vulnerability to climate change).</p> <p>On the basis that consideration of the extent to which climate exacerbates or ameliorates the effects of the Proposed Development will be presented in the climate aspect chapter of the ES, the Inspectorate agrees that it can be scoped out of further specific assessment in terms of cumulative effects and this approach accords with industry standard guidance of the Institute of Environmental Management and Assessment (IEMA).</p>

ID	Ref	Other points	Inspectorate's comments
4.11.3	Paragraph 16.3.11	Operational noise and air quality cumulative effects	<p>The traffic modelling upon which the air quality and noise assessment are based will take into account committed development in the future traffic flow forecasts and therefore these two aspect chapters are "inherently cumulative".</p> <p>On the basis of the approach to the assessment set out in 16.3.13 - 16.3.25, the list of cumulative development schemes should be confirmed within the ES as being within the scope of the operational traffic scenario modelling to demonstrate that all relevant pathways of cumulative noise and air quality effects have been considered.</p>

## 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>5</sup>
- Planning Inspectorate advice notes<sup>6</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: Habitats 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>5</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>6</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>7</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 Bury Clinical Commissioning Group
Natural England	Natural England
The Historic Buildings and Monuments Commission for England	Historic England
The relevant fire and rescue authority	Greater Manchester Fire and Rescue Service
The relevant police and crime commissioner	Greater Manchester Police and Crime Commissioner (the functions of whom are held by the Mayor of Greater Manchester)
The Environment Agency	The Environment Agency
Integrated Transport Authorities (ITAs) and Passenger Transport Executives (PTEs)	Travel for Greater Manchester Passenger Transport Executives
The Relevant Highways Authority	Bury Metropolitan Borough Council
The relevant strategic highways company	Highways England
The Coal Authority	The Coal Authority
The Canal and River Trust	The Canal and River Trust
Public Health England, an executive agency of the Department of Health	Public Health England

<sup>7</sup> Schedule 1 of The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (the 'APFP Regulations')

<b>SCHEDULE 1 DESCRIPTION</b>	<b>ORGANISATION</b>
The Crown Estate Commissioners	The Crown Estate
The Forestry Commission	Forestry Commission

**TABLE A2: RELEVANT STATUTORY UNDERTAKERS<sup>8</sup>**

<b>STATUTORY UNDERTAKER</b>	<b>ORGANISATION</b>
The relevant Clinical Commissioning Group	NHS Bury Clinical Commissioning Group
The National Health Service Commissioning Board	NHS England
The relevant NHS Trust	North West Ambulance Service NHS Trust
Railways	Highways England Historical Railways Estate
Universal Service Provider	Royal Mail Group
Homes and Communities Agency	Homes England
The relevant Environment Agency	The Environment Agency
The relevant water and sewage undertaker	United Utilities
The relevant public gas transporter	Cadent Gas Limited
	Last Mile Gas Ltd
	Energy Assets Pipelines Limited
	ES Pipelines Ltd
	ESP Networks Ltd
	ESP Pipelines Ltd
	ESP Connections Ltd

<sup>8</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
	Fulcrum Pipelines Limited
	Harlaxton Gas Networks Limited
	GTC Pipelines Limited
	Independent Pipelines Limited
	Indigo Pipelines Limited
	Leep Gas Networks Limited
	Murphy Gas Networks limited
	Quadrant Pipelines Limited
	National Grid Gas Plc
	Scotland Gas Networks Plc
	Southern Gas Networks Plc
The relevant electricity distributor with CPO Powers	Eclipse Power Network Limited
	Last Mile Electricity Ltd
	Energy Assets Networks Limited
	ESP Electricity Limited
	Forbury Assets Limited
	Fulcrum Electricity Assets Limited
	Harlaxton Energy Networks Limited
	Independent Power Networks Limited
	Indigo Power Limited
	Leep Electricity Networks Limited
	Murphy Power Distribution Limited
	The Electricity Network Company Limited
	UK Power Distribution Limited
	Utility Assets Limited

STATUTORY UNDERTAKER	ORGANISATION
	Vattenfall Networks Limited
	Electricity North West Limited
	UK Power Networks Limited
The relevant electricity transmitter with CPO Powers	National Grid Electricity Transmission Plc
The relevant electricity interconnector with CPO Powers	National Grid Interconnectors Limited

**TABLE A3: SECTION 43 LOCAL AUTHORITIES (FOR THE PURPOSES OF SECTION 42(1)(B))<sup>9</sup>**

LOCAL AUTHORITY <sup>10</sup>
Blackburn with Darwen Council
Bolton Council
Bury Metropolitan Borough Council
Lancashire County Council
Manchester City Council
Rochdale Borough Council
Rossendale Borough Council
Salford City Council

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

ORGANISATION
Greater Manchester Combined Authority

<sup>9</sup> Sections 43 and 42(B) of the PA2008

<sup>10</sup> As defined in Section 43(3) of the PA2008

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

<b>CONSULTATION BODIES WHO REPLIED BY THE STATUTORY DEADLINE:</b>
Blackburn with Darwen Borough Council
Cadent Gas Limited
Canal & River Trust
The Coal Authority
The Environment Agency
ESP Utilities Group Ltd
Health and Safety Executive (HSE)
Highways England
Historic England
Natural England
Public Health England
Rochdale Borough Council.
Royal Mail

## Kent, Richard

---

**From:** Forward Planning <forwardplanning@blackburn.gov.uk>  
**Sent:** 12 July 2021 13:00  
**To:** M60 Simister Island  
**Subject:** RE: TR010064 - M60/M62/M66 Simister Island Interchange - EIA Regulation 10 Consultation

I can confirm that Blackburn with Darwen Borough Council has no comment to make in relation to this consultation.

Regards

### Darren Tweed

Strategic Growth and Planning Policy Manager  
Growth Team, Department for Growth and Development  
[Blackburn with Darwen Borough Council](#)

tel: 01254 507966  
team assist: 01254 585 962

---

**From:** M60 Simister Island <M60SimisterIsland@planninginspectorate.gov.uk>  
**Sent:** 05 July 2021 18:07  
**Subject:** TR010064 - M60/M62/M66 Simister Island Interchange - EIA Regulation 10 Consultation

### FAO: Head of Planning / Planning Consultations Department

Dear Sir/Madam

Please see attached correspondence relating to the proposed M60/M62/M66 Simister Island Interchange project.

Please note the deadline for consultation responses is **2 August 2021**, and is a statutory requirement that cannot be extended.

Regards

**Richard Kent**  
Senior EIA Advisor  
Environmental Services



Direct Line: 0303 444 5895  
Helpline: 0303 444 5000  
Email: [Richard.Kent@planninginspectorate.gov.uk](mailto:Richard.Kent@planninginspectorate.gov.uk)

Web: <https://www.gov.uk/government/organisations/planning-inspectorate> (The Planning Inspectorate)

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

Twitter: [@PINSGov](https://twitter.com/PINSGov)

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DPC:76616c646f72



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Your Ref: TR010064-000004  
Date: 23 July 2021

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

Submitted via email: M60SimisterIsland@planninginspectorate.gov.uk



**Ref: TR010064 – M60/M62/M66 Simister Island Interchange - EIA Scoping Notification and Consultation**

I refer to your letter dated 5<sup>th</sup> July 2021 regarding the above proposed DCO. Cadent has reviewed the EIA 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 at this stage the following apparatus within the vicinity of the proposed works:

- Medium pressure gas pipelines and associated equipment
- Low Pressure gas pipelines and associated equipment

**Should any diversions be required to facilitate the scheme, Cadent will require adequate notice and discussions should be started at the earliest opportunity.**

**Where the Promoter intends to acquire land, extinguish rights, or interfere with any of Cadent's apparatus, Cadent will require appropriate protection and further discussion on the impact to its apparatus and rights including adequate Protective Provisions.**

**Where diversions are required to facilitate the scheme, it is essential that adequate temporary and permanent land take , land rights and consents are included within the Order to enable works to proceed in time and to provide appropriate rights for Cadent to access, maintain and protect apparatus in future**

**Key Considerations:**

- Cadent has a Deed of Grant of Easement for each pipeline, which prevents the erection of permanent / temporary buildings, or structures, change to existing ground levels, storage of materials etc.
- Please be aware that written permission is required before any works commence within 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 Dial Before You Dig Specification for Safe Working in the Vicinity of Cadent Assets. There will be additional requirements dictated by Cadent's plant protection team.
- Cadent will also need to ensure that its pipelines remain accessible during 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.

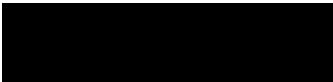


- The method of installation shall be confirmed through the submission of a formal written method statement from the contractor to Cadent.
- A Cadent representative shall monitor any works within close proximity to the pipeline.

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 a diversion is required

Yours Faithfully



**Vicky Cashman**  
Planning & Consents  
General Counsel Department  
Email: [vicky.cashman@cadentgas.com](mailto:vicky.cashman@cadentgas.com)



## **Further Guidance**

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

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

Specification for safe working in the vicinity of Cadent assets - requirements for third parties:

<https://cadentgas.com/nggdwsdev/media/Downloads/Digging%20Safely/Dial-before-you-dig-brochure.pdf>

Dial before you dig guidance:

<https://cadentgas.com/nggdwsdev/media/Downloads/Digging%20Safely/Dial-before-you-dig-leaflet.pdf>

Essential Guidance on digging safely near our pipes:

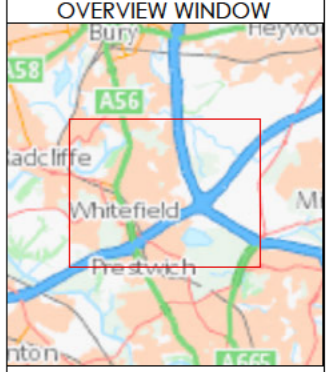
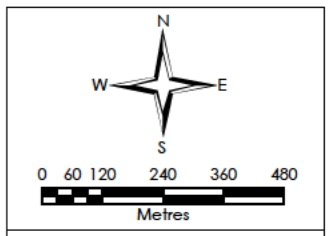
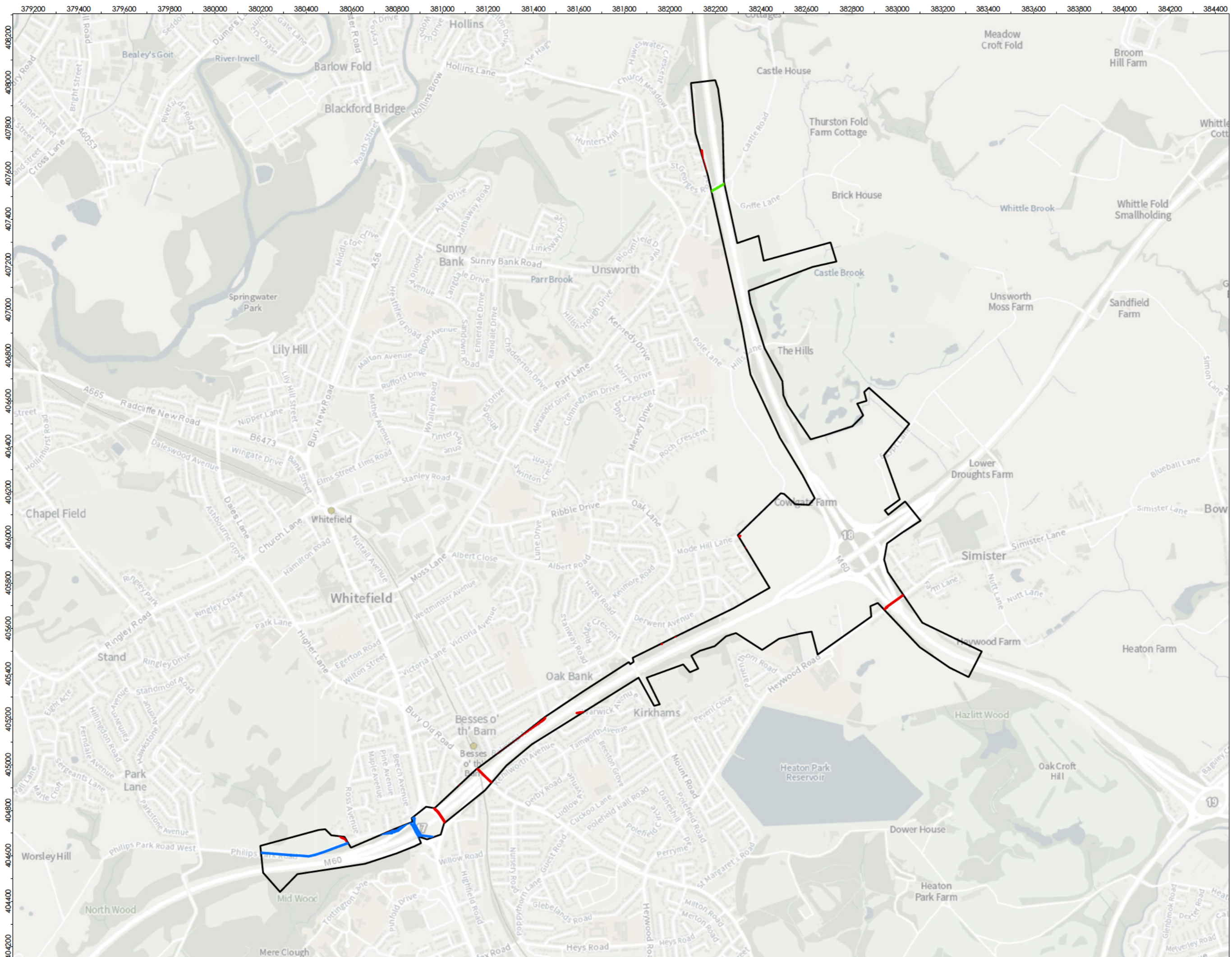
<https://cadentgas.com/help-advice/digging-safely>

Tree Planting Guidance:

<https://cadentgas.com/nggdwsdev/media/Downloads/Digging%20Safely/Tree-planting-guidance-Cadent-for-web.pdf>

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

[https://cadentgas.com/nggdwsdev/media/Downloads/Digging%20Safely/Excavating\\_Safely\\_Leaflet\\_Gas-1.pdf](https://cadentgas.com/nggdwsdev/media/Downloads/Digging%20Safely/Excavating_Safely_Leaflet_Gas-1.pdf)



**LEGEND:**

- IP Network
- LP
- MP
- Order Limits

REVISION: A

CLIENT:   
Your Gas Network.

