

SILVERTOWN TUNNEL

**Preliminary
Environmental
Information Report:
Appendix 5.A**

**Scoping Opinion
Response Table**

Silvertown Tunnel Preliminary Environmental Information Report

Appendix 5.A: Scoping Opinion Response Table

THIS PAGE IS LEFT INTENTIONALLY BLANK

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
Scoping Opinion Chapter 2.0: The proposed development			
Introduction			
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. (Para 2.1 of PINS Report).	PINS	NA	NA
The Applicants' information			
Overview of the proposed development			
The project will provide a dual two-lane connection between the A102 Blackwall Tunnel Approach on Greenwich Peninsula and the Tidal Basin roundabout junction on the A1020 Lower Lea Crossing/Silvertown Way by means of twin tunnels under the River Thames. (Para 2.2 of PINS Report).	PINS	Chapter 4 Scheme Description	NA
The project is needed because existing nearby Blackwall Tunnel does not meet current dimensional and geometrical design standards; this contributes to incidents that cause the temporary closure of one or both bores, leading to traffic congestion. (Para 2.3 of PINS Report).	PINS	Chapter 4 Scheme Description	NA
Description of the site and surrounding area			
<i>The application site</i>			
The location of the project is set-out in section 1.2 of the Scoping Report. Plate 1-1 of the Scoping Report illustrates the proposed location of the Silvertown Tunnel. The application site boundary and project infrastructure is shown in more detail on drawing STWTN-ATK-GEN-XXXXDR-Z-00002 in Appendix A of the Scoping Report. (Para 2.4 of PINS Report).	PINS	Chapter 4 Scheme Description	NA
The tunnel would link areas immediately to the north and south of the Thames between Silvertown and the Greenwich Peninsula. (Para 2.5 of PINS Report).	PINS	Chapter 4 Scheme Description	NA

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>The northern portal of the proposed tunnel lies in the London Borough of Newham. This portal lies close to the Silvertown Quays which lie to the east of Silvertown Way where mixed use residential and commercial development is proposed. The surrounding area, around the perimeter of the Royal Victoria Docks, comprises mixed residential and recreational uses. Light commercial uses dominate to the south of the elevated Silvertown Way and the Docklands Light Railway (DLR). (Para 2.6 of PINS Report).</p>	PINS	Chapter 4 Scheme Description	NA
<p>The north junction tunnel approach roads would impact on a small area of derelict land that is entirely surrounded by the cement works and the embankments of the DLR. (Para 2.7 of PINS Report).</p>	PINS	Chapter 4 Scheme Description	NA
<p>The southern tunnel portal lies on the Greenwich Peninsula in the Royal Borough of Greenwich. The current land use in this area is predominantly car parking, together with the O2 arena and commercial buildings located to the northwest and a leisure facility to the south-east. (Para 2.8 of PINS Report).</p>	PINS	Chapter 4 Scheme Description	NA
<p>A gas holder (approximately 75m in diameter) is located close to the highway realignment works on the western boundary of the project. (Para 2.9 of PINS Report).</p>	PINS	Chapter 4 Scheme Description	NA
<i>The surrounding area</i>			
<p>The surrounding area encompasses several industrial buildings on both sides of the Thames, it is anticipated that these buildings will not be affected. The area is currently classified as relatively deprived, but this is predicted to improve as a result of new development in the area. (Para 2.10 of PINS Report).</p>	PINS	Chapter 7 Community and Private Assets	NA
<p>The World Heritage Sites of Maritime Greenwich and the Scheduled Greenwich Palace lie approximately 1.5 km to the south west of the proposed site. (Para 2.11 of PINS Report).</p>	PINS	Chapter 8 Cultural Heritage	The assessment takes into account the proximity of the World Heritage Sites of Maritime Greenwich and the Greenwich Palace scheduled monument.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>The number of routes available allowing vehicles to cross the Thames in this area are limited as there is a width restriction at the Rotherhithe Tunnel and a height restriction at the Blackwall Tunnel. These restrictions can lead to tunnel closures and delays. The existing road network in the area is struggling to keep up with increasing demand. (Para 2.12 of PINS Report).</p>	PINS	Transport Assessment (TA)	NA
<p>The Woolwich Ferry provides an alternative option to the tunnel for vehicles, however there are only a limited number of crossings per day and the ferry may not be ideally located for both current and future needs in the area. The lack of alternatives means that whenever there is a problem with any of the existing road crossings, traffic is forced to make long diversions in order to cross the Thames. (Para 2.13 of PINS Report).</p>	PINS	Transport Assessment (TA)	NA
Alternatives			
<p>Section 3 of the Scoping Report identifies the four main options which were initially identified for assessment:</p> <ul style="list-style-type: none"> • Option A Do nothing • Option B Demand management and maximise public transport • Option C Lower cost road options (ferry crossings) • Option D Higher cost road options (road tunnels and bridges). <p>(Para 2.14 of PINS Report).</p>	PINS	Chapter 3 Alternatives	NA
<p>These options were then subdivided into more specific options, from which the following schemes were shortlisted for further assessment:</p> <ul style="list-style-type: none"> • User charging at the Blackwall Tunnel (in conjunction with new infrastructure) • A bored tunnel at Silvertown • A new vehicle ferry at Gallions Reach • A new vehicle ferry at Woolwich; and • A new local road bridge or tunnel at Gallions Reach (in conjunction with Silvertown tunnel). (Para 2.15 of PINS Report). 	PINS	Chapter 3 Alternatives	NA