SCHEME:  
M60/M62/M66 Simister  
Island Interchange

TITLE:  
Location Plan

FP: 105118-659  
SCALE: 1:15,000 @ A3  
DATE: 13/07/2021

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Map data

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**FISHER GERMAN**

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[ashby@fishergerman.co.uk](mailto:ashby@fishergerman.co.uk)

**DRAWING REF:**  
CADENT-2021-07-EP-LP-SIMISTER  
ISLAND INTERCHANGE

The Planning Inspectorate  
Environmental Services  
Central operations  
Temple Quay House  
2 The Square  
Bristol  
BS1 6PN

Your Ref TR010064-000004

Our Ref CRTR-PLAN-2021-33190

Monday 19 July 2021

Email only: [M60SimisterIsland@planninginspectorate.gov.uk](mailto:M60SimisterIsland@planninginspectorate.gov.uk) and to the applicant  
[M60J18SimisterIslandInterchange@highwaysengland.co.uk](mailto:M60J18SimisterIslandInterchange@highwaysengland.co.uk)

Dear Sir/Madam

**EIA Scoping consultation in relation to the application by Highway England for an Order granting Development Consent for the M60/M62/M66 Sinister Island (the Proposed Development).**

Thank you for your consultation dated 5<sup>th</sup> July 2021, in relation to the above.

We are the charity who look after and bring to life 2000 miles of canals & rivers. Our waterways contribute to the health and wellbeing of local communities and economies, creating attractive and connected places to live, work, volunteer and spend leisure time. These historic, natural and cultural assets form part of the strategic and local green-blue infrastructure network, linking urban and rural communities as well as habitats. By caring for our waterways and promoting their use we believe we can improve the wellbeing of our nation. The Trust is a statutory consultee body on Nationally Significant Infrastructure Projects.

The Canal & River Trust do not own any waterways within the immediate vicinity of the proposed development, our closest waterway is the Manchester Bolton, & Bury Canal which is over 3km from the existing junction. The Rochdale Canal which is a designated Site of Scientific Interest (SSSI) and Special Area of Conservation (SAC) due to the aquatic flora it supports, is over 4km from the junction. We do however note that the report mentions at 9.4.14 that the Rochdale Canal is within 200m of the '*Stage 2 Affected Road Network*' and as such would be scoped in as a potential receptor. We have been unable to find any further details/plans showing this within the submitted document. But we would agree with the Rochdale Canal, due to its International and National Designations is scoped into the report for further assessment.

Please do not hesitate to contact me with any queries you may have.

Yours sincerely,

**Tim Bettany-Simmons MRTPI**  
Area Planner – Special Projects

Tim.Bettany-Simmons@canalrivertrust.org.uk  
07342 057926

<https://canalrivertrust.org.uk/specialist-teams/planning-and-design>

**Canal & River Trust**

Fradley Junction, Alrewas, Burton-upon-Trent, Staffordshire DE13 7DN

T 0303 040 4040 E [canalrivertrust.org.uk/contact-us](http://canalrivertrust.org.uk/contact-us) W [canalrivertrust.org.uk](http://canalrivertrust.org.uk)



The Coal  
Authority



INVESTOR IN PEOPLE



RTPI  
Learning Partner

200 Lichfield Lane  
Berry Hill  
Mansfield  
Nottinghamshire  
NG18 4RG

Tel: 01623 637 119 (Planning Enquiries)

Email: [planningconsultation@coal.gov.uk](mailto:planningconsultation@coal.gov.uk)

Web: [www.gov.uk/coalauthority](http://www.gov.uk/coalauthority)

For the Attention of: Planning Inspectorate

**[By Email: [M60SimisterIsland@planninginspectorate.gov.uk](mailto:M60SimisterIsland@planninginspectorate.gov.uk)]**

28 July 2021

Dear Sir/Madam

**RE: TR010064-000004 - The M60/M62/M66 Simister Island Interchange Scheme (the Proposed Scheme) comprises improvements to the M60 Junction (J)18 interchange (also known as Simister Island) and also widening to five lanes of the M60 between J17 and J18.; M60 J18 (Simister Island), North Of Manchester**

Thank you for your notification received on the 5 July 2021 in respect of the above.

The Coal Authority is a non-departmental public body sponsored by the Department of Business, Energy & Industrial Strategy. As a statutory consultee, The Coal Authority has a duty to respond to planning applications and development plans in order to protect the public and the environment in mining areas.

Our records indicate that parts of the site fall within the defined Development High Risk area, however this is due to the presence of coal outcrops which lie beneath significant levels of drift below the site. In such cases we do not require submission of a Coal Mining Risk Assessment to support development proposals as these outcrops do not pose a potential risk to surface stability.

We note that the submission is supported by an Environmental Scoping Report, dated 29 June 2021 and that this report provides commentary on ground conditions and risks posed by coal mining legacy. This report notes that a ground investigation is programmed to inform an assessment of the ground conditions along the route of the scheme. Any identified risks encountered arising from past coal mining activity at surface or shallow depth during these works should be properly considered and

remediated, where necessary, to ensure the safety and stability of the development. However, on the basis of our records, in respect of the route of the scheme as indicated, we would not expect a Coal Mining Risk Assessment to be included as part of the EIA assessment.

Please do not hesitate to contact me if you would like to discuss this matter further.

Yours sincerely

*Melanie Lindsley*

**Melanie Lindsley** *BA (Hons), DipEH, DipURP, MA, PGCertUD, PGCertSP, MRTPI*  
**Development Team Leader (Planning)**

#### Disclaimer

The above consultation response is provided by The Coal Authority as a Statutory Consultee and is based upon the latest available data on the date of the response, and electronic consultation records held by The Coal Authority since 1 April 2013. The comments made are also based upon only the information provided to The Coal Authority by the Local Planning Authority and/or has been published on the Council's website for consultation purposes in relation to this specific planning application. The views and conclusions contained in this response may be subject to review and amendment by The Coal Authority if additional or new data/information (such as a revised Coal Mining Risk Assessment) is provided by the Local Planning Authority or the Applicant for consultation purposes.

The Planning Inspectorate  
3/18 Eagle Wing  
Temple Quay House (2 The Square)  
Temple Quay  
Bristol  
Avon  
BS1 6PN

**Our ref:** SO/2021/121357/01-L01  
**Your ref:** Richard Kent  
**Date:** 02 August 2021

Dear Sir/Madam

**M60/M62/M66 SIMISTER ISLAND INTERCHANGE - EIA REGULATION 10  
CONSULTATION (PROJECT SPEED GIS PILOT - RECORD UNDER ENV6005014R  
TASK CODE 2)  
SIMISTER ISLAND, JUNCTION 18, M60**

Thank you for referring the above Scoping Opinion to the Environment Agency, please find our comments below.

### **Chapter 9 – Biodiversity**

The Government has made a commitment to include an amendment to the long-awaited Environment Bill that will add the requirement for new ‘nationally significant’ infrastructure projects in England – including for transport and energy – to provide net gain in biodiversity and habitats for wildlife.

Based on scheme’s construction being planned for 2025 and with the Environment Bill likely to be enacted before this date, the scope of the project should be looking to consider how biodiversity gains will be achieved either through the protection and enhancement of existing habitats, the creation of new ones, and/or the strengthening of connections between them.

### **Chapter 10 – Geology and Soils**

The site is split in two by an unnamed fault at the centre of the site splitting the “northern loop” area to the north with the associated lagoon and the southern area which represent the new motorway junction cuttings.

#### Northern Area

Environment Agency  
Richard Fairclough House Knutsford Road, Warrington, WA4 1HT.  
Customer services line: 03708 506 506  
[www.gov.uk/environment-agency](http://www.gov.uk/environment-agency)

Cont/d..



The drift geology in this area consists of Till Devensian – Diamicton classed as a secondary (undifferentiated) aquifer and Peat deposits underlain by Pennine Middle Coal Measures - Mudstone, Siltstone and Sandstone. Classed as a Secondary A aquifer.

We have no information on the groundwater levels on the site however we do not expect shallow groundwater to be present at the site, the BGS mapping and modelling suggests that around 30m of superficial drift soils will be present before bedrock is reached in this area. The glacial Till deposits are classed as a secondary (undifferentiated) aquifer this has been assigned in cases where it has not been possible to attribute either category A or B to a rock type. In the case of glacial Tills in this area we are aware that sand bands may exist which can provide a source of water. We have no specific information about this at the site however site investigation should be completed to ascertain whether sand bands which may store water exist.

### Southern area

The southern half of the site which will be developed by new road connections bypassing junction 18 of the M60, is underlain again by The glacial Till deposits which are classed as a secondary (undifferentiated) again where sand bands may exist which may be Secondary A or B aquifers. Glaciofluvial Ice Contact Deposits, Devensian - Sand And Gravel and Peat deposits are also present in this area. These are both classed as Secondary A Aquifers. The bedrock in this area is mapped as Chester formation – Sandstone. This is classed as a Principal aquifer.

### Contamination sources

Our limited information does not suggest that there has been extensive historical development on the site, however we would recommend that a contaminated land assessment in line with our LCRM guidance is followed in this case to identify any possible risk. Previous site investigations as part of the current motorway island have not been made available, however some borehole data is available from the BGS which corroborates the above assessment, although the quality of the data on the website is poor for the area of interest. Any further site investigation will need to ascertain whether there are any large sand bands in the Glacial till deposits which would be classed as an aquifer

## **Chapter 14 – Road Drainage and the Water Environment**

### Flood Risk

The scoping report states that a flood risk assessment will be undertaken to support the proposals. The proposed option would not appear to directly impact on designated "main river" watercourses but also recognises that control of surface water runoff will be an issue to address in design.

The Lead Local Flood Authority should be consulted with regards to the proposals given their statutory role on surface water flood risk under the Flood and Water Management Act 2010.

### Water Quality

As noted in this section, there is a requirement under the National Policy Statement to demonstrate compliance with the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017. In particular there should be no deterioration of any waterbody and measures to meet the overall objective of 'good' ecological status/potential should be addressed where possible. As such a specific compliance assessment against the Water Framework Directive is welcome.

Surface water from the motorway network flows into a number of tributaries in the surrounding area from current motorway outfalls. These ultimately flow into the River Roch and River Irk watercourses which monitored by the Environment Agency for compliance against the EU Water Framework Directive, namely:

- River Irk (Wince - Irwell) (Ref: GB112069061131), Moderate Status
- Whittle Bk (Irwell) (Ref: GB112069061250), Moderate Status
- River Roch (Spodden -Irwell) (GB112069064600), Moderate Status

The scoping report identifies that mitigation will be required for existing outfalls (Para 14.3.24) and the potential for Sustainable Urban Drainage System (SUDs) is noted. We support the opportunities to incorporate environmental best practice in the form of multifunctional and above ground SUDs where feasible. Further best practice can be found on the CIRIA website:

[https://www.ciria.org/Memberships/The\\_SuDs\\_Manual\\_C753\\_Chapters.aspx](https://www.ciria.org/Memberships/The_SuDs_Manual_C753_Chapters.aspx)

If any infiltration to ground is proposed, included unlined storage lagoons we would require a thorough risk assessment to identify risks from road drainage particularly with regards to hydrocarbons and micro plastics. We would expect at the planning stages this detailed drainage design be completed in line with current guidance including SUDS guidance the LA113 guidance and the Environment Agency's approach to groundwater protection available from gov.uk

## **Environmental Permitting Requirements**

The nearest main river watercourses to the junction are Castle Brook to the north east of the junction and Whitefield Brook between Derwent Ave and the eastbound approach carriageway. Any works that would impact on these watercourses may require a flood risk activity permit which is separate to and in addition to any planning permission granted. Further details and guidance are available on the GOV.UK website:

<https://www.gov.uk/guidance/flood-risk-activities-environmental-permits>

Any dewatering activities on-site could have an impact upon local wells, water supplies and/or nearby watercourses and environmental interests. This activity was previously exempt from requiring an abstraction licence. Since 1 January 2018, most cases of new planned dewatering operations above 20 cubic metres a day will require a water abstraction licence from us prior to the commencement of dewatering activities at the site. More information is available on gov.uk: <https://www.gov.uk/guidance/water-management-apply-for-a-water-abstraction-or-impoundment-licence#apply-for-a-licence-for-a-previously-exempt-abstraction>

The CL:AIRE Definition of Waste: Development Industry Code of Practice (version 2) provides operators with a framework for determining whether or not excavated material arising from site during remediation and/or land development works is waste or has ceased to be waste. Under the Code of Practice:

- excavated materials that are recovered via a treatment operation can be reused on-site providing they are treated to a standard such that they are fit for purpose and unlikely to cause pollution
- treated materials can be transferred between sites as part of a hub and cluster project
- some naturally occurring clean material can be transferred directly between sites

All contaminated materials should be adequately characterised both chemically and physically in line with British Standard BS EN 14899:2005 'Characterization of Waste - Sampling of Waste Materials - Framework for the Preparation and Application of a Sampling Plan' and that the permitting status of any proposed treatment or disposal activity is clear. If in doubt, the Environment Agency should be contacted for advice at an early stage to avoid any delays. Further information can be found in:

- the [position statement](#) on the Definition of Waste: Development Industry Code of Practice
- The [waste management](#) page on GOV.UK

Contaminated soil that is (or must be) disposed of is waste. Therefore, its handling, transport, treatment and disposal are subject to waste management legislation, which includes:

- Duty of Care Regulations 1991
- Hazardous Waste (England and Wales) Regulations 2005
- Environmental Permitting (England and Wales) Regulations 2016
- The Waste (England and Wales) Regulations 2011

### **Environment Agency Land Ownership**

We can confirm that the Environment Agency has no land interests within the boundary of the project.

Should you wish to discuss anything in further detail please do not hesitate to get in touch.

Yours faithfully

**Helen Telfer**  
**Senior Planning Advisor**

Direct dial 020 302 50618

Direct e-mail [helen.telfer@environment-agency.gov.uk](mailto:helen.telfer@environment-agency.gov.uk)

**Kent, Richard**

---

**From:** ESP Utilities Group Ltd <donotreply@espug.com>  
**Sent:** 06 July 2021 11:13  
**To:** M60 Simister Island  
**Subject:** Reference: PE160466. Plant Not Affected Notice from ES Pipelines

M60/M62/M66 Simister Island Interchange  
Planning Inspectorate

6 July 2021

Reference: TR010064 - M60/M62/M66 Simister Island Interchange

Dear Sir/Madam,

Thank you for your recent plant enquiry at:

I can confirm that ESP Utilities Group Ltd has no gas or electricity apparatus in the vicinity of this site address and will not be affected by your proposed works.

ESP Utilities Group Ltd are continually laying 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.