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>The above options were appraised to determine whether or not they would meet the defined investment criteria. This appraisal demonstrated that a combination of measures would be required to meet the criteria. The package identified as most closely meeting the Mayor's policies and the investment criteria was the one comprising: Silvertown Bored Tunnel; Gallions Reach Ferry; and User Charging at the Blackwall Tunnel (only with new infrastructure). (Para 2.16 of PINS Report).</p>	PINS	Chapter 3 Alternatives	NA
Description of the Proposed Development			
<p>The proposed Silvertown Tunnel would provide a dual two lane connection between the A102 Blackwall Tunnel Approach on Greenwich Peninsula and the Tidal Basin roundabout junction on the A1020 Lower Lea Crossing/Silvertown Way by means of twin tunnels under the River Thames. The twin bored tunnels (11.0m internal diameter and 1.0km long) would be designed with a circular cross section with cross passages for evacuation at maximum 350m centres. The tunnel approaches would be cut and cover. The speed limit within the tunnel and on the approach roads would be 30mph. (Para 2.17 of PINS Report).</p>	PINS	Chapter 4 Scheme Description	NA
<p>The project would pass under the River Thames, inside an area of land that has been safeguarded for this purpose; the applicant must ensure that the boundaries of the safeguarded land are clearly identified within a plan included within the ES. (Para 2.18 of PINS Report).</p>	PINS	Chapter 4 Scheme Description	The boundaries of the safeguarded land are clearly identified within the plans included in Volume 3, Appendix 4.C of the PEIR.
<p>The Blackwall Tunnel does not meet current dimensional and geometrical design standards contributing to a high number of traffic incidents that necessitate temporary closure of one or other bore (there were circa 1400 closures in 2012). The new tunnel would be built to modern standards and would be large enough to carry vehicles of all sizes. (Para 2.19 of PINS Report).</p>	PINS	Chapter 4 Scheme Description	NA

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
Pedestrians and cyclists would not be able to use the Silvertown Tunnel for safety reasons, but could use the existing nearby Emirates Air Line (2.20 of PINS Report).	PINS	Chapter 4 Scheme Description	NA
<p>The project design and alignment provides for:</p> <ul style="list-style-type: none"> • A grade-separated, free-flow link from the A102 Blackwall Tunnel approach, to the south of Blackwall Tunnel, to the Silvertown Tunnel south portal • An at-grade interchange with the Tidal Basin Roundabout providing a link from the Silvertown Tunnel north portal to the local road network with direct access to the A1020 Lower Lea Crossing/Silvertown Way • Reconnection of Tunnel Avenue to the west of the A102 on the Greenwich Peninsula to improve local accessibility • Public Transport and non-motorised user links to improve accessibility and safety • Consideration of emergency/contingency planning including impacts on the wider network; and • Integration with land development proposals (e.g. Greenwich Peninsula Master plan). (Para 2.21 of PINS Report). 	PINS	Chapter 4 Scheme Description	NA
The northern highway arrangement is shown on Drawing STWTN-ATK-GEN-ANXX-DR-Z-00001 in Appendix A of the Scoping Report. (Para 2.22 of PINS Report).	PINS	Chapter 4 Scheme Description	NA
The northern arrangement would require the elongation of the existing Tidal Basin roundabout to provide a suitable tie-in for the tunnel approach road. This modification incorporates a cut-through for southbound traffic approaching the tunnel from the Lower Lea Crossing providing a direct route through the signalised roundabout. This design would ensure that full access is maintained at the junction with all traffic navigating the signalised roundabout conventionally, apart from the aforementioned traffic flow that would cut through the centre. (Para 2.23 of PINS Report).	PINS	Chapter 4 Scheme Description	NA

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
The southern highway arrangement is shown on Drawing STWTN-ATK-GEN-ANXX-DR-Z-00001 of Appendix A of the Scoping Report. (Para 2.24 of PINS Report).	PINS	Chapter 4 Scheme Description	NA
The southern section would create a free-flow connection between the tunnel and the A102 from the south only. This would be achieved by raising the vertical alignment of the A102 southbound carriageway such that it spans over the new northbound tunnel approach road, by means of a new bridge, as it diverges from the A102 northbound carriageway. (Para 2.25 of PINS Report).	PINS	Chapter 4 Scheme Description	NA
The southbound exit from the tunnel would join the A102 southbound carriageway as a lane gain, with a suitable weaving length, before the nearside lane tapers down. (Para 2.26 of PINS Report).	PINS	Chapter 4 Scheme Description	NA
Extensive retaining walls would be utilised to accommodate the significant level differences between carriageways around the southern section and thereby reduce overall landtake. (Para 2.27 of PINS Report).	PINS	Chapter 4 Scheme Description	NA
Proposed Access			
The Silvertown Tunnel would connect with the existing road network from the north portal to the A1020 Lower Lea Crossing/Silvertown Way and from the south portal to the south of the Blackwall Tunnel and via a grade separated, free-flow link from the A102 Blackwall Tunnel approach. (Para 2.28 of PINS Report).	PINS	Chapter 4 Scheme Description	NA
River facilities are currently being considered for delivery of tunnel segments and other bulk materials to the site and removal of spoil via Thames Wharf. (Para 2.29 of PINS Report).	PINS	Chapter 4 Scheme Description	NA
Construction			

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
An indicative construction programme has been developed which indicates that the construction period would be approximately 206 weeks. The current construction programme assumes some enabling works would commence during 2016/2017. The programme assumes that the tunnel would be bored seven days a week. (Para 2.30 of PINS Report).	PINS	Chapter 4 Scheme Description	NA
The main bores would be constructed by a tunnel boring machine and would have a lining of reinforced pre-cast concrete segments. The segments would be bolted longitudinally and radially and would be fitted with gaskets to render the lining watertight. (Para 2.31 of PINS Report).	PINS	Chapter 4 Scheme Description	NA
Excavated material from tunnelling activity, the construction of the portals and general construction waste would be removed from the site where the tunnel boring machine enters the ground and from the area of the cut and cover and open cut portals located at the northern and southern ends of the tunnel at Silvertown and the Greenwich Peninsula respectively. (Para 2.32 of PINS Report).	PINS	Chapter 4 Scheme Description	NA
To minimise disruption to the highway network, and reduce carbon emissions, river facilities are currently being considered for delivery of tunnel segments and other bulk materials to the site and the removal of spoil via Thames Wharf. (Para 2.33 of PINS Report).	PINS	Chapter 4 Scheme Description	NA
Spoil would travel by conveyer from the tunnel to a storage site and would then transfer through a loading bunker and conveyer to a barge at Thames Wharf. (Para 2.34 of PINS Report).	PINS	Chapter 4 Scheme Description	NA
The tunnel segments would be off-loaded from the barge by a crawler crane and placed in a designated segment storage stack area. Segments would be moved from the storage area by a gantry crane to the tunnel. (Para 2.35 of PINS Report).	PINS	Chapter 4 Scheme Description	NA

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
Whilst the proximity to the River Thames provides the opportunity to remove waste by barge and thereby reduce adverse impacts on local roads, disposal by road transport remains an option at this stage. As the reference design develops the consideration would give potential re-use and disposal options for the excavated material, in particular re-use options for London Clay. (Para 2.36 of PINS Report).	PINS	Chapter 4 Scheme Description	NA
The Scoping Report highlights that based upon the current project design it is not anticipated that there would be a requirement for any property demolition. However, this would be reviewed as the reference design is completed. (Para 2.37 of PINS Report).	PINS	Chapter 4 Scheme Description	NA
The extent of the permanent and temporary works and associated land take for the project is shown on Drawing STWTN-ATK-GEN-XXXX-DR-Z-00002 in Appendix A of the Scoping Report. (Para 2.38 of PINS Report).	PINS	Chapter 4 Scheme Description	NA
As part of the development of the project design an Outline Site Waste Management Plan has been prepared that will continue to be updated as the reference design is produced. (Para 2.39 of PINS Report).	PINS	Chapter 4 Scheme Description	NA
Operation and maintenance			
The Scoping Report provides limited information in regard to the operational and maintenance requirements of the proposed development. (Para 2.40 of PINS Report).	PINS	Chapter 4 Scheme Description	NA
Description of the Site and the Surrounding Area			
The SoS notes that there is no clear section in the report setting out the description of the site and its surroundings, rather is dispersed throughout the report. The SoS recommends that a clear description is set out in the ES. (Para 2.41 of PINS Report)	PINS	Chapter 4 Scheme Description	A clear description of the site and surrounding area is provided in the PEIR.
The Secretary of State's comments			
Description of the Proposed Development			

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>The SoS welcomes the use of figures to support the description of the application site. In the ES it should be ensured that the figures are of high quality and relate closely to the main text. It is recommended that:</p> <ul style="list-style-type: none"> • All features referenced in the main text of the ES should be shown and named on a relevant figure • All figures should be clear and legible, and where there is a lot of environmental information to present, consideration should be given for this to be arranged over a number of figures to limit the amount of overlaid information and avoid confusion; and • All features on figures should be clearly labelled, identifying not only the presence of certain designations, but also the name of that specific feature. (Para 2.42 of PINS Report) 	PINS	Drawings/Figures	Figures provided in the PEIR are of high quality and relate closely to the main text, and are in line with the recommendations set out.
<p>It would be helpful for the description of the location of receptors to be provided by reference to the direction and distance from the main site. (Paras 2.43 of PINS Report)</p>	PINS	All	The description of receptors includes reference to the direction and distance from the main site.
<p>The applicant should ensure that the description of the proposed development that is being applied for is as accurate and firm as possible as this will form the basis of the environmental impact assessment. It is understood that at this stage in the evolution of the project the description of the proposals and even the location of the site may not be confirmed. It is noted at paragraph 2.5.2 of the Scoping Report that an 'early concept design' is presented. The applicant should be aware however, that the description of the development in the ES must be sufficiently certain to meet the requirements of paragraph 17 of Schedule 4 Part 1 of the EIA Regulations and there should therefore be more certainty by the time the ES is submitted with the DCO. (Para 2.44 of PINS Report)</p>	PINS	Chapter 4 Scheme Description	An accurate and firm Scheme description is provided.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
If a draft DCO is to be submitted, the applicant should clearly define what elements of the proposed development are integral to the NSIP and which are 'associated development' under the Planning Act 2008 (PA 2008) or are an ancillary matter. (Para 2.45 of PINS Report).	PINS	Chapter 4 Scheme Description	The PEIR defines what elements of the proposed development are integral to the NSIP and which are 'associated development' under the Planning Act 2008 (PA 2008) or are an ancillary matter.
Any proposed works and/or infrastructure required as associated development, or as an ancillary matter, (whether on or off-site) should be considered as part of an integrated approach to environmental assessment. (Para 2.46 of the PINS Report).	PINS	Chapter 4 Scheme Description	The PEIR considers associated development as part of an integrated approach to the EIA.
<p>The SoS recommends that the ES should include a clear description of all aspects of the proposed development, at the construction, operation and decommissioning stages, and include:</p> <ul style="list-style-type: none"> • Land-use requirements • Site preparation • Construction processes and methods • Transport routes • Operational requirements • Maintenance activities • Emissions: water, air and soil pollution, noise, vibration, light, heat, radiation. (Para 2.47 of PINS Report) 	PINS	Chapter 4 Scheme Description	The PEIR includes a clear description of all aspects of the proposed development, at the construction, operation and decommissioning stages, as set out.
The environmental effects of all wastes to be processed and removed from the site should be addressed. The ES will need to identify and describe the control processes and mitigation procedures for storing and transporting waste off site. All waste types should be quantified and classified. (Para 2.48 of PINS Report)	PINS	Chapter 13 Materials	Effects of waste are covered in the Materials Chapter of the PEIR and the preliminary Site Waste Management Plan.
Alternatives			