**Important Notice**

Please be advised that any enquiries for ESP Connections Ltd, formerly known as British Gas Connections Ltd, should be sent directly to us at the address shown above or alternatively you can email us at: [PlantResponses@espug.com](mailto:PlantResponses@espug.com)

**ESP have provided you with all the information we have to date however, there may be inaccuracies or delays in data collection and digitisation caused by a range of practical and unforeseeable reasons and as such, we recommend the following steps are taken as a minimum before work is commenced that involves the opening of any ground and reference made to HSG47 (Avoiding danger from underground services).**

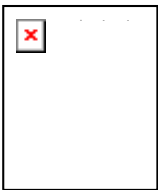
- A. Plans are consulted and marked up on site**
- B. The use of a suitable and sufficient device to locate underground utilities before digging (for example the C.A.T and Genny)**
- C. Trial holes are dug to expose any marked up or traced utilities in the ground**
- D. If no utilities are shown on any plans and no trace is received using a suitable and sufficient**

device, trial holes are dug nonetheless using hand tools at the location or at regular intervals along the location that the work is being carried out depending on the length of excavation work being undertaken

**E. All location work is carried out by individuals with sufficient experience and technical knowledge who may choose to control this activity under a Safe System Of Work**

Yours faithfully,

Plant Protection Team  
**ESP Utilities Group Ltd**



Bluebird House  
Mole Business Park  
Leatherhead  
KT22 7BA

☎ 01372 587500 📠 01372 377996

<http://www.espug.com>

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## Kent, Richard

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**From:** Johnson, Adam <Adam.Johnson@highwaysengland.co.uk>  
**Sent:** 26 July 2021 09:40  
**To:** M60 Simister Island  
**Subject:** Highways England Response - M60/M62/M66 Simister Island Interchange - EIA Regulation 10 Consultation

Good morning

Thank you for consulting Highways England's Planning Team in relation to the M60/M62/M66 Simister Island Interchange road scheme. As Statutory Consultees in the planning process, we take seriously our obligations to ensure that the necessary road infrastructure is provided to mitigate the impact of development.

We note, of course, that this is a Highways England scheme, and we are familiar with the current proposals. As such, our Planning Team will offer no comment as this time regarding the Simister Island scheme.

Kind regards

Adam

### Adam Johnson

#### Network Development and Planning Team

Highways England | Piccadilly Gate | Store Street | Manchester | M1 2WD

**Tel:** +44 (0) 7917 426 500

**Web:** <http://www.highwaysengland.co.uk>

---

**From:** M60 Simister Island <M60SimisterIsland@planninginspectorate.gov.uk>  
**Sent:** 05 July 2021 17:36  
**Subject:** TR010064 - M60/M62/M66 Simister Island Interchange - EIA Regulation 10 Consultation

Dear Sir/Madam

Please see attached correspondence relating to the proposed M60/M62/M66 Simister Island Interchange project.

Please note the deadline for consultation responses is **2 August 2021**, and is a statutory requirement that cannot be extended.

Regards

### Richard Kent

Senior EIA Advisor  
Environmental Services



Direct Line: 0303 444 5895  
Helpline: 0303 444 5000

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

Web: <https://www.gov.uk/government/organisations/planning-inspectorate> (The Planning Inspectorate)

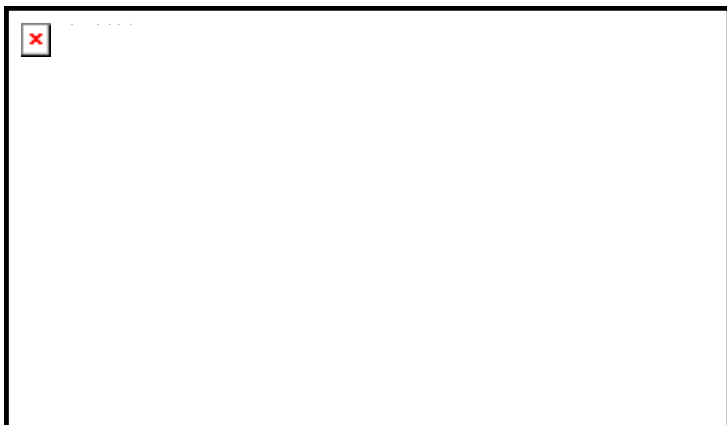
Web: <https://infrastructure.planninginspectorate.gov.uk> (National Infrastructure Planning)

Twitter: [@PINSgov](https://twitter.com/PINSgov)

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**Highways England Company Limited | General enquiries: 0300 123 5000 | National Traffic Operations Centre, 3 Ridgeway, Quinton Business Park, Birmingham B32 1AF | <https://www.gov.uk/government/organisations/highways-england> | [info@highwaysengland.co.uk](mailto:info@highwaysengland.co.uk)**

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Historic England

Ms Emily Park  
The Planning Inspectorate  
Environmental Services  
Temple Quay House  
Bristol  
BS1 6PN

Direct Dial: 0161 242 1439

Our ref: PL00752690

27 July 2021

Dear Ms Park

### **M60/M62/M66 Simister Island Interchange**

Thank you for your letter of 5th July 2021 consulting us about the above EIA Screening Report.

It is for the local authority to determine whether an EIA should be prepared for the proposed development. However, from the information given, we consider that there appears to be minimal impact on the historic environment and therefore an EIA may not be required in relation to the historic environment.

We would also recommend that the applicant seeks confirmation from the relevant local authority Historic Environment staff for an informed local opinion of need.

If further information becomes available which might result in a change to this, then we would like to be informed and provided with that information so that we can consider the matter further and respond to you as appropriate.

If you have any queries about the above or would like to discuss anything further, please do not hesitate to contact me.

Yours sincerely,

Emma Feddon  
Business Officer  
emma.feddon@historicengland.org.uk



SUITES 3.3 AND 3.4 CANADA HOUSE 3 CHEPSTOW STREET MANCHESTER M1 5FW

Telephone 0161242 1416  
HistoricEngland.org.uk



*Historic England is subject to both the Freedom of Information Act (2000) and Environmental Information Regulations (2004). Any Information held by the organisation can be requested for release under this legislation.*

CEMHD  
NSIP Consultations  
Building 1.2, Redgrave Court  
Merton Road, Bootle  
Merseyside, L20 7HS

Your ref: TR010064-000004

Our ref: 4.2.1.6868.

HSE email: [NSIP.applications@hse.gov.uk](mailto:NSIP.applications@hse.gov.uk)

Date: 9 July 2021

FAO Emily Park  
Senior EIA Advisor  
Environmental Services  
Central Operations  
Temple Quay House  
2 The Square  
Bristol, BS1 6PN

(By Email)

Dear Emily

**Application by Highways England (the Applicant) for an Order granting Development Consent for the M60/M62/M66 Simister Island (the Proposed Development)**

Thank you for your letter of 5 July 2021 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 installations with Hazardous Substances Consent or pipelines in the vicinity of the road improvement scheme (based on the 'Provisional Order Limits' shown in Figure 1.1 'Location Plan and Local Planning Authority Boundaries', Drawing Number: HE548642-JAC-GEN-SII\_MLT-SK-LE-001, Revision: P01, Dated: Jun 21) and, therefore, we would not wish to comment on its siting. If in the intervening period we are notified of a change to this situation, the developer would need to seek advice from us.

**Hazardous Substances Consent**

Not applicable to this road improvement scheme.

**Explosives sites**

HSE have no comment to make on the proposed development since there are no licensed explosives sites in the vicinity of the proposed development.

**Electrical Safety**

No comment, from a planning perspective.

During lockdown, please send any further communication on this project directly to the HSE's designated e-mail account for NSIP applications at [nsip.applications@hse.gov.uk](mailto:nsip.applications@hse.gov.uk).

Yours sincerely

*Monica*

Monica Langton  
CEMHD4  
NSIP Consultation Team

Date: 22 July 2021  
Our ref: 359259  
Your ref: TR010064-000004



M60simisterisland@planninginspectorate.gov.uk  
**BY EMAIL ONLY**

Customer Services  
Hombeam 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):** Development Consent Order for M60/M62/M66 Simister Island Interchange - EIA Scoping Opinion Bury MBC/Highways Agency TR010064-000004

Thank you for seeking our advice on the scope of the Environmental Statement (ES) in your consultation which we received on 05 July 2021.

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.

We have reviewed the Scoping Report and we agree with the majority of issues scoped in and out of the EIA but we have the following specific comments to make:

#### **5.5.2 Habitats Regulations Assessment**

In this paragraph it states that the HRA Screening exercise identified no source-receptor pathways to European designated sites and has therefore concluded no likely significant effect from the proposal. This conclusion does not appear to match up with the findings in the thematic chapters later on in the report. In chapters 6.3.25 and 9.3.2 it is stated that Rochdale Canal SAC is being screened in to the air quality assessment, therefore Natural England advise that the HRA cannot conclude no likely significant effect at this stage.

#### **6. Air Quality**

The list of baseline air quality condition sources in chapter 6.3.1 would benefit from the inclusion of Air Pollution Information System (APIS) to access the site relevant critical loads.

#### **9. Biodiversity**

Table 9.4 (Summary of impact pathways) European and nationally designated sites should be included as receptors to air quality changes.

We commend the reference to biodiversity enhancement in this chapter but suggest it could be strengthened by including a commitment to an ambitious biodiversity net gain target. For the wide range of habitats on this site, Natural England advocates the use of the Defra Metric to calculate any potential biodiversity losses and compensation to be measured. [The Biodiversity Metric 3.0 - JP039 \(naturalengland.org.uk\)](https://www.naturalengland.org.uk/Information-and-communications/Policy-and-strategy/Policy-and-strategy-reports/2019/09/2019-09-01-The-Biodiversity-Metric-3.0-JP039)

#### **10. Geology and Soils**

Chapter 10.4.4 confirms that peat deposits are present and will be removed as part of the proposal.

Peat is a precious resource that can take thousands of years to form and should therefore be considered an irreplaceable habitat. Peat represents the largest terrestrial carbon store in the UK and performs an important role in water catchment management. All deep peat (40cm or deeper) is understood by Natural England to be Blanket Bog and we recommend that further investigation is carried out to determine the extent of peat habitat that could be affected.

Natural England advise that impacts to peat should be included in the scoping questions in Table 10.3.

## **15. Climate**

The impacts from damaging peat habitat and the subsequent carbon release should be carefully considered in the chapter.

### **Discretionary Advisory Service**

For detailed bespoke and technical advice to ensure the proposal is sensitive to both habitats and species and that biodiversity net gain opportunities are considered, the Natural England Discretionary Advice Service (DAS) enables developers to take into account all environmental considerations of a proposal at the earliest stage of a development Please see the following link: <https://www.gov.uk/guidance/developers-get-environmental-advice-on-your-planning-proposals>

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.

Annex A to this letter provides Natural England's additional advice on the scope of the Environmental Impact Assessment (EIA) for this proposal.

For any queries or further information relating to the specific advice in this letter only please contact [janet.baguley@naturalengland.org.uk](mailto:janet.baguley@naturalengland.org.uk). Please send any new consultations, or any further information on this consultation to: [consultations@naturalengland.org.uk](mailto:consultations@naturalengland.org.uk).

Yours faithfully

Janet Baguley  
Lead Adviser Sustainable Development

## **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.

#### **2.2 Internationally and Nationally Designated Sites**

The ES should thoroughly assess the potential for the proposal to affect designated sites. European sites (e.g. 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.

Should a Likely Significant Effect on a European/Internationally designated site be identified or be uncertain, the competent authority (in this case the Local Planning Authority) may need to prepare an Appropriate Assessment, in addition to consideration of impacts through the EIA process.

### **Sites of Special Scientific Interest (SSSIs) and sites of European or international importance (Special Areas of Conservation, Special Protection Areas and Ramsar sites)**

- Further information SSSI's 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 and should identify such 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>

### **2.3 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.

### **2.4 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.

### **2.5 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 <https://www.gov.uk/guidance/biodiversity-duty-public-authority-duty-to-have-regard-to-conserving-biodiversity>.

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.

### **2.6 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. 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 and Access Land**

The EIA should consider potential impacts on access land, public open land and rights of way in the vicinity of the development. 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.

### **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.

## **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.

## **Ancient Woodland – addition to the S41 NERC Act paragraph**

The S41 list includes six priority woodland habitats, which will often be ancient woodland, with all ancient semi-natural woodland in the South East falling into one or more of the six types.

Information about ancient woodland can be found in Natural England's standing advice [http://www.naturalengland.org.uk/Images/standing-advice-ancient-woodland\\_tcm6-32633.pdf](http://www.naturalengland.org.uk/Images/standing-advice-ancient-woodland_tcm6-32633.pdf).

Ancient woodland is an irreplaceable resource of great importance for its wildlife, its history and the contribution it makes to our diverse landscapes. Local authorities have a vital role in ensuring its conservation, in particular through the planning system. The ES should have regard to the requirements under the NPPF (Para. 175)<sup>2</sup> which states:

When determining planning applications, local planning authorities should apply the following principles:

- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts);
- c) 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.





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Your Ref: TR010064-000004  
Our Ref: CIRIS 57698

Ms Emily Park  
Senior EIA Advisor  
The Planning Inspectorate  
Temple Quay House  
2 The Square  
Bristol, BS1 6PN

28th July 2021

Dear Ms Park

**Nationally Significant Infrastructure Project  
M60/M62/M66 Simister Island TR010064-000004  
Scoping Consultation Stage**

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.

Having considered the submitted scoping report we wish to make the following specific comments and recommendations:

**Environmental Public Health**

We understand that the promoter will wish to avoid unnecessary duplication and that many issues including air quality, emissions to water, waste, contaminated land etc. will be covered elsewhere in the Environmental Statement (ES). We believe the summation of relevant issues into a specific section of the report provides a focus which ensures that public health is given adequate consideration. The section should summarise key information, risk assessments, proposed

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mitigation measures, conclusions and residual impacts, relating to human health. Compliance with the requirements of National Policy Statements and relevant 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. The attached appendix summarises PHE's requirements and recommendations regarding the content of and methodology used in preparing the ES. Please note that where impacts relating to health and/or further assessments are scoped out, promoters should fully explain and justify this within the submitted documentation.

### **Recommendations**

1. We request that the ES clarifies the impact on human health from the identified potential sources of water contamination and if necessary, the proposer should confirm either that the proposed development does not impact any receptors from potential sources of emissions to water; or ensure that an adequate assessment of the possible impacts is undertaken and included in the ES along with proposed mitigation measures.
2. Pollutants associated with road traffic or combustion, particularly particulate matter and oxides of nitrogen, are non-threshold; i.e., an exposed population is likely to be subject to potential harm at any level. Reducing public exposures of non-threshold pollutants (such as particulate matter and nitrogen dioxide) below air quality standards has potential public health benefits. We support approaches which minimise or mitigate public exposure to non-threshold air pollutants, address inequalities (in exposure), maximise co-benefits (such as physical exercise). We encourage their consideration during development design, environmental and health impact assessment, and development consent.
3. It is noted that the current proposals do not appear to consider possible health impacts of Electric and Magnetic Fields (EMF). We request that the ES clarifies this and if necessary, the proposer should confirm either that the proposed development does not impact any receptors from potential sources of EMF; or ensure that an adequate assessment of the possible impacts is undertaken and included in the ES.

Yours sincerely

For and 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: PHE recommendations regarding the scoping document

### Introduction

The Planning Inspectorate's Advice Note 11: Working with Public Bodies covers many of the generic points of interaction relevant to the Planning Inspectorate and Public Health England (PHE). The purpose of this Annex is to help applicants understand the issues that PHE expect to see addressed by applicants preparing an Environmental Statement (ES) as part of their Nationally Significant Infrastructure Planning (NSIP) submission.