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
The ES requires that the applicant provide 'An outline of the main alternatives studied by the applicant and an indication of the main reasons for the applicant's choice, taking into account the environmental effects' (See Appendix 3). (Para 2.49 of PINS Report)	PINS	Chapter 3 Alternatives	An outline of alternatives is provided in the PEIR.
The SoS welcomes the discussion of the alternative options in section 3 of the scoping report. However the SoS draws the applicant's attention to the response from the London Borough of Tower Hamlets (LBTH), at Appendix 2 of this Opinion, regarding multi-modal tunnels, when addressing alternatives within the ES. (Para 2.50 of PINS Report).	PINS	Chapter 3 Alternatives	A response to the Borough of Tower Hamlets (LBTH) is provided below.
The SoS considers that a decision should be reached regarding the selection of river or road transport for the removal of waste as soon as possible, if this is not possible it must be ensured that the worst case scenario is assessed within the ES. (Para 2.51 of PINS Report).	PINS	Chapter 4 Scheme Description	Waste and materials will be transported to and from site by water as far as possible (either by ships or barges) and movements have been assessed in the materials and waste and transport assessments. In addition lorry movements have been assessed quantitatively in the PEIR and the subsequent effects on the vehicular capacity of the existing highways network assessed in the Transport Assessment.
Flexibility			
The SoS notes the reference (para 2.5.1 in the Scoping Report) to the 'Rochdale Envelope' but directs attention to the 'Flexibility' section in Appendix 3 of this Opinion which provides additional comment on the recommended approach. (Para 2.52 of PINS Report)	PINS	Chapter 4 Scheme Description	Noted, these comments have been referred to when defining the scheme description.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
If river transport is to be utilised in the removal of waste the ES will need to capture the potential cumulative impact of additional barge use along this stretch of the Thames in combination with that required in association with other development along the Thames. (Para 2.53 of PINS Report)	PINS	All	The barge and ship movements associated with the key material resources are presented quantitatively and the subsequent effects on the river capacity assessed in the PEIR.
It should be noted that if the proposed development changes substantially during the EIA process, prior to application submission, the applicant may wish to consider the need to request a new scoping opinion. (Para 2.54 of PINS Report)	PINS	Chapter 4 Scheme Description	Noted
Proposed Access			
The Scoping Report provides little detail on site access arrangements during the construction phase. The SoS expects to see a detailed description of access arrangements in the ES, accompanied by figures where appropriate. (Para 2.55 of PINS Report)	PINS	Chapter 4 Scheme Description	The scheme description includes a detailed description of access arrangements during construction.
The ES should identify proposed routes to and from the construction sites for both construction vehicles and workers. (Para 2.56 of PINS Report)	PINS	Chapter 4 Scheme Description	The PEIR has identified indicative construction routes.
Construction			
The SoS considers that information on construction including: phasing of programme; construction methods and activities associated with each phase; siting of construction compounds (including on and off site); lighting equipment/requirements; and number, movements and parking of construction vehicles (both HGVs and staff) should be clearly indicated in the ES. (Para 2.57 of PINS Report).	PINS	Chapter 4 Scheme Description	Construction information has been provided in the PEIR as recommended.
The SoS recommends that potential off-site implications of the disposal of waste are also considered in the ES. (Para 2.58 of PINS Report)	PINS	Chapter 4 Scheme Description	Off-site implications of disposal of waste have been considered where appropriate in the materials and waste chapter.
Operation and Maintenance			