We have included a comprehensive outline of the type of issues we would expect to be considered as part of an NSIP which falls under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations). PHE encourages applicants to contact us as early in the process as possible if they wish to discuss or clarify any matters relating to chemical, poison, radiation or wider public health.

### General Information on Public Health England

PHE was established on 1 April 2013 to bring together public health specialists from more than 70 organisations into a single public health service. We are an executive agency of the Department of Health and are a distinct delivery organisation with operational autonomy to advise and support government, local authorities and the National Health Service (NHS) in a professionally independent manner.

We work closely with public health professionals in Wales, Scotland and Northern Ireland, and internationally.<sup>1</sup> We have specialist teams advising on specific issues and the potential impacts arising from environmental public health including chemicals, noise, air quality, ionising and non-ionising radiation.

### PHE's NSIP roles and responsibilities

PHE is a statutory consultee in the NSIP process for any *applications likely to involve chemicals, poisons or radiation which could potentially cause harm to people and are likely to affect significantly public health.*<sup>2</sup> PHE will consider potential significant effects (direct and indirect) of a proposed development on population and human health and the impacts from chemicals, radiation and environmental hazards. We also consider other factors which may have an impact on public health, such as the wider determinants of health, health improvement and health inequalities (where PHE has a legal duty specified in the Health and Social Care Act 2012)<sup>3</sup>.

Under certain circumstances PHE may provide comments on radiation on behalf of the Scottish Government. If a proposer is submitting a planning application in Scotland which may require advice on radiation you are recommended to contact the appropriate Scottish Planning Authority for advice on how to proceed.

In the case of applications in Wales, PHE remains a statutory consultee but the regime applies to a more limited range of development types. For NSIP applications likely to affect land in Wales, an applicant should still consult PHE but, additionally will be required to consult the Welsh Government.

### Environmental Impact Assessments – PHE Responsibilities

PHE has a statutory role as a consultation body under the EIA Regulations. Where an applicant has requested a scoping opinion from the Planning Inspectorate<sup>4</sup>, PHE will be consulted regarding the

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<sup>1</sup> <https://www.gov.uk/government/organisations/public-health-england/about#priorities>

<sup>2</sup> The Infrastructure Planning (Interested Parties and Miscellaneous Prescribed Provisions) Regulations 2015

<sup>3</sup> <http://www.legislation.gov.uk/ukpga/2012/7/contents/enacted>

<sup>4</sup> The scoping process is administered and undertaken by the Planning Inspectorate on behalf of the Secretary of State

scope, and level of detail, of the information to be provided in the ES. PHE has a duty to make information available to the applicant.

PHE provides advice relating to EIA within this document and during the NSIP consultation stages. PHE encourages applicants to discuss the scope of the ES with us at an early stage to explore, for example, whether careful site selection or other design issues could minimise or eliminate public health impacts or to outline the requirement for, scope and methodology of any assessments related to public health. PHE's standard recommendations in response to EIA scoping consultations are below.

## **PHE's recommendations to applicants regarding Environmental Impact Assessments**

### **General approach**

PHE provides advice relating to EIA within this document and during the NSIP consultation stages. It is the role of the applicant to prepare the ES.

When preparing an ES the applicant should give consideration to best practice guidance such as the Government's Handbook for scoping projects: environmental impact assessment<sup>5</sup>, and Guidance: on Environmental Impact Assessment<sup>6</sup>

The [Planning Inspectorate's Advice Note Seven](#): Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements also provide guidance to applicants and other persons with interest in the EIA process as it relates to NSIPs. It is important that the submitted ES identifies and assesses the potential public health impacts of the activities at, and emissions from, the development.

**Applicants are reminded that Section 5(2)(a) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 specifically includes a requirement that the EIA must identify, describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of the proposed development on population and human health.**

PHE is of the opinion that this requirement encompasses the wider determinants of public health, as well as chemicals, poisons and radiation. Further information on PHE's recommendations and requirements is included below.

PHE understands that there may be separate sections of the ES covering the assessment of impacts on air, land, water and so on, but expects an ES to include a specific section summarising potential impacts on population and health. This section should bring together and interpret the information from other assessments as necessary. The health, wellbeing and population impacts section should address the following steps.

1. Screening: Identify any significant effects.
  - a. Summarise the methodologies used to identify health impacts, assess significance and sources of information
  - b. Evaluate any reference standards used in carrying out the assessment and in evaluating health impacts (e.g., environmental quality standards)

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<sup>5</sup> <https://www.gov.uk/government/publications/handbook-for-scoping-projects-environmental-impact-assessment>

<sup>6</sup> <https://www.gov.uk/guidance/environmental-impact-assessment#the-purpose-of-environmental-impact-assessment>

- c. Where the applicant proposes the ‘scoping out’ of any effects a clear rationale and justification should be provided along with any supporting evidence.
2. Baseline Survey:
    - a. Identify information needed and available, evaluate quality and applicability of available information
    - b. Undertake assessment
  3. Alternatives:
    - a. Consideration of alternatives (including alternative sites, choice of process, and the phasing of construction) is widely regarded as good practice. Ideally, the EIA process should start at the stage of site 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>7</sup>.
  4. Design and assess possible mitigation
    - a. Consider and propose suitable corrective actions should mitigation measures not perform as effectively predicted.
  5. Impact Prediction: Quantify and Assess Impacts:
    - a. Evaluate and assess the extent of any positive and negative effects of the development. Effects should be assessed in terms of likely health outcomes, including those relating to the wider determinants of health such as socio-economic outcomes, in addition to health outcomes resulting from exposure to environmental hazards. Mental health effects should be included and given equivalent weighting to physical effects.
    - b. Clearly identify any omissions, uncertainties and dependencies (e.g., air quality assessments being dependant on the accuracy of traffic predictions)
    - c. Evaluate short-term impacts associated with the construction and development phase
    - d. Evaluate long-term impacts associated with the operation of the development
    - e. Evaluate any impacts associated with decommissioning of the development
    - f. Evaluate any potential cumulative impacts as a result of the development, currently approved developments which have yet to be constructed, and proposed developments which do not currently have development consent
  6. Monitoring and Audit
    - a. Identify key modelling predictions and mitigation impacts and consider implementing monitoring and audit to assess their accuracy / effectiveness.

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 applicant should fully explain and justify their rationale in the submitted documentation.

### **Human and environmental receptors**

The applicant should clearly identify the development’s location and the distance of the development to off-site receptors that may be affected by emissions from, or activities at, the development. Off-site 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.

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<sup>7</sup> DCLG guidance, 1999 <http://www.communities.gov.uk/documents/planningandbuilding/pdf/155958.pdf>



Identify and consider impacts on residential areas and sensitive receptors (such as schools, nursing homes and healthcare facilities, as well as other vulnerable population groups such as those who are young, older, with disabilities or long-term conditions, or on low incomes) in the area(s) which may be affected by emissions, this should include consideration of any new receptors arising from future development

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.

### **Impacts arising from construction and decommissioning**

Any assessment of impacts arising from emissions or activities 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 applicant to follow best practice guidance during all phases from construction to decommissioning to ensure appropriate measures are in place to mitigate any potential negative impact on health from emissions (point source, fugitive and traffic-related) and activities. An effective Construction Environmental Management Plan (CEMP) (and Decommissioning Environmental Management Plan (DEMP)) will help provide reassurance that activities are well managed. The applicant should ensure that there are robust mechanisms in place to respond to any complaints made during construction, operation, and decommissioning of the facility.

### **Emissions to air and water**

PHE has a number of comments regarding the assessment of emissions from any type of development in order that the ES 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 an evaluation of the public health benefits of development options which reduce air pollution – even below limit values – as pollutants such as nitrogen dioxide and particulate matter show no threshold below which health effects do not occur;<sup>8, 9</sup>
- consider the construction, operational, and decommissioning phases;
- 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;
- fully account for fugitive emissions;
- include appropriate estimates of background levels (i.e., when assessing the human health risk of a chemical emitted from a facility or operation, background exposure to the chemical from other sources should be taken into account);
- encompass the combined impacts of all pollutants which may be emitted by the development with all pollutants arising from associated development and transport, considered in a single holistic assessment (i.e., of overall impacts);
- 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;
- identify cumulative and incremental impacts (i.e., assess cumulative impacts from multiple sources), including those arising from associated development, other existing and proposed

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<sup>8</sup> <https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution>

<sup>9</sup>

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/795185/Review\\_of\\_interventions\\_to\\_improve\\_air\\_quality.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/795185/Review_of_interventions_to_improve_air_quality.pdf)

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);

- compare predicted environmental concentrations to the applicable standard or guideline value for the affected medium. Where available, the most recent UK standards for the appropriate media (i.e., 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, or other reputable International bodies e.g. European Union or OECD:
  - If no standard or guideline value exists, the predicted exposure to humans should be estimated and compared to an appropriate health-based value (e.g., a Tolerable Daily Intake or equivalent);
  - 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).
- include appropriate screening assessments and detailed dispersion modelling where this is screened as necessary;
- include Chemical Abstract Service (CAS) numbers alongside chemical names, where referenced in the ES;
- include consideration of local authority, Environment Agency, Natural Resources Wales, Defra national network, and any other local site-specific sources of monitoring data;
- 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 Committee on Carcinogenicity of Chemicals approach<sup>10</sup> is used.

Whilst screening of impacts using qualitative methodologies is common practice (eg, 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 applicant 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. Further to assessments of compliance with limit values, for non-threshold pollutants (ie, those that have no threshold below which health effects do not occur) the **benefits** of development options which reduce population exposure should be evaluated.

#### *Additional points specific to emissions to air*

When considering baseline conditions (of existing air quality) and 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) or Clean Air Zones (CAZ). The applicant should demonstrate close working/consultation with the appropriate local authorities
- modelling using appropriate meteorological data (i.e. from the nearest suitable meteorological station and include a range of years and worst-case conditions)
- modelling taking into account local topography, congestion and acceleration

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<sup>10</sup> <https://www.gov.uk/government/publications/cancer-risk-characterisation-methods>

### *Additional points specific to emissions to water*

When considering baseline conditions (of existing water quality) and the assessment and future monitoring of impacts, these should:

- include assessment of potential impacts on human health and not focus solely on ecological impacts
- identify and consider all routes by which emissions may lead to population exposure (e.g., surface watercourses, recreational waters, sewers, geological routes etc.)
- assess the potential off-site effects of emissions to groundwater (eg, on aquifers used for drinking water) and surface water (used for drinking water abstraction) in terms of the potential for population exposure
- include consideration of potential impacts on recreational users (eg, from fishing, canoeing etc.) alongside assessment of potential exposure via drinking water

### **Land quality**

We would expect the applicant to provide details of any hazardous contamination present on site (including ground gas) as part of a site condition report and associated risk assessment.

Emissions to and from the ground should be considered in terms of the previous history of the site and the potential of the site, during construction and 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 in accordance with the Environment Agency publication Land Contamination: risk management<sup>11</sup> and the potential impact on nearby receptors; control and mitigation measures should be outlined.

### **Waste**

The applicant should demonstrate compliance with the waste hierarchy (e.g. with respect to re-use, recycling or recovery and disposal).

For wastes arising from the development the ES should assess:

- 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

If the development includes wastes delivered to the installation:

- Consider issues associated with waste delivery and acceptance procedures (including delivery of prohibited wastes) and should assess potential off-site impacts and describe their mitigation

### **Other aspects**

Within the ES, PHE would expect to see information about how the applicant 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.

PHE would expect the applicant to consider 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: both in terms of their applicability to the development itself, and the development'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>12</sup>, jointly published by Liverpool John Moores University and the

<sup>11</sup> Available from <https://www.gov.uk/guidance/land-contamination-how-to-manage-the-risks>

<sup>12</sup> Available from: [http://allcatsrgrey.org.uk/wp/download/public\\_health/Health-Risk-Perception-Env-Probs.pdf](http://allcatsrgrey.org.uk/wp/download/public_health/Health-Risk-Perception-Env-Probs.pdf)

Health Protection Agency (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 ES’ as good practice.

### **Electromagnetic fields (EMF)**

This advice relates to 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 on the Gov.UK website.<sup>13</sup>

There is a potential health impact associated with the electric and magnetic fields around substations, overhead power lines and underground cables. The field strengths tend 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**

A voluntary code of practice is published which sets out key principles for complying with the ICNIRP guidelines.<sup>14</sup> 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.<sup>15, 16</sup>

#### **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, based on an accompanying comprehensive review of the scientific evidence, was published in 2004 by the National Radiological Protection Board (NRPB), one of PHE’s predecessor organisations<sup>17</sup>

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 as expressed in the 1999 EU Council Recommendation on limiting exposure of the general public (1999/519/EC):<sup>18</sup>

#### **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

<sup>13</sup> <https://www.gov.uk/government/collections/electromagnetic-fields#low-frequency-electric-and-magnetic-fields>

<sup>14</sup> [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)

<sup>15</sup> [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)

<sup>16</sup> [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)

<sup>17</sup>

<http://webarchive.nationalarchives.gov.uk/20140629102627/http://www.hpa.org.uk/Publications/Radiation/NPRBArchive/DocumentsOfTheNRPB/Absd1502/>

<sup>18</sup> [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)

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 electric fields. 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 underlying basic restrictions and reducing the risk of indirect effects.

### **Long term effects**

There is concern about the possible effects of long-term exposure to extremely low frequency electric and magnetic fields, from power lines. In the NRPB advice issued in 2004, it was concluded that the studies that suggest health effects, including those concerning childhood leukaemia in relation to power frequency magnetic fields, 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), which include power frequency fields, and to make practical recommendations to Government:<sup>19</sup>

Relevant here is SAGE's 2007 First Interim Assessment, which makes several recommendations concerning high voltage power lines. In responding, Government supported the implementation of low cost options such as optimal phasing to reduce exposure; however it did not support the option of creating corridors around power lines in which development would be restricted 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 on the national archive website.<sup>20</sup>

The Government also supported calls for providing more information on power frequency electric and magnetic fields, which is available on the PHE web pages.

### **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>21</sup> (ICRP) are followed. PHE provides advice on the application of these recommendations in the UK. The ICRP recommendations are

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<sup>19</sup> <http://www.emfs.info/policy/sage/>

<sup>20</sup>

[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)

<sup>21</sup> These recommendations are given in publications of the ICRP notably publications 90 and 103 see the website at <http://www.icrp.org/>

implemented in the Euratom Basic Safety Standards<sup>22</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.

As part of the EIA process PHE expects applicants 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.

When considering the radiological impact of routine discharges of radionuclides to the environment PHE would, as part of the EIA process, 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>23</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>24</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, undertaken as part of the EIA, 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.

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<sup>22</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.

<sup>23</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>24</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)

Of relevance here is PHE advice on radiological criteria and assessments for land-based solid waste disposal facilities<sup>25</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 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.