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
Information on the operation and maintenance of the proposed development should be included in the ES and should cover but not be limited to such matters as the number of full/part-time jobs; shift patterns; the number and types of vehicle movements generated during the operational stage. (Para 2.59 of PINS Report)	PINS	Chapter 4 Scheme Description	Information on the operation and maintenance of the proposed development is included in the scheme description. The number of part time jobs is discussed in the community and private assets assessment. Vehicle movements are assessed in the transport assessment and effects on all travellers chapters of the PEIR.
Scoping Opinion Chapter 3.0: EIA Approach and Topic Areas			
Introduction			
This section contains the SoS's specific comments on the approach to the ES and topic areas as set out in the Scoping Report. General advice on the presentation of an ES is provided at Appendix 3 of this Opinion and should be read in conjunction with this Section. (Para 3.1 of PINS Report)	PINS	All	Noted, this guidance has been referred to when preparing the PEIR.
Applicants are advised that the scope of the DCO application should be clearly addressed and assessed consistently within the ES. (Para 3.2 of PINS Report).	PINS	All	The scope of the DCO application is clearly set out in the PEIR and assessed by all topics.
The ES should not be a series of separate reports collated into one document, but rather a comprehensive assessment drawing together the environmental impacts of the project. (Para 3.3 of PINS Report).	PINS	All	Cumulative effects have been considered in each of the individual topic chapters of the PEIR and are summarised below. The interactions between effects (interrelations) will be assessed in the final ES.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>Attention is drawn to the recommendation in Appendix 3 to provide a series of Summary Tables. As well as assisting the decision making process these may also help to ensure impacts have been fully assessed and to ensure that mitigation relied upon in the ES is included on the draft DCO. (Para 3.4 of PINS Report)</p>	PINS	All	Noted, this guidance has been referred to when preparing the PEIR.
Environmental Statement (ES) - Approach			
<p>The information provided in the Scoping Report sets out the proposed approach to the preparation of the ES. Whilst early engagement on the scope of the ES is to be welcomed, the SoS notes that the level of information provided at this stage is not always sufficient to allow for detailed comments from either the SoS or the consultees. (Para 3.5 of PINS Report).</p>	PINS	NA	NA
<p>The SoS would suggest that the applicant ensures that appropriate consultation is undertaken with the relevant consultees in order to agree wherever possible the timing and relevance of survey work as well as the methodologies to be used. The SoS notes and welcomes the intention to finalise the scope of investigations in conjunction with ongoing stakeholder liaison and consultation with the relevant regulatory authorities and their advisors. (Para 3.6 of PINS Report).</p>	PINS	All	Noted.
<p>The SoS recommends that the physical scope of the study areas should be identified under all the environmental topics and should be sufficiently robust in order to undertake the assessment. The extent of the study areas should be on the basis of recognised professional guidance, whenever such guidance is available. The study areas should also be agreed with the relevant consultees and, where this is not possible, this should be stated clearly in the ES and a reasoned justification given. The scope should also cover the breadth of the topic area and the temporal scope, and these aspects should be described and justified. (Para 3.7 of PINS Report).</p>	PINS	All	Agreed.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
The Scoping Report sets out the specific topic sections as a series of Tables. This is not helpful when needing to identify and cross refer to text. Therefore the SoS recommends that the ES should be set out in report format with all paragraphs clearly numbered. (Para 3.8 of PINS Report).	PINS	All	Noted.
Matters to be scoped out			
<p>The applicant has identified in the section 6.2 of the Scoping Report the matters proposed to be 'scoped out'. These include:</p> <ul style="list-style-type: none"> • Air Quality: <ul style="list-style-type: none"> o Odour assessment • Community and Private Assets: <ul style="list-style-type: none"> o Effects on Agricultural Land o Impacts on Waterway Restoration Projects • Effects on all Travellers: <ul style="list-style-type: none"> o Bridleways and Equestrian Travellers • Geology and Soils: <ul style="list-style-type: none"> o Effects on Agricultural Soils o Effects on Geologically Designated Sites • Materials: <ul style="list-style-type: none"> o Impacts due to extraction and transport of raw materials o Impacts from the manufacture of products and subsequent transport; and • Townscape and Visual Assessment: <ul style="list-style-type: none"> o Impacts on landscape. (Para 3.9 of Pins Report) 	PINS	NA	NA
Matters are not scoped out unless specifically addressed and justified by the applicant, and confirmed as being scoped out by the SoS. (Para 3.10 of PINS Report)	PINS	NA	Noted.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
It is proposed that odour will be scoped out of the air quality assessment as an odour assessment is largely not relevant to a highways scheme. Any potential odour impacts generated through the movement of contaminated materials during construction would be managed through the use of a Construction Environmental Management Plan (CEMP) and adherence to task specific method statements. The SoS agrees that this is an acceptable approach and that odour may be scoped out of the assessment. (Para 3.11 of PINS Report)	PINS	Chapter 6 Air Quality	NA
Effects on agricultural land are to be scoped out of the assessment on community and private assets as there is no agricultural land within the vicinity of the project. The SoS agrees that impacts on agricultural land may be scoped out of the assessment at the tunnel location, but not in terms of where any sites are identified for the	PINS	Chapter 7 Community and Private Assets Chapter 12 Geology and Soils	Construction information is provided in Chapter 4 of the PEIR as recommended.
It is proposed that impacts on Waterway Restoration Projects will be scoped out of the assessment as the tunnel will be constructed at such a depth that it would not impact directly upon the River Thames. The SoS agrees that impacts on Waterway Restoration Projects may be scoped out of the assessment. (Para 3.13 of PINS Report)	PINS	NA	NA
It is proposed that effects on equestrian travellers be scoped out of the assessment as there are no bridleways in the study area and there is a lack of evidence of equestrian use, the SoS agrees that effects on equestrian travellers can be scoped out of the assessment. (Para 3.14 of PINS Report)	PINS	Transport Assessment (TA)	NA