### **Noise from National Networks and Airports**

Public Health England's mission is to protect and improve the nation's health and wellbeing and reduce health inequalities. Environmental noise can cause stress and disturb sleep, which over the long term can lead to a number of adverse health outcomes.<sup>26 27</sup>

The Noise Policy Statement for England (NPSE)<sup>28</sup> sets out the government's overall policy on noise. Its aims are to:

- avoid significant adverse impacts on health and quality of life;
- mitigate and minimise adverse impacts on health and quality of life; and
- contribute to the improvement of health and quality of life.

These aims should be applied within a broader context of sustainable development, where noise is considered alongside other economic, social and environmental factors. PHE expects such factors may include<sup>29</sup>:

- Ensuring healthy lives and promoting well-being for all at all ages;
- promoting sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all;
- building resilient infrastructure, promoting inclusive and sustainable industrialisation and fostering innovation;
- reducing inequality; and
- making cities and human settlements inclusive, safe, resilient and sustainable.

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<sup>25</sup> HPA RCE-8, Radiological Protection Objectives for the Land-based Disposal of Solid Radioactive Wastes, February 2009

<sup>26</sup> World Health Organisation, *Environmental Noise Guidelines for the European Region*. 2018.

<sup>27</sup> Lercher, P., G. Aasvang, and Y.e. de Kluizenaar, *WHO Noise and Health Evidence Reviews*.

<sup>28</sup> DEFRA, *Noise Policy Statement for England*. 2010.

<sup>29</sup> United Nations. *Sustainable Development Goals*. 2020 [01/06/2020]; Available from: <https://sustainabledevelopment.un.org/?menu=1300>.

PHE’s consideration of the effects of health and quality and life attributable to noise is guided by the recommendations in the 2018 Environmental Noise Guidelines for the European Region 27 published by the World Health Organization, and informed by high quality systematic reviews of the scientific evidence<sup>28 30 31</sup> The scientific evidence on noise and health is rapidly developing, and PHE’s recommendations are also informed by relevant studies that are judged to be scientifically robust and consistent with the overall body of evidence.

In line with its mission, PHE believes that Nationally Significant Infrastructure Projects (NSIP) should not only limit significant adverse effects, but also explore opportunities to improve the health and quality of life of local communities and reduce inequalities.

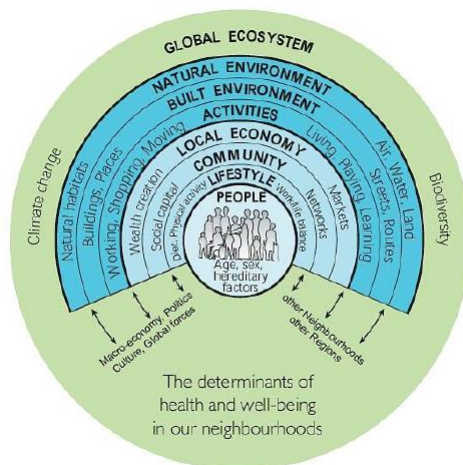
PHE also recognises the developing body of evidence showing that areas of tranquillity offer opportunities for health benefits through psychological restoration. NSIP applications need to demonstrate that they have given due consideration to the protection of the existing sound environment in these areas.

Further, more detailed, guidance on PHE’s scoping advice for noise issues associated with road schemes is included in Appendix 3.

### Wider Determinants of Health

The World Health Organization (WHO's) defines health as “a state of complete physical, mental and social well-being and not merely an absence of disease or infirmity” (WHO, 1948).

The health and wellbeing 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.



Barton and Grant<sup>32</sup>

<sup>30</sup> Clark, C., C. Crumpler, and A.H. Notley, *Evidence for Environmental Noise Effects on Health for the United Kingdom Policy Context: A Systematic Review of the Effects of Environmental Noise on Mental Health, Wellbeing, Quality of Life, Cancer, Dementia, Birth, Reproductive Outcomes, and Cognition*. Int J Environ Res Public Health, 2020. **17**(2).

<sup>31</sup> van Kamp, I., et al., *Evidence Relating to Environmental Noise Exposure and Annoyance, Sleep Disturbance, Cardio-Vascular and Metabolic Health Outcomes in the Context of IGCN (N): A Scoping Review of New Evidence*. Int J Environ Res Public Health, 2020. **17**(9).

<sup>32</sup> Barton H, Grant M. A health map for the local human habitat. The Journal of the Royal Society for the Promotion of Health 2006; 126(6): 252-3.



PHE recognises that evaluating an NSIP's impacts on health through the wider determinants is more complex than assessing a project's direct impacts against clearly defined regulatory protections. The 2017 EIA Regulations clarify that the likely significant effects of a development proposal on population and human health must be assessed.

PHE's expectations are that the proponent of an NSIP will conduct a proportionate and evidence-based assessment of the anticipated direct and indirect effects on health and wellbeing in line with the relevant regulatory and policy requirements. Consideration should be given to impacts during the construction, operation and decommissioning phase of NSIPs. Consideration should be given to the avoidance or mitigation of any negative impacts, as well as to how the NSIP could be designed to maximise potential positive benefits.

We accept that the relevance of wider determinants and associated impacts will vary depending on the nature of the proposed development. PHE has focused its 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

PHE has developed a list of 21 determinants of health and wellbeing under these four broad themes. These determinants should be considered within any scoping report and if the applicant proposes to scope any areas out of the assessment, they should provide clear evidence-based reasoning and justification. Appendix 2 provides greater detail on the nature of each determinant.

### **Methodology**

PHE will expect assessments to set out the methodology used to assess impacts on each determinant included in the scope of the assessment. In some instances, the methodologies described may be established and refer to existing standards and/or guidance. In other instances, there may be no pre-defined methodology, which can often be the case for the wider determinants of health; as such there should be an application of a logical evidence based impact assessment method that:

- identifies the temporal and geographic scope of assessment
- identifies affected sensitive receptors (general population and vulnerable populations) to impacts from the relevant determinant
- establishes the current baseline situation
- identifies the NSIP's potential direct and indirect impacts on each population
- if impacts are identified, evaluates whether the potential effect is likely to be significant in relation to the affected population
- identifies appropriate mitigation to eliminate or minimise impacts or the subsequent effects on health and inequalities
- identifies opportunities to achieve benefits from the scheme for health and inequalities
- considers any in combination or cumulative effects
- identifies appropriate monitoring programmes

Currently there is no standard methodology for assessing the population and human health effects of infrastructure projects, but a number of guides exist, including:

- Institute of Environmental Management and Assessment, 2017: Health in Environmental Assessment, a primer for a proportionate approach;<sup>33</sup>
- NHS London Healthy Urban Development Unit (HUDU), 2015. Healthy Urban Planning Checklist and Rapid Health Impact Assessment Tool;<sup>34</sup>
- Wales Health Impact Assessment Unit, 2012: HIA a practical guide;<sup>35</sup>
- National Mental Wellbeing Impact Assessment Development Unit 2011: Mental Wellbeing Impact Assessment Toolkit;<sup>36</sup>

PHE expects assessments to follow best practice from these guides and from methodologies adopted within other successful health/environmental impacts assessments.

### **Determining significant effects**

Neither the EIA regulations nor the National Policy Statements provide a definition of what constitutes a 'significant' effect, and so PHE have derived a list of factors which it will take into consideration in the assessment of significance of effects, as outlined below. These list of factors should be read in conjunction with guidance from the above guides.

#### **1. Sensitivity:**

Is the population exposed to the NSIP at particular risk from effects on this determinant due to pre-existing vulnerabilities or inequalities (for example, are there high numbers in the local population of people who are young, older, with disabilities or long-term conditions, or on a low income)? Will the NSIP widen existing inequalities or introduce new inequalities in relation to this determinant?

#### **2. Magnitude:**

How likely is the impact on this determinant to occur? If likely, will the impact affect a large number of people / Will the impact affect a large geographic extent? Will the effects be frequent or continuous? Will the effects be temporary or permanent and irreversible?

#### **3. Cumulative effects:**

Will the NSIP's impacts on this determinant combine with effects from other existing or proposed NSIPs or large-scale developments in the area, resulting in an overall cumulative effect different to that of the project alone?

What are the cumulative effects of the impacts of the scheme on communities or populations. Individual impacts individually may not be significant but in combination may produce an overall significant effect.

#### **4. Importance:**

Is there evidence for the NSIP's effect on this determinant on health? Is the impact on this determinant important in the context of national, regional or local policy?

#### **5. Acceptability:**

What is the local community's level of acceptance of the NSIP in relation to this determinant? Do the local community have confidence that the applicants will promote positive health impacts and mitigate against negative health effects?

#### **6. Opportunity for mitigation:**

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[https://www.researchgate.net/publication/316968065\\_Health\\_in\\_Environmental\\_Impact\\_Assessment\\_a\\_primer\\_for\\_a\\_proportionate\\_approach](https://www.researchgate.net/publication/316968065_Health_in_Environmental_Impact_Assessment_a_primer_for_a_proportionate_approach)

<sup>34</sup> <https://www.healthyrbandevelopment.nhs.uk/our-services/delivering-healthy-urban-development/health-impact-assessment/>

<sup>35</sup> [https://whiasu.publichealthnetwork.cymru/files/1415/0710/5107/HIA\\_Tool\\_Kit\\_V2\\_WEB.pdf](https://whiasu.publichealthnetwork.cymru/files/1415/0710/5107/HIA_Tool_Kit_V2_WEB.pdf)

<sup>36</sup> <https://q.health.org.uk/document/mental-wellbeing-impact-assessment-a-toolkit-for-wellbeing/>

If this determinant is included in the scope for the EIA is there an opportunity to enhance any positive health impacts and/or mitigate any negative health impacts?

### **Vulnerable groups**

Certain parts of the population may experience disproportionate negative health effects as a result of a development. Vulnerable populations can be identified through research literature, local population health data or from the identification of pre-existing health conditions that increase vulnerability.

The effects on health and wellbeing and health inequalities of the scheme will have particular effect on vulnerable or disadvantaged populations, including those that fall within the list of protected characteristics. Some protected groups are more likely to have elevated vulnerability associated with social and economic disadvantages. Consideration should be given to language or lifestyles that influence how certain populations are affected by impacts of the proposal, for example non-English speakers may face barriers to accessing information about the works or expressing their concerns.

Equality Impact Assessments (EqIA) are used to identify disproportionate effects on Protected Groups (defined by the Equality Act, 2010), including health effects. The assessments and findings of the Environmental Statement and the EqIA should be cross referenced between the two documents, particularly to ensure the assessment of potential impacts for health and inequalities and that resulting mitigation measures are mutually supportive.

The Wales Health Impact Assessment Support Unit (WHIASU), provides a suggested guide to vulnerable groups

#### *Age related groups*

- Children and young people
- Older people

#### *Income related groups*

- People on low income
- Economically inactive
- Unemployed/workless
- People who are unable to work due to ill health

#### *Groups who suffer discrimination or other social disadvantage*

- People with physical or learning disabilities/difficulties
- Refugee groups
- People seeking asylum
- Travellers
- Single parent families
- Lesbian, gay or transgender people
- Black and minority ethnic groups
- Religious groups

#### *Geographical groups*

- People living in areas known to exhibit poor economic and/or health indicators
- People living in isolated/over-populated areas
- People unable to access services and facilities

### **Mental health**

PHE supports the use of the broad definition of health proposed by the World Health Organisation (WHO). 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. NSIP schemes can be of such scale and nature that they will impact on the over-arching protective factors, which are:

- Enhancing control
- Increasing resilience and community assets
- Facilitating participation and promoting inclusion.

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 impacts on mental health, including suicide, is required. 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

Perceptions about the proposed scheme may increase the risk of anxiety or health effects by perceived effects. “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.

### **Evidence base and baseline data**

Baseline population / community health data (quantitative and qualitative) should be sufficient to represent current health status and identify areas or groups with poor health or inequalities. This should provide sufficient information on the physical and mental health and wellbeing and social determinants of health for the affected populations and any vulnerable groups identified.

A baseline health assessment could include:

- General population data (including size, density, age, gender, income and employment, socio-economic status, crime and disorder etc, health status.)
- Environmental information (housing, transport, access to services, provision and access to green space, tranquillity or sound environment)
- Data on behaviour, such as levels of physical activity, smoking, car usage, walking and cycling
- Surveys of local conditions
- Local concerns and anxieties (where documented)
- Secondary analysis of existing local data
- Resident surveys or consultations
- Health status, particularly of the population groups already identified as vulnerable and likely to benefit or be harmed by the proposal. This should include mental health and suicide.
- Quality of life indicators (if available / relevant)
- Local people’s views of the area and of the services provided (community engagement exercises)

There will be a range of publicly available health data including:

- National datasets such as those from the Office of National Statistics,
- PHE, including the fingertips data sets,
- Non-governmental organisations,
- Local public health reports, such as the Joint Strategic Needs Assessment and Health and Wellbeing Strategies;
- Consultation with local authorities, including public health teams
- Information received through public consultations, including community engagement exercises

There should be a narrative which interprets the data collected in the context of the project. A list of tables and data is not sufficient, so the report should consider:

- Are particular groups or vulnerable groups likely to be impacted more than others and is this clearly described and explained?
- What indicators within the current health baseline that are worse than England average/ local ward or LSOA levels?
- What are the levels of inequality in the study area?  
What are the potential inequalities in the distribution of impacts?

## **Mitigation**

If the assessment has identified that significant negative effects are likely to occur with respect to the wider determinants of health, the assessment should include a description of planned mitigation measures the applicant will implement to avoid or prevent effects on the population.

Mitigation and/or monitoring proposals should be logical, feasible and have a clear governance and accountability framework indicating who will be responsible for implementation and how this will be secured during the construction and/or operation of the NSIP.

Any proposed mitigation should have sufficient detail to allow for an assessment of the adequacy of the proposed mitigation measures.

## **Positive benefits from the scheme**

The scale of many NSIP developments will generate the potential for positive impacts on health and wellbeing; however, delivering such positive health outcomes often requires specific enabling or enhancement measures. For example, the construction of a new road network to access an NSIP site may provide an opportunity to improve the active transport infrastructure for the local community. PHE expects developments to consider and report on the opportunity and feasibility of positive impacts. These may be stand alone or be considered as part of the mitigation measures.

## **Replacement publicly accessible space or community assets**

The replacement of community assets provides opportunity for positive impacts and the design, location and operation of the replacement asset should be considered in consultation with user, the local community and agencies.