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
It is proposed that effects on agricultural soils can be scoped out at the tunnel location only. Effects on geologically designated sites are proposed to be scoped out of the assessment as there are no geological sites within the study area. The SoS agrees that effects on geologically designated sites at the tunnel location can be scoped out of the assessment, if following consultation (as set out on page 69 of the Scoping Report), this confirms there are no statutory or non-statutory geologically designated sites in the vicinity likely to be significantly affected. (Para 3.15 of PINS Report)	PINS	Chapter 12 Geology and Soils	Noted.
It is proposed that the environmental effects associated with the extraction and transportation of primary raw materials and manufacture of products will be scoped out of the assessment as these processes are already likely to have been subject to environmental assessment. The SoS agrees that extraction of raw materials and manufacture of products may be scoped out of the	PINS	Chapter 4 Scheme Description Chapter 6 Air Quality Transport Assessment (TA)	Chapter 4, Scheme Description includes information on construction traffic including materials haulage, and this will be assessed in the EIA.
Townscape and visual assessment is proposed to be considered due to the urban location of the proposed tunnel. The SoS agrees that landscape character may be scoped out of the assessment. (Para 3.17 of PINS Report)	PINS	Chapter 15 Townscape and Visual	NA
The SoS notes that in addition to the points specifically identified in section 6.2 of the Scoping Report, other matters are identified in the Scoping Report that are proposed to be scoped out. The SoS does not agree to the following matters to be scoped out: surveys for fish or other features of the River Thames (page 58 of the Scoping Report); ground-borne vibration during the construction phase (page 77 of the Scoping Report); and night-time lighting (page 79 of the	PINS	Chapter 15 Townscape and Visual Chapter 9 Terrestrial Ecology Chapter 14 Noise and Vibration	Specific responses on these aspects are provided in the responses to individual Stakeholders below.
Whilst the SoS has not agreed to scope out certain topic or matters within the Opinion on the basis of the information available at the time, this does not prevent the applicant from subsequently agreeing with the relevant consultees to scope matters out of the ES, where further evidence has been provided to justify this approach. This approach should be explained fully in the ES. (Para 3.19 of PINS Report)	PINS	All	Noted.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
In order to demonstrate that topics have not simply been overlooked, where topics are scoped out prior to submission of the DCO application, the ES should still explain the reasoning and justify the approach taken. (Para 3.20 of PINS Report)	PINS	All	Noted.
National Policy Statements (NPSs)			
Sector specific NPSs are produced by the relevant Government Departments and set out national policy for nationally significant infrastructure projects (NSIPs). They provide the framework within which the Examining Authority will make their recommendations to the Secretary of State and include the Government's objectives for the development of NSIPs. (Para 3.21 of PINS Report)	PINS	NA	NA
The relevant NPS is the National Road and Rail Networks NPS which is currently in draft. This draft NPS sets out assessment principles that should be considered in the EIA for the proposed development. When undertaking the EIA, the applicant must have regard to this draft NPS and identify how principles these have been assessed in the ES. (Para 3.22 of PINS Report)	PINS	All	The assessments has regard to this draft NPS and identifies how these have been assessed in the PEIR.
The SoS must have regard to any matter that the SoS thinks is important and relevant to the SoS's decision. This can include the draft NPS where the relevant NPS has not been formally designated. (Para 3.23 of PINS Report)	PINS	NA	Noted.
Environmental Statement - Structure			
Section 7 of the Scoping Report sets out the outline structure of the ES on which the applicant seeks the opinion of the SoS. (Para 3.24 of PINS Report)	PINS	NA	NA

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>The SoS notes from paragraph 7.1.3 that the EIA would cover a number of assessments under the broad headings of:</p> <ul style="list-style-type: none"> • Air Quality • Community and Private Assets • Cultural Heritage • Ecology and Nature Conservation • Effects on all Travellers • Geology and Soils • Materials • Noise and Vibration • Townscape and Visual • Water Environment; and • Cumulative Effects. (Para 3.25 of PINS Report) 	PINS	NA	NA
Topic areas			
Air Quality (see Scoping Report Section 6.3)			
<p>The SoS notes that the assessment will be undertaken in accordance with DMRB HA 207/07 and the latest Interim Advice Notes (IAN): 170/12 and 174/13. The assessment will consider worst case sensitive receptor locations within 200m of affected routes. Modelled predictions will be compared against the UK Air Quality Objectives / EU Limit Values as appropriate. The SoS welcomes this approach to the assessment of air quality impacts for this project. (Para 3.26 of PINS Report)</p>	PINS	Chapter 6 Air Quality	NA

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>There are a number of declared Air Quality Management Areas (AQMA) close to the proposed tunnel; the site itself is almost surrounded by declared AQMAs with the southern end of the tunnel entirely contained within an AQMA. The majority of these AQMA's have been declared in relation to measured or predicted exceedances of the nitrogen dioxide (NO2) air quality objectives, a number have also been declared in relation to exceedances of the particulate matter (PM10) objectives. It should be made clear in the ES whether the declarations relate to a measured or predicted breach of the annual mean objectives for each pollutant and/or the shorter term objectives for each pollutant (Para 3.27 of PINS Report)</p>	PINS	Chapter 6 Air Quality	<p>It is made clear in the PEIR whether the AQMAs relate to a measured or predicted breach of the annual mean objectives for each pollutant and/or the shorter term objectives for each pollutant.</p>
<p>A total of 23 AQMA's have been identified within the East London Highway Assignment Model (ELHAM) though the applicant has indicated that it is unlikely that all of these AQMA's would be affected by the proposed project. (Para 3.28 of PINS Report)</p>	PINS	Chapter 6 Air Quality	NA
<p>Consultations will be held with the officers responsible for air quality in those local authorities which may be affected by the project. The SoS recommends that the applicant seeks agreement with the relevant local authority officers over the size of the air quality study area and the selection of receptor locations to be assessed and that this is reported in the ES. (Para 3.29 of PINS Report)</p>	PINS	Chapter 6 Air Quality	<p>In-person consultations were undertaken with EHOs from the London boroughs of Greenwich, Tower Hamlets and Newham. Areas of concern were raised by EHOs and if predicted to be affected by the Scheme, were integrated into the study area. The predicted air quality study area was presented to representatives of the aforementioned boroughs in July 2015 as part of the statements of common ground process.</p>
<p>Matters to be Scoped out by the Applicant</p>			