Any replacement recreational land, open space or other community assets should be located and designed to:

- Not unreasonably extend journey times or increase transport costs, or result in too many people being prevented from travelling sustainably due to unsuitable walking or cycling routes.
- Ensure that accessibility planning has been properly taken into account and that the proposal will not adversely impact on disadvantaged groups.
- Meet identified community needs which may go beyond direct replacement but can be reasonably incorporated
- Provide acceptable recreational amenity, including noise environment, for outdoor spaces associated with the individual community facilities
- The design of the sites should be carried out in consultation with the local community. It should incorporate features and designs to enable access and use across the life course.
- The PEIR should contain sufficient detail regarding the location and design in order to determine the acceptability of the replacement facilities.
- Quality, quantity and accessibility should be determined against defined criteria agreed with stakeholders. The following evidence based assessment tools should be considered:

The quality of the provision of replacement green space should be assessed, for example by the use of:

[Building with Nature](#) - There are 6 wellbeing standards, which are:

- Accessible
- Inclusive
- Seasonal enjoyment
- Locally relevant
- Socially sustainable
- Distinctive

The [ANGSt standards](#) address amount, access and quality

The [ORVaL tool](#) - This tool works on areas that are currently publicly accessible and looks at welfare values for this area. The site functionality allows users to investigate how altering the land cover, features or the area of existing recreation sites will change usage and welfare values. This allows a comparison between existing and the proposed sites. Contact should be made with the ORVaL team to establish the functionality of the tool relevant to the DCO and interpretation of the findings<sup>37</sup>.

[Green Flag Award](#)- a robust framework for assessing the quality of public green spaces of all types and sizes.

## **Employment**

NSIP schemes have the potential to negatively impact through the relocation or loss of local businesses. Equally they can offer an opportunity for new business activity and employment both at the construction stage and operation of the development approved by the DCO.

There is clear evidence that good work improves health and wellbeing across people's lives and protects against social exclusion. Conversely, unemployment is bad for health and wellbeing, as it is associated with an increased risk of mortality and morbidity. For many individuals, in particular those with long-term conditions such as mental health problems, musculoskeletal (MSK) conditions and disabilities, health issues can be a barrier to gaining and retaining employment. Employment rates are lowest among disabled people, with only 51.3% in work, meaning there is a substantial employment rate gap in the UK between disabled and non-disabled people (81.4% in employment). Among these working age disabled people in the UK, 54% have a mental health or MSK condition as their main health condition<sup>38</sup>. Enabling people with health issues to obtain or retain work, and be productive within the workplace, is a crucial part of the economic success and wellbeing of every community and industry.

It is important that people are supported to gain employment and maintain economic independence for themselves and their families, especially as they age. This is of particular importance for individuals with long-term conditions and disabilities, due to the barriers they face in gaining employment and retaining a job.

Where relevant any assessments should include:

- The impact of business relocation in order to identify the likely level of job losses within the study area
- The proposed support mechanisms to be established for business owners and employees
- A clear strategy and action plan that addresses barriers to employment within the local population and those that cease employment due to the DCO.

## **Compulsory purchase**

NSIP schemes can involve the compulsory acquisition of property from land take. Mitigation will involve supporting home-owners and tenants in understanding and utilising the compensation and support offered through the compensation policies.

The impacts from compulsory acquisition of land and property can affect health and wellbeing, including mental health, for example from home, school and employment relocation and loss of employment. This will be particularly relevant to sensitive receptors within communities, many of which will form part of the private rented sector.

Compensation and support can be an important element of mitigation, but developers should consider opportunities to work through partners and local Voluntary, Community and Social

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<sup>37</sup> [https://www.leep.exeter.ac.uk/orval/pdf-reports/ORVal2\\_User\\_Guide.pdf](https://www.leep.exeter.ac.uk/orval/pdf-reports/ORVal2_User_Guide.pdf)

<sup>38</sup> [PHE \(Jan 2019\). Guidance - Health matters: health and work \(https://publichealthmatters.blog.gov.uk/2019/01/31/health-matters-health-and-work/\)](https://publichealthmatters.blog.gov.uk/2019/01/31/health-matters-health-and-work/)

Enterprise (VCSE) organisations. These organisations offer the potential for engagement with vulnerable groups and may gain greater acceptance by the wider community.

Any compulsory purchase support schemes should ensure sufficient competency in public health, including public mental health, in order to help support local communities. The aim would be to establish a workforce that is confident, competent and committed to:

promote good physical and mental health across the population

prevent mental illness and suicide

improve the quality and length of life of people living within affected communities

The Public mental health leadership and workforce development framework<sup>39</sup> published by PHE offers a skills framework for the wider public health workforce. As well as the competences in this framework. Health Education England (HEE) have published a course content guide entitled Public Mental Health Content Guide For introductory courses or professional development in mental health and wellbeing<sup>40</sup>.

### **Monitoring**

PHE expects an assessment to include consideration of the need for monitoring and the ES should clearly state the principles on which the monitoring strategy has been established, including monitoring in response to unforeseen impacts or effects.

It may be appropriate to undertake monitoring where:

- Critical assumptions have been made in the absence of supporting evidence or data
- There is uncertainty about whether significant negative effects are likely to occur and it would be appropriate to include planned monitoring measures to track their presence, scale and nature.
- There is uncertainty about the potential success of mitigation measures
- It is necessary to track the nature of the impact or effect and provide useful and timely feedback that would allow action to be taken should negative effects occur

The monitoring strategy should set out:

- Monitoring methodologies
- Data sources, particularly if being obtained from third parties or open access data
- Assessment methods
- Publication methodology
- Reporting frequency
- Temporal and geographic scope

For very large controversial schemes it may be worth considering the need to have an independent organisation undertake / report on the monitoring and the need for academic robustness.

### **Community based reports**

Large complex schemes that involve significant effects on communities or significant cumulative effects can benefit from identifying impacts and reporting at an individual community level. This assists in the identification of 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.

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<sup>39</sup> [Public mental health leadership and workforce development framework - Confidence, competence, commitment. PHE \(2015\)](#)

<sup>40</sup> [Public Mental Health Content Guide for introductory courses or professional development in mental health and wellbeing. Health education England](#)

**How to contact PHE**

If you wish to contact us regarding an existing or potential NSIP application please email:  
[nsipconsultations@phe.gov.uk](mailto:nsipconsultations@phe.gov.uk)



## Appendix 2

Table 1 – Wider determinants of health and wellbeing

Health and wellbeing themes			
Access	Traffic and Transport	Socioeconomic	Land Use
<b>Wider determinants of health and wellbeing</b>			
<p>Access to :</p> <ul style="list-style-type: none"> <li>• local public and key services and facilities.</li> <li>• Good quality affordable housing.</li> <li>• Healthy affordable food.</li> <li>• The natural environment.</li> <li>• The natural environment within the urban environment.</li> <li>• Leisure, recreation and physical activities 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 cohesions 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>

### 1) Access

- a. Access to local, public and key services and facilities  
 Access to local facilities can increase mobility and social participation. Body mass index is significantly associated with access to facilities, including factors such as the mix and density of facilities in the area. The distance to facilities has no or only a small effect on walking and other physical activities. Access to recreational facilities can increase physical activity, especially walking for recreation, reduce body weight, reduce the risk of high blood pressure, and reduce the number of vehicle trips, the distances travelled and greenhouse gas emissions.

Local services include health and social care, education, employment, and leisure and recreation. Local facilities include community centres, shops, banks/credit unions and Post Offices. Services and facilities can be operated by the public, private and/or voluntary sectors. Access to services and facilities is important to both physical and mental health and wellbeing. Access is affected by factors such as availability, proximity to people's place of residence, existence of transport services or active travel infrastructure to the location of services and facilities, and the quality of services and facilities.

The construction or operation of an NSIP can affect access adversely: it may increase demand and therefore reduce availability for the existing community; during

construction, physical accessibility may be reduced due to increased traffic and/or the blockage of or changes to certain travel routes. It is also possible that some local services and facilities are lost due to the land-take needed for the NSIP.

Conversely if new routes are built or new services or facilities provided the NSIP may increase access. NSIPs relating to utilities such as energy and water can maintain, secure or increase access to those utilities, and thereby support health and wellbeing.

b. Access to good-quality affordable housing

Housing refurbishment can lead to an improvement in general health and reduce health inequalities. Housing improvements may also benefit mental health. The provision of diverse forms and types of housing is associated with increased physical activity. The provision of affordable housing is strongly associated with improved safety perceptions in the neighbourhood, particularly among people from low-income groups. For vulnerable groups, the provision of affordable housing can lead to improvements in social, behavioural and health related outcomes. For some people with long term conditions, the provision of secure and affordable housing can increase engagement with healthcare services, which can lead to improved health-related outcomes. The provision of secure and affordable housing can also reduce engagement in risky health-related behaviours. For people who are homeless, the provision of affordable housing increases engagement with healthcare services, improves quality of life and increases employment, and contributes to improving mental health.

Access to housing meets a basic human need, although housing of itself is not necessarily sufficient to support health and wellbeing: it is also important that the housing is of good quality and affordable. Factors affecting the quality of housing include energy efficiency (eg effective heating, insulation), sanitation and hygiene (eg toilet and bathroom), indoor air quality including ventilation and the presence of damp and/or mould, resilience to climate change, and overcrowding. The affordability of housing is important because for many people, especially people on a low income, housing will be the largest monthly expense; if the cost of housing is high, people may not be able to meet other needs such as the need for heating in winter or food. Some proposals for NSIPs include the provision of housing, which could be beneficial for the health and wellbeing of the local population. It is also possible that some housing will be subject to a compulsory purchase order due to the land-take needed for an NSIP.

c. Access to affordable healthy food

Access to healthy food is related to the provision of public and active transport infrastructure and the location and proximity of outlets selling healthier food such as fruit and vegetables. For the general population, increased access to healthy, affordable food through a variety of outlets (shops, supermarkets, farmers' markets and community gardens) is associated with improved dietary behaviours, including attitudes towards healthy eating and food purchasing behaviour, and improved adult weight. Increased access to unhealthier food retail outlets is associated with increased weight in the general population and increased obesity and unhealthy eating behaviours among children living in low-income areas. Urban agriculture can improve attitudes towards healthier food and increase fruit and vegetable consumption.

Factors affecting access to healthy affordable food include whether it is readily available from local shops, supermarkets, markets or delivery schemes and/or there are opportunities to grow food in local allotments or community gardens. People in environments where there is a high proportion of fast food outlets may not have easy access to healthy affordable food.

d. Access to the natural environment

Availability of and access to safe open green space is associated with increased physical activity across a variety of behaviours, social connectedness, childhood development, reduced risk of overweight and obesity and improved physical and mental health outcomes. While the quantity of green space in a neighbourhood helps to promote physical activity and is beneficial to physical health, eg lower rates of mortality from cardiovascular disease and respiratory disease in men, the availability of green environments is likely to contribute more to mental health than to physical health: the prevalence of some disease clusters, particularly anxiety and depression, is lower in living environments which have more green space within a 1-km radius.

The proximity, size, type, quality, distribution, density and context of green space are also important factors. Quality of green space may be a better predictor of health than quantity, and any type of green space in a neighbourhood does not necessarily act as a venue for, or will encourage, physical activity. 'Walkable' green environments are important for better health, and streetscape greenery is as strongly related to self-reported health as green areas. Residents in deprived areas are more likely to perceive access to green space as difficult, to report poorer safety, to visit the green space less frequently and to have lower levels of physical activity. The benefits to health and wellbeing of blue space include lower psychological distress.

The natural environment includes the landscape, waterscape and seascape. Factors affecting access include the proximity of the natural environment to people's place of residence, the existence of public transport services or active travel infrastructure to the natural environment, the quality of the natural environment and feelings of safety in the natural environment. The construction of an NSIP may be an opportunity to provide green and/or blue infrastructure in the local area. It is also possible that green or blue infrastructure will be lost due to the land-take needed for the NSIP.

e. Access to the natural environment within the urban environment

Public open spaces are key elements of the built environment. Ecosystem services through the provision of green infrastructure are as important as other types of urban infrastructure. It supports physical, psychological and social health, although the quality, perceptions of safety and accessibility of green space affects its use. Safe parks may be particularly important for promoting physical activity among urban adolescents. Proximity to urban green space and an increased proportion of green space are associated with decreased treatment of anxiety/mood disorders, the benefits deriving from both participation in usable green space near to home and observable green space in the neighbourhood. Urban agriculture may increase opportunities for physical activity and social connections.

A view of 'greenery' or of the sea moderates the annoyance response to noise. Water is associated with positive perceptive experiences in urban environments, with benefits for health such as enhanced contemplation, emotional bonding, participation and physical activity. Increasing biodiversity in urban environments, however, may promote the introduction of vector or host organisms for infectious pathogens, eg green connectivity may potentiate the role of rats and ticks in the spread of disease, and bodies of water may provide habitats for mosquitoes.

The natural environment within the urban environment includes the provision of green and blue space in towns and cities. Factors involved in access include the proximity of the green and/or blue space to people's place of residence, the existence of transport services or active travel infrastructure to the green and/or blue space, the quality of the green and/or blue space and feelings of safety when using the green and/or blue space. The construction of an NSIP may be an opportunity to provide green and/or blue infrastructure in the local urban environment. It is also possible that green or blue

infrastructure in the urban environment will be lost due to the land-take needed for the NSIP.

- f. Access to leisure, recreation and physical activity opportunities within the urban and natural environments.

Access to recreational opportunities, facilities and services is associated with risk factors for long-term disease; it can increase physical activity, especially walking for recreation, reduce body mass index and overweight and obesity, reduce the risk of high blood pressure, and reduce the number of vehicle trips, the distances travelled and greenhouse gas emissions. It can also enhance social connectedness. Children tend to play on light-traffic streets, whereas outdoor activities are less common on high-traffic streets. A perception of air pollution can be a barrier to participating in outdoor physical activity<sup>41</sup>. However, the health co-benefits from physical activity outweigh the adverse effects of air pollution. There is a positive association between urban agriculture and increased opportunities for physical activity and social connectivity. Gardening in an allotment setting can result in many positive physical and mental health-related outcomes. Exercising in the natural environment can have a positive effect on mental wellbeing when compared with exercising indoors.

Leisure and recreation opportunities include opportunities that are both formal, such as belonging to a sports club, and informal, such as walking in the local park or wood. Physical activity opportunities include routine activity as part of daily life, such as walking or cycling to work, and activity as part of leisure or recreation, such as playing football. The construction of an NSIP may enhance the opportunities available for leisure and recreation and physical activity through the provision of new or improved travel routes, community infrastructure and/or green or blue space. Conversely, construction may reduce access through the disruption of travel routes to leisure, recreation and physical activity opportunities.

## 2) **Traffic and Transport**

- a. Accessibility

Walkability, regional accessibility, pavements and bike facilities are positively associated with physical activity and negatively related to body weight and high blood pressure, and reduce the number of vehicle trips, the distances travelled and greenhouse gas emissions. Body mass index is associated with street network accessibility and slope variability.

Accessibility in relation to transport and travel has several aspects including whether potential users can gain physical access to the infrastructure and access to the services the infrastructure provides. The design and operation of transport infrastructure and the associated services should take account of the travel needs of all potential users including people with limited mobility. People whose specific needs should be considered include pregnant women, older people, children and young people and people with a disability. Other aspects of transport infrastructure affecting accessibility include safety and affordability, both of which will affect people's ability to travel to places of employment and/or key local services and facilities and/or access their social networks.