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>The SoS recommends that dispersion modelling considers a range of possibilities and seeks to ensure that the 'worst case' scenario is assessed, for example congestion associated with the construction phase. (Para 3.30 of PINS Report)</p>	<p>PINS</p>	<p>Chapter 6 Air Quality</p>	<p>The impact of tunnel emissions was modelled within the dispersion model and formed part of the local air quality assessment. The Tunnel emissions were modelled using ADMS (Roads) as a volume source located at the tunnel portals. Additionally, the modelled concentrations were uplifted following advice in Highways Agency (HA) Interim Advice Note (IAN) 170/12 to account for the overly optimistic air quality projections contained in tools such as the emissions factor toolkit and background maps. A number of scenarios were modelled that ranged from best case to worst case.</p>
<p>The SoS welcomes that the applicant intends to consult Natural England (NE) regarding the location of any designated nitrogen sensitive sites that could be affected by the project. (Para 3.31 of PINS Report)</p>	<p>PINS</p>	<p>Chapter 6 Air Quality</p>	<p>NA</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>The SoS recommends that the applicant gives due consideration to potential mitigation measures in the ES and set these out clearly in the ES. The applicant should also consult the relevant local authority officers regarding locations where additional air quality monitoring would be appropriate. (Para 3.32 of PINS Report)</p>	<p>PINS</p>	<p>Chapter 6 Air Quality</p>	<p>Mitigation measures are set out in PEIR for construction. For the operational phase charging variations and junction improvements represent the best mitigation. Consultation was undertaken with relevant local authority officers to identify appropriate locations for air quality monitoring.</p>
<p>The SoS notes the concerns of the LBTH regarding the classification of air quality impacts within AQMA's, it is recommended that any increase (even if very small) of pollutant concentrations within an AQMA should not be categorised as having a negligible impact. (Para 3.33 of PINS Report)</p>	<p>PINS</p>	<p>Chapter 6 Air Quality</p>	<p>IAN 174/13 Updated advice for evaluating significant local air quality effects for users of DMRB Volume 11, Section 3, Part 1 Air Quality provides advice on determining the significance of a scheme's impact on air quality. The advice provides a means of evaluating the significance of local air quality effects in line with the requirements of the existing EIA Directive for highway schemes. Changes in concentration of -0.4 to +0.4 NO₂ are regarded as imperceptible owing to the measure of uncertainty in air quality monitoring, modelling and the traffic data used in the assessment. Any changes above this which cause a receptor to exceed, or cause worsening to an already exceeding receptor are considered in the judgement of significance.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
The SoS recommends that the assumptions relating to the future air quality baseline should be set out clearly in the ES. The SoS notes the comments of the LBTH that a conservative approach to the future baseline should be taken. (Para 3.34 of PINS Report)	PINS	Chapter 6 Air Quality	Assumptions relating to future air quality baseline are set out in the ES and are based on accepted guidance at the time of the assessment.
The SoS recommends that it is ensured that all cross referencing is correct in the ES. (Para 3.35 of PINS Report)	PINS	All	Noted.
Community and Private Assets (see Scoping Report Section 6.4)			
The SoS notes that the study area is crossed by road and rail infrastructure and there is not currently expected to be any loss of open space or any need to demolish any existing properties. (Para 3.36 of PINS Report)	PINS	Chapter 7 Community and Private Assets	NA
The SoS notes the comments of the Canal and River Trust regarding the selection of a tunnel crossing being of benefit as it would not result in further restrictions on larger vessels using this stretch of the Thames. (Para 3.37 of PINS Report)	PINS	Chapter 7 Community and Private Assets	NA
The SoS notes the comments of the Health and Safety Executive (HSE) concerning the proposed application surface development being within the inner zone consultation distance of two major hazard sites which include the east Greenwich gasholder station and Brenntag UK. Additionally the new grade separated junction will be within the inner zone of one of the sites. HSE advises against dual carriageways within the inner consultation zones. (Para 3.38 of PINS Report)	PINS	NA	Method statements will be prepared for all construction works which will take into consideration the relevant HSE and utility company requirements.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>The SoS draws the attention of the applicant to the HSE comments in relation to explosive sites. During the construction phase of the development land controlled by General Marine (Tugs and Barges) Ltd would be included in the temporary land take for temporary work or site compounds, consequently General Marine would not be able to handle any explosives at their premises during the construction phase, HSE intend to contact the company regarding this matter. (Para 3.39 of PINS Report)</p>	PINS	NA	<p>Method statements will be prepared for all construction works which will take into consideration the relevant HSE and utility company requirements.</p>
<p>Cultural Heritage (see Scoping Report Section 6.5)</p>			
<p>The SoS notes that the methodology for the assessment will follow that set out in DMRB Volume II Section 3, HA208/07 Cultural Heritage. The assessment will accord with the 'Code of Conduct and Standards Guidance for Archaeological Desk Based Assessments' of the Institute of Archaeologists. The study will also conform to the requirements of the National Planning Policy Framework. The SoS notes the comments by English Heritage that the methodology will need to extend beyond desk-based assessment and the recommendation that a comprehensive 3D geoarchaeological deposit model of the site and its surroundings based on existing and new boreholes be utilised in carrying out the assessment. The SoS recommends further discussion takes place between the applicant, English Heritage and other relevant consultees to agree the detailed methodology including the need for any intrusive investigative work. (Para 3.40 of PINS Report)</p>	PINS	Chapter 8 Cultural Heritage	<p>A comprehensive 3D geoarchaeological deposit model of the site and its surroundings has been produced in consultation with Historic England. Liaison with Historic England and other consultees regarding potential intrusive investigative work is ongoing.</p>