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<sup>41</sup> Annear, M., Keeling, S., Wilkinson, T., Cushman, G., Gidlow, B., & Hopkins, H. (2014). Environmental influences on healthy and active ageing: A systematic review. *Ageing & Society*, 34 (4), 590-622. Available at [https://www.academia.edu/34314864/Environmental\\_influences\\_on\\_healthy\\_and\\_active\\_ageing\\_a\\_systematic\\_review](https://www.academia.edu/34314864/Environmental_influences_on_healthy_and_active_ageing_a_systematic_review)

b. Access to / by public transport

Provision of high-quality public transport is associated with higher levels of active travel among children and among people commuting to work, with a decrease in the use of private cars. Combining public transport with other forms of active travel can improve cardiovascular fitness. Innovative or new public transport interventions may need to be marketed and promoted differently to different groups of transport users, eg by emphasising novelty to car users while ensuring that the new system is seen by existing users as coherently integrated with existing services.

Transport facilitates access to other services, facilities and amenities important to health and wellbeing. Public transport is any transport open to members of the public including bus, rail and taxi services operated by the public, private or community sectors. For people who do not have access to private transport, access to public transport is important as the main agency of travel especially for journeys >1 mile. Access to public transport is not sufficient, however, and access by public transport needs to be taken into account: public transport services should link places where people live with the destinations they need or want to visit such as places of employment, education and healthcare, shops, banks and leisure facilities. Other aspects of access to public transport include affordability, safety, frequency and reliability of services.

c. Opportunities for / access by cycling & walking

Walking and cycling infrastructure can enhance street connectivity, helping to reduce perceptions of long-distance trips and providing alternative routes for active travel. Awareness of air pollution could be a barrier to participating in active travel, however those that choose to walk or cycle often experience lower exposure to pollution, and create less pollution than those in vehicles<sup>42</sup>. Prioritising pedestrians and cyclists through changes in physical infrastructure can have positive behavioural and health outcomes, such as physical activity, mobility and cardiovascular outcomes. The provision and proximity of active transport infrastructure is also related to other long-term disease risk factors, such as access to healthy food, social connectedness and air quality.

Perceived or objective danger may also have an adverse effect on cycling and walking, both of which activities decrease with increasing traffic volume and speed, and cycling for leisure decreases as local traffic density increases. Health gains from active travel policies outweigh the adverse effects of road traffic incidents. New infrastructure to promote cycling, walking and the use of public transport can increase the time spent cycling on the commute to work, and the overall time spent commuting among the least-active people. Active travel to work or school can be associated with body mass index and weight, and may reduce cardiovascular risk factors and improve cardiovascular outcomes. The distance of services from cycle paths can have an adverse effect on cycling behaviour, whereas mixed land use, higher densities and reduced distances to non-residential destinations promote transportation walking.

d. Links between communities

Social connectedness can be enhanced by the provision of public and active transport infrastructure and the location of employment, amenities, facilities and services.

e. Community severance

In neighbourhoods with high volumes of traffic, the likelihood of people knowing and trusting neighbours is reduced.

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<sup>42</sup> Defra 2019, Clean Air Strategy 2019. Available at <https://www.gov.uk/government/publications/clean-air-strategy-2019>

- f. Connections to jobs  
The location of employment opportunities and the provision of public and active transportation infrastructure are associated with risk factors for long-term disease such as physical activity. Good pedestrian and cycling infrastructure can promote commuting physical activity. Improved transport infrastructure has the potential to shift the population distribution of physical activity in relation to commuting, although a prerequisite may be a supportive social environment. Mixed land use, higher densities and reduced distances to non-residential destinations promote transportation walking.

The ease of access to employment, shops and services including the provision of public and active transport are important considerations and schemes should take any opportunity to improve infrastructure to promote cycling, walking and the use of public transport

- g. Connections to services, facilities and leisure opportunities  
Mixed land use, higher densities and reduced distances to non-residential destinations promote transportation walking. Access to recreational opportunities and the location of shops and services are associated with risk factors for long-term disease such as physical activity, access to healthy food and social connectedness. Increased distance of services from cycle paths can have an adverse effect on cycling behaviour.

### 3) **Socio Economic**

- a. Employment opportunities including training opportunities  
Employment is generally good for physical and mental health and well-being, and worklessness is associated with poorer physical and mental health and well-being. Work can be therapeutic and can reverse the adverse health effects of unemployment for healthy people of working age, many disabled people, most people with common health problems and social security beneficiaries. Account must be taken of the nature and quality of work and its social context and jobs should be safe and accommodating. Overall, the beneficial effects of work outweigh the risks of work and are greater than the harmful effects of long-term unemployment or prolonged sickness absence. Employment has a protective effect on depression and general mental health.

Transitions from unemployment to paid employment can reduce the risk of distress and improve mental health, whereas transitions into unemployment are psychologically distressing and detrimental to mental health. The mental health benefits of becoming employed are also dependent on the psychosocial quality of the job, including level of control, demands, complexity, job insecurity and level of pay: transition from unemployment to a high-quality job is good for mental health, whereas transition from unemployment to a low-quality job is worse for mental health than being unemployed. For people receiving social benefits, entry into paid employment can improve quality of life and self-rated health (physical, mental, social) within a short time-frame. For people receiving disability benefits, transition into employment can improve mental and physical health. For people with mental health needs, entry into employment reduces the use of mental health services.

For vocational rehabilitation of people with severe mental illness (SMI), Supported Employment is more effective than Pre-vocational Training in helping clients obtain competitive employment; moreover, clients in Supported Employment earn more and work more hours per month than those in Pre-vocational Training.

- b. Local Business Activity  
It is important to demonstrate how a proposed development will contribute to ensuring

the vitality of town centres. Schemes should consider the impact on local employment, promote beneficial competition within and between town centres, and create attractive, diverse places where people want to live, visit and work

In rural areas the applicant should assess the impact of the proposals on a prosperous rural economy, demonstrate how they will support the sustainable growth and expansion of all types of business and enterprise in rural areas, promoting the development and diversification of agricultural and other land based rural businesses.

c. Regeneration

Following rebuilding and housing improvements in deprived neighbourhoods, better housing conditions are associated with better health behaviours; allowing people to remain in their neighbourhood during demolition and rebuilding is more likely to stimulate life-changing improvements in health behaviour than in people who are relocated. The partial demolition of neighbourhoods does not appear to affect residents' physical or mental health. Mega-events, such as the Olympic Games, often promoted on the basis of their potential legacy for regeneration, appear to have only a short-term impact on mental health.

d. Tourism and Leisure Industries

The applicant should assess the impact of the proposed development on retail, leisure, commercial, office, tourism, cultural, community and residential development needed in town centres. In rural locations assessment and evaluation of potential impacts on sustainable rural tourism and leisure developments that benefit businesses in rural areas, communities and visitors should be undertaken.

e. Community / social cohesion and access to social networks

The location of employment, shops and services, provision of public and active transport infrastructure and access to open space and recreational opportunities are associated with social connectedness. Access to local amenities can increase social participation. Neighbourhoods that are more walkable can increase social capital. Urban agriculture can increase opportunities for social connectivity. Infrastructure developments, however, can affect the quality of life of communities living in the vicinity, mediated by substantial community change, including feelings of threat and anxiety, which can lead to psychosocial stress and intra-community conflict.

f. Community engagement

Public participation can improve environmental impact assessments, thereby increasing the total welfare of different interest groups in the community. Infrastructure development may be more acceptable to communities if it involves substantial public participation.

4) **Land Use**

a. Land use in urban and / or rural settings

Land-use mix including infrastructure:

Land use affects health not only by shaping the built environment, but also through the balance of various types of infrastructure including transport. Vulnerable groups in the population are disproportionately affected by decisions about land use, transport and the built environment. Land use and transport policies can result in negative health impacts due to low physical activity levels, sedentary behaviours, road traffic incidents, social isolation, air pollution, noise and heat. Mixed land use can increase both active travel and physical activity. Transportation walking is related to land-use mix, density and distance to non-residential destinations; recreational walking is related to density and mixed use. Using modelling, if land-use density and diversity are increased, there is a shift from motorised transport to cycling, walking and the use

of public transport with consequent health gain from a reduction in long-term conditions including diabetes, cardiovascular disease and respiratory disease.

b. Quality of urban and natural environments

Long-term conditions such as cardiovascular disease, diabetes, obesity, asthma and depression can be moderated by the built environment. People in neighbourhoods characterised by high 'walkability' walk more than people in neighbourhoods with low 'walkability' irrespective of the land-use mix. In neighbourhoods associated with high 'walkability' there is an increase in physical activity and social capital, a reduction in overweight and blood pressure, and fewer reports of depression and of alcohol abuse. The presence of walkable land uses, rather than their equal mixture, relates to a healthy weight. Transportation walking is at its highest levels in neighbourhoods where the land-use mix includes residential, retail, office, health, welfare and community, and entertainment, culture and recreation land uses; recreational walking is at its highest levels when the land-use mix includes public open space, sporting infrastructure and primary and rural land uses. Reduced levels of pollution and street connectivity increase participation in physical activity.

Good-quality street lighting and traffic calming can increase pedestrian activity, while traffic calming reduces the risk of pedestrian injury. 20-mph zones and limits are effective at reducing the incidence of road traffic incidents and injuries, while good-quality street lighting may prevent them. Public open spaces within neighbourhoods encourage physical activity, although the physical activity is dependent on different aspects of open space, such as proximity, size and quality. Improving the quality of urban green spaces and parks can increase visitation and physical activity levels.

Living in a neighbourhood overlooking public areas can improve mental health, and residential greenness can reduce the risk of cardiovascular mortality. Crime and safety issues in a neighbourhood affect both health status and mental health. Despite the complexity of the relationship, the presence of green space has a positive effect on crime, and general environmental improvements may reduce the fear of crime. Trees can have a cooling effect on the environment – an urban park is cooler than a non-green site. Linking road infrastructure planning and green infrastructure planning can produce improved outcomes for both, including meeting local communities' landscape sustainability objectives.



## Appendix 3

### NSIP National Networks – Road schemes (scoping stage)

### Public Health England Generic Response: Noise and Public Health

#### Guiding principles

Public Health England's mission is to protect and improve the nation's health and wellbeing and reduce health inequalities. Environmental noise can cause stress and disturb sleep, which over the long term can lead to a number of adverse health outcomes [1, 2]. The Noise Policy Statement for England (NPSE) [3] sets out the government's overall policy on noise. Its aims are to:

- avoid significant adverse impacts on health and quality of life;
- mitigate and minimise adverse impacts on health and quality of life; and
- contribute to the improvement of health and quality of life.

These aims should be applied within a broader context of sustainable development, where noise is considered alongside other economic, social and environmental factors. PHE expects such factors may include [4]:

- Ensuring healthy lives and promoting well-being for all at all ages;
- promoting sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all;
- building resilient infrastructure, promoting inclusive and sustainable industrialisation and fostering innovation;
- reducing inequality; and
- making cities and human settlements inclusive, safe, resilient and sustainable.

PHE's consideration of the effects of health and quality and life attributable to noise is guided by the recommendations in the 2018 Environmental Noise Guidelines for the European Region [1] published by the World Health Organization, and informed by high quality systematic reviews of the scientific evidence [2, 5, 6]. The scientific evidence on noise and health is rapidly developing, and PHE's recommendations are also informed by relevant studies that are judged to be scientifically robust and consistent with the overall body of evidence.

In line with its mission, PHE believes that Nationally Significant Infrastructure Projects (NSIP) should not only limit significant adverse effects, but also explore opportunities to improve the health and quality of life of local communities and reduce inequalities.

PHE also recognises the developing body of evidence showing that areas of tranquillity offer opportunities for health benefits through psychological restoration. NSIP applications need to demonstrate that they have given due consideration to the protection of the existing sound environment in these areas.

#### Significance of Impacts

Determining significance of impacts is an essential element of an Environmental Impact Assessment, and therefore significance needs to be clearly defined at the earliest opportunity by the Applicant. PHE recommends that the definition of significance is discussed and agreed with relevant stakeholders, including local authority environmental health and public health teams and local community representatives, through a documented consultation process. PHE recommends that any disagreement amongst stakeholders on the methodology for defining significance is acknowledged in the planning application documentation and could inform additional sensitivity analyses.

For noise exposure, PHE expects assessments of significance to be closely linked to the associated impacts on health and quality of life, and not on noise exposure per se (in line with the NPSE). The latest revision of the Design Manual for Roads and Bridges (DMRB) Table 3.49 LA111 [7] includes proposed values for the Lowest Observable Adverse Effect Level (LOAEL) and Significant

Observable Adverse Effect Level (SOAEL)<sup>43</sup> for operational noise, and these values are likely to inform judgements on significance of impact. Whilst DMRB does not explicitly reference the underpinning evidence that informed these numbers, the night time LOAEL and SOAEL of 40 dB L<sub>night</sub> (outside, free-field) and 55 dB L<sub>night</sub> (outside, free-field) respectively, correspond to the guideline value and interim target proposed in the WHO Night Noise Guidelines (2009) [8]. The Night Noise Guidelines emphasized that the interim target was “not a health-based limit value by itself. Vulnerable groups cannot be protected at this level”.

The daytime SOAEL of 68 dB LA<sub>10,18hr</sub> (façade) appears to be derived from the relative noise level in the Noise Insulation Regulations (NIR) [9], which is linked to the provision of enhanced noise insulation for new highway infrastructure. The NIR does not explicitly refer to the underpinning evidence on which the relevant noise level is based, and there is a lack of good quality evidence linking noise exposure expressed in the LA<sub>10</sub> metric to health effects. Therefore, it is helpful to convert these levels to L<sub>den</sub> and LA<sub>eq,16hr</sub> metrics, which are more widely used in the noise and health literature. Assuming motorway traffic, a level of 68 dB LA<sub>10,18hr</sub> (façade) is approximately equivalent to 44 free-field outdoor levels of 69dB L<sub>den</sub> (or 45 64LA<sub>eq,16hr</sub>). The corresponding internal noise levels are<sup>46</sup> approximately 54dB LA<sub>eq,16hr</sub> (open windows), 48dB LA<sub>eq,16hr</sub> (tilted windows) and 36dB LA<sub>eq,16hr</sub> (closed windows).

For construction noise the latest revision of the DMRB makes reference to Section E3.2 and Table E.1 in Annex E (informative) of BS 5228-1:2009+A1:2014 [10] for the definition of SOAELs. Table E.1 of BS 5228-1:2009+A1:2014 provides examples of threshold values in three categories, based on existing ambient values. Threshold values are higher when ambient noise levels are higher. Daytime (07:00-19:00, weekdays) thresholds can be traced back to principles promoted by the Wilson Committee in 1963 [11]: “Noise from construction and demolition sites should not exceed the level at which conversation in the nearest building would be difficult with the windows shut.” The Wilson committee also recommended that “Noisy work likely to cause annoyance locally should not be permitted between 22.00 hours and 07.00 hours.” BS 5228 states that these principles have been expanded over time to include a suite of noise levels covering the whole day/week period taking into account the varying sensitivities through these periods.

With reference to the noise exposure hierarchy table in the Planning Practice Guidance (Noise) [14], PHE is not aware of good quality scientific evidence that links specific noise levels to behavioural/attitudinal changes in the general population. Reactions to noise at an individual level are strongly confounded by personal, situational and environmental non-acoustic factors [16, 17], and large inter-personal variations are observed in the reaction of a population to a particular noise level [18-21]. For these reasons PHE is not able to provide evidence-based general recommendations for SOAELs that are able to achieve the aims and objectives of the Noise Policy Statement for England and the Planning Practice Guidance on noise. DMRB allows for project specific LOAELs and SOAELs to be defined if necessary, and PHE recommends that for each scheme the Applicant gives careful consideration of the following:

- The existing noise exposure of affected communities – in particular, consideration of any designated Noise Important Areas identified in proximity to the scheme;
- The size of the population affected – for example an effect may be deemed significant if a large number of people are exposed to a relatively small noise change;
- The relative change in number and type of vehicle pass-bys;
- Changes in the temporal distribution of noise during day/evening/night, or between weekdays and weekends;

<sup>43</sup> As defined in the Noise Policy Statement for England [3] and the Planning Practice Guidance [14].

<sup>44</sup> Using equation 4.16 from [22], assuming free-field levels;  $L_{A_{10,18hr}}(\text{free-field}) = L_{A_{10,18hr}}(\text{façade}) - 2.5\text{dB(A)}$  as per CRTN [13].

<sup>45</sup> Using conversion factors in para. 2.2.13 Transport Analysis Guidance (TAG) Unit A3 [15]

<sup>46</sup> Using external – internal level differences reported by Locher et al. (2018) [12], based on measurements at 102 dwellings in Switzerland in 2016.

- Soundscape and tranquillity, in particular the value that communities put on the lack of environmental noise in their area, or conversely, on the lack of public areas within walking distance that are relatively free from environmental noise;
- Opportunities for respite (predictable periods of relief from noise), either spatially or temporally;
- Cumulative exposure to other environmental risk factors, including other sources of noise and air pollution,
- Local health needs, sensitivities and objectives.

The WHO Environmental Noise Guidelines (2018) do not define LOAELs for environmental noise sources, partly because the scientific evidence suggests that there is no clear threshold where adverse impacts on health and quality of life cease to occur in the general population. Based on the systematic reviews that informed the 2018 WHO Environmental Noise Guidelines [2], the daytime operational noise LOAEL quoted in DMRB is equivalent to approximately 8% of the population Highly Annoyed<sup>47</sup>, and the night time LOAEL is equivalent to approximately 2% of the population Highly Sleep Disturbed<sup>48</sup>. Therefore, the impact assessment should acknowledge that adverse health effects will occur beyond the assessment threshold (LOAEL). PHE recommends that the Applicant explains what its chosen SOAELs for a specific scheme mean in population health terms in a similar fashion.

PHE does not believe that the current scientific evidence supports the modification of SOAELs and UAELs based on the existing noise insulation specification of residential dwellings, and in particular whether enhanced sound insulation avoids significant adverse effects on health and quality of life. See also sections on Mitigation and Step Changes in Noise Exposure.

### Health Outcomes

PHE encourages the applicant to present noise exposure data in terms of the Lden metric (in addition to Leq and L10), to facilitate interpretation by a broad range of stakeholders. This is because most recent scientific evidence on the health effects of environmental noise is presented in terms of Lden [1, 5, 6]. PHE believes that quantifying the health impacts associated with noise exposure and presenting them in health-based metrics allows decision makers to make more informed decisions.

For transportation sources, PHE recommends the quantification of health outcomes using the methodology agreed by the Interdepartmental Group on Costs and Benefits - Noise subgroup [IGCB(N) [23] (currently under review)), and more recent systematic reviews [1, 5, 6]. PHE believes there is sufficient evidence to quantify the following health outcomes: long-term annoyance, sleep disturbance, ischaemic heart disease (IHD), and potentially stroke<sup>49</sup> and diabetes<sup>50</sup>. Effects can be expressed in terms of number of people affected, number of disease cases, and Disability Adjusted Life Years (DALYs). THE IGCB(N) guidance can also be used to translate these effects into monetary terms.

Some health outcomes, namely annoyance and self-reported sleep disturbance, can be influenced by the local context and situation. In these cases, it would be preferable to use exposure-response functions (ERFs) derived in a local context. However, PHE is not aware of any ERFs for road traffic being available for a UK context from data gathered in the last two decades. Therefore, in PHE's view the ERFs presented in the WHO-commissioned systematic reviews offer a good foundation for

<sup>47</sup> 55 dB LA10,18hr (façade) is approximately equal to 57 dB Lden (free-field), assuming motorway traffic [13, 22]. Applying the exposure-response function presented in Guski et al., 2017 [19] for road traffic noise and annoyance (excluding Alpine and Asian studies), approximately 8% of a population is highly annoyed at 57 dB Lden.

<sup>48</sup> Applying the exposure-response function presented in Basner et al., 2018 [20] for road traffic noise and sleep disturbance gives the result that approximately 2% of a population is highly sleep disturbed at 40 dB Lnight.

<sup>49</sup> A literature review commissioned by Defra [6] identified nine longitudinal studies on road traffic noise and incidence of stroke, and eight longitudinal studies on road traffic noise and stroke mortality.

<sup>50</sup> A literature review commissioned by Defra [6] identified four longitudinal studies on road traffic noise and incidence of diabetes.

appraisal of the health effects associated with road traffic noise [2]. For annoyance, the average curve derived excluding Alpine and Asian studies may be considered more transferable to a UK context. For metabolic outcomes, no ERF was published in the WHO ENG 2018. A recent meta-analysis of five cohort studies of road traffic noise and incidence of diabetes was reported by Vienneau in 2019 [24].

Where schemes have the potential to impact a large number of people, PHE expects the Applicant to carry out literature scoping reviews to ensure that the most robust and up-to-date scientific evidence is being used to quantify adverse effects attributable to the Scheme.

PHE expects to see a clear outline of the steps taken to arrive at the final judgement of significance based on these health outcomes, including a description of local circumstances and modifiers anticipated, and how reasonably foreseeable changes in these circumstances will be dealt with during the assessment process.

### **Identification and Consideration of Receptors**

The identification of noise sensitive receptors in proximity to the proposed scheme - or route options - is essential in providing a full assessment of potential impacts. Examples of noise sensitive receptors include but are not limited to:

- Noise Important Areas
- Residential areas
- Schools, hospitals and care homes
- Community green and blue spaces and areas valued for their tranquillity, such as local and national parks
- Public Rights of Way (PRoWs)

Noise Important Areas (NIAs) are areas with the highest levels of noise exposure at a national level and as such require very careful consideration in terms of protection from increased noise levels as well as opportunities for noise mitigation that can lead to an improvement in health and quality of life. DMRB requires a list of noise mitigation measures that the project will deliver in Noise Important Areas. PHE supports this requirement - new development should offer an opportunity to reduce the health burden of existing transport infrastructure, particularly for those worst affected. PHE would encourage this approach to extend beyond NIAs, in line with the third aim of NPSE [3].

### **Baseline Sound Environment**

The greater the understanding of the baseline sound environment, the greater the potential for the assessment to reflect the nature and scale of potential impacts, adverse or beneficial, associated with the Scheme. PHE recommends that traditional averaged noise levels are supplemented by a qualitative characterisation of the sound environment, including any particularly valued characteristics (for example, tranquillity) and the types of sources contributing to it [25].

PHE recommends that baseline noise surveys are carried out 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. Achieving these aims is likely to require long-term noise monitoring in multiple locations for a period greater than seven days. This information should be used to test the robustness of any conversions between noise metrics (e.g. converting from LA10,18hr to LAeq,2300-0700 and Lden).

PHE suggests that a variety of metrics can be used to describe the sound environment with and without the scheme – for example, levels averaged over finer time periods, background noise levels expressed as percentiles, and number of event metrics (e.g. N65 day, N60 night) – and that, where possible, this suite of metrics is used to inform judgements of significance. There is emerging

evidence that intermittency metrics can have an additional predictive value over traditional long-term time-averaged metrics for road traffic noise [27].

### **Mitigation**

PHE expects decisions regarding 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, to ensure the effectiveness of said measures.

With regards to road traffic noise, low-noise road surfaces, acoustic barriers, traffic management and noise insulation schemes can all be considered. Priority should be given to reducing noise at source, and noise insulation schemes should be 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' preference to open windows. There is, at present, insufficient good quality evidence as to whether insulation schemes are effective at reducing long-term annoyance and self-reported sleep disturbance [28], and initiatives to evaluate the effectiveness of noise insulation to improve health outcomes are strongly encouraged.

PHE notes the suggestion in DMRB methodology that post-construction noise monitoring cannot provide a reliable gauge for reference against predicted impacts of operational noise. The issues highlighted in DMRB relate to noise exposure, and not to health outcomes. PHE suggests that monitoring of health and quality of life can be considered pre and post operational phases, to ascertain whether mitigation measures are having the desired effect for local communities.

PHE expects consideration of potential adverse effects due to noise and vibration during construction and recommends that a full and detailed Construction Environmental Management Plan (CEMP) is developed and implemented by the Applicant and/or the contractor responsible for construction. PHE recommends that the CEMP includes a detailed programme of construction which highlights the times and durations of particularly noisy works, the measures taken to reduce noise at source, the strategy for actively communicating this information to local communities, and procedures for responding effectively to any specific issues arising.

There is a paucity of scientific evidence on the health effects attributable to construction noise associated with large infrastructure projects [5, 6] where construction activities may last for a relatively long period of time. PHE recommends that the Applicant considers emerging evidence as it becomes available and reviews its assessment of impacts as appropriate.

### **Green Spaces and Private Amenity Areas**

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 [29-31]. Research from the Netherlands suggests that people living in noisy areas appear to have a greater need for areas offering quiet than individuals who are not exposed to noise at home [29]. Control of noise at source is the most effective mitigation for protecting outdoor spaces; noise insulation schemes do not protect external amenity spaces (such as private gardens and balconies or community recreation facilities and green spaces) from increased noise exposure.

PHE expects consideration to be given to the importance of existing green spaces as well as opportunities to create new tranquil spaces which are easily accessible to those communities exposed to increased noise from the scheme. These spaces should be of a high design quality and have a sustainable long-term management strategy in place.

### **Step-changes in Noise Exposure and the Change-effect**

The Applicant should take into consideration the "change-Effect", i.e. the potential for a real or anticipated step-change in noise exposure to result in attitudinal responses that are greater or lower than that which would be expected in a steady state scenario [28, 32]. Where a perception of change is considered likely, PHE recommends that the change-effect is taken into account in the

assessment for the opening year of the proposed development. For longer term assessments, the effects of population mobility need to be taken into consideration.

### **Community Engagement and Consultation Feedback**

PHE recommends that public consultations carried out during the planning application process clearly identify the predicted changes to the sound environment during construction and operation of the Scheme, the predicted health effects on neighbouring communities, proposed noise mitigation strategies and any proposed measures for monitoring that such mitigation measures will achieve their desired outcomes.

PHE encourages the Applicant to use effective ways of communicating any changes in the acoustic environment generated by the scheme to local communities. For example, immersive and suitably calibrated audio-visual demonstrations can help make noise and visual changes more intuitive to understand and accessible to a wider demographic. If the proposed scheme will have an impact over a relatively large geographical area, the Applicant should consider community-specific fact-sheets and/or impact maps, which are easily accessible to all individuals both in hard copy and online. If online, search functionality can potentially be included, for example, by postcode.

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**ROCHDALE**  
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Date: 02 August 2021

Richard Kent  
Senior EIA Advisor  
Environmental Services  
The Planning Inspectorate

**Sent via Email**

Dear Sir/Madam,

**Proposal: Environment Impact Assessment (EIA) Regulation 10 scoping opinion on the proposed M60/M62/M66 Simister Island Interchange Project**

**Location: M60/M62/M66 Simister Island Interchange**

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Thank you for your request for a consultation response in relation to the above proposals. Rochdale Borough Council has reviewed the below document(s) to inform this response letter.

PCF STAGE 3 Environmental Scoping Report (HE548642-JAC-EGN-SII\_MLT-RP-LE-0013 | P04, dated 29/06/21)

The council, in principle supports the proposal to improve capacity and traffic flows through Simister Island Interchange.

The scoping report reviewed is considered to be comprehensive and robust in its approach to topics to be included within the future Environmental Statement and its consideration of the baseline conditions and assessment methodology. Rochdale BC concurs with the report's selected topics to be scoped in and out as set out at Table 17.1 of the report.

The council can confirm it has also been contacted separately by the applicant's consultants to provide input on the detailed proposals for preparation of the Landscape and Visual Impact Assessment. In line with Regulation 11(3) of the EIA Regulations, Rochdale will make available any information in our possession which is considered relevant to the preparation of the ES and will provide direct feedback and correspondence with the applicant where this will aid in the preparation of the ES.

Yours faithfully,

**Ryan Grant**  
Principal Planning Officer (Growth)  
Rochdale Borough Council





## **Proposed DCO Application by Highways England for the M60/M62/M66 Simister Island**

### **Royal Mail response to EIA Scoping Consultation**

Under section 35 of the Postal Services Act 2011, Royal Mail has been designated by Ofcom as a provider of the Universal Postal Service. Royal Mail is the only such provider in the United Kingdom. The Act provides that Ofcom's primary regulatory duty is to secure the provision of the Universal Postal Service. Ofcom discharges this duty by imposing regulatory conditions on Royal Mail, requiring it to provide the Universal Postal Service.

Royal Mail's performance of the Universal Service Provider obligations is in the public interest and should not be affected detrimentally by any statutorily authorised project. Accordingly, Royal Mail seeks to take all reasonable steps to protect its assets and operational interests from any potentially adverse impacts of proposed development.

Royal Mail and its advisor BNP Paribas Real Estate have reviewed Highways England's PCF Stage 3 Environmental Scoping Report dated 29 June 2021.

This scheme has been identified as having potential for impact on Royal Mail operational interests. However, at this time Royal Mail is not able to provide a consultation response due to insufficient information being available to adequately assess the level of risk to its operation and the available mitigations for any risk. Therefore, Royal Mail wishes to reserve its position to submit a consultation response/s at a later stage in the consenting process and to give evidence at any future Public Examination, if required.

In the meantime, any further consultation information on this infrastructure proposal and any questions of Royal Mail should be sent to:

**Holly Trotman (holly.trotman@royalmail.com), Senior Planning Lawyer, Royal Mail Group Limited**

**Daniel Parry Jones (daniel.parry-jones@realestate.bnpparibas), Director, BNP Paribas Real Estate**

Please can you confirm receipt of this holding statement by Royal Mail.

End