<p>The SoS notes the response from English Heritage highlighting the extensive existing data available in the Greater London Historic Environment Record (GLHER) and other data held by Crossrail. The SoS agrees that the assessment should take all relevant information into account. (Para 3.41 of PINS Report)</p>	PINS	Chapter 8 Cultural Heritage	<p>Baseline data has been obtained from GLHER and will be included in the ES. The assessment will consider all data that is made available to us.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>The SoS notes that the Heritage List for England identifies 14 listed buildings within 1.5km of the application site; these include a number of structures associated with the Royal Victoria Docks such as warehouses and grain silos. The World Heritage Sites of Maritime Greenwich and the Scheduled Greenwich Palace lie approximately 1.5 km to the south west of the proposed site. The SoS notes the findings of previous archaeological investigations in the study area which indicate there is potential for the application site to contain remains relating to flood events and human activity in the prehistoric period and the industrial development of the area from the post-medieval period onwards. English Heritage have indicated that to the north of the river impacts are expected to be in relation to industrial archaeology and deeply buried prehistoric remains, whereas impacts to the south of the river are expected to be related to deeply buried prehistoric remains only. (Para 3.42 of PINS Report)</p>	PINS	Chapter 8 Cultural Heritage	<p>The assessment has been undertaken with regard to the potential for the application site to contain remains relating to flood events and human activity in the prehistoric period and the industrial development of the area from the post-medieval period onwards. The assessment also recognises that to the north of the river impacts are expected to be in relation to industrial archaeology and deeply buried prehistoric remains, whereas impacts to the south of the river are expected to be related to deeply buried prehistoric remains only.</p>
<p>The SoS notes that the entire tunnel site lies within Archaeological Priority Areas (APAs), it is recommended that this is taken into consideration within the ES. (Para 3.43 of PINS Report)</p>	PINS	Chapter 8 Cultural Heritage	<p>The assessment takes into account the fact that the tunnel lies within an APA.</p>
<p>The proposed study area will cover 500m from the application site boundary for undesignated assets and 1 km from the application site boundary for designated assets. The SoS welcomes that assets of particular significance highlighted by consultees falling outside of the defined study area will also be considered by the applicant. (Para 3.44 of PINS Report)</p>	PINS	Chapter 8 Cultural Heritage	<p>The assessment takes into account the proximity of the World Heritage Sites of Maritime Greenwich and the Greenwich Palace scheduled monument, both of which are located outside the 1km study area for designated assets.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>The applicant has identified potential mitigation measures including intrusive and non-intrusive surveys of archaeological, built heritage and historic landscape assets, which might include: archaeological excavation; archaeological watching brief; photographic survey; measured survey; building recording including internal and external inspection; remote sensing and diver survey of the riverbed. The SoS welcomes that the applicant will consider a broad range of potential mitigation. (Para 3.45 of PINS Report)</p>	PINS	Chapter 8 Cultural Heritage	<p>The assessment has considered a broad range of potential mitigation including intrusive and non-intrusive surveys of archaeological, built heritage and historic landscape assets.</p>
<p>The SoS recommends that English Heritage’s Inspector of Ancient Monuments is consulted in relation to effects within the river such as scour from barge traffic. (Para 3.46 of PINS Report)</p>	PINS	Chapter 8 Cultural Heritage	<p>The ES will include the results of a survey of the foreshore area in the area of the proposed jetty so that any potential impacts associated with its construction and operation, including scour, can be identified.</p>
<p>Ecology and Nature Conservation (see Scoping Report Section 6.6)</p>			
<p>The SoS notes that the CIEEM Guidelines in combination with DMRB Volume 11 Section 2, Part 5, Volume 11, Section 3 Part 4 (Highways Agency, 1993) and Interim Advice Note 130/10 (Highways Agency, 2010) will form the basis of the ecological assessment methodology. This approach to the assessment is accepted by the SoS. (Para 3.47 of PINS Report)</p>	PINS	Chapter 9 Terrestrial Ecology	Noted.
<p>The SoS recommends that surveys should be thorough up to date and should take account of other development proposed in the vicinity. (Para 3.48 of PINS Report)</p>	PINS	Chapter 9 Terrestrial Ecology	Noted.
<p>The SoS recommends that the proposals should address fully the needs of protecting and enhancing biodiversity. The assessment should cover habitats species and processes within the study site and its surroundings. (Para 3.49 of PINS Report)</p>	PINS	Chapter 9 Terrestrial Ecology	<p>Noted, the assessment will cover habitats species and processes within the study site and its surroundings.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
The SoS notes that the applicant considers that no European sites would be affected by the proposals; the closest European site is the Lee Valley SPA and Ramsar site which is approximately 8 km north west of the application boundary. (Para 3.50 of PINS Report)	PINS	Chapter 9 Terrestrial Ecology	NA
The SoS notes that the key ecological receptors have been identified as: <ul style="list-style-type: none"> • River Thames and Tidal Tributaries SINC (including mudflats and wetland birds) • Deciduous/scrubby woodland (including, potentially nesting birds) • Scrub and bare ground mosaic habitat (including potentially, reptiles, nesting birds and notable invertebrates) • Black Redstart <i>Phoenicurus ochruros</i>; and • Common species of reptiles. (Para 3.51 of PINS Report) 	PINS	Chapter 9 Terrestrial Ecology	NA
The assessment should take account of impacts on noise, vibration and air quality and cross reference should be made to these specialist reports. (Para 3.52 of PINS Report)	PINS	Chapter 9 Terrestrial Ecology	The impacts of noise, air quality and vibration are included in the PEIR. Interrelationship of impacts will be considered in the ES and clearly cross-referenced.
The SoS recommends that the ES assesses the impact of all phases of the proposal on protected species. (Para 3.53 of PINS Report)	PINS	Chapter 9 Terrestrial Ecology	Noted, all phases are assessed in the PEIR.
The SoS notes the advice of NE regarding consideration of the potential impacts on non-statutory sites such as Local Wildlife Sites, local Nature Reserves and Regionally Important Geological and Geomorphological Sites within the ES. (Para 3.54 of PINS Report)	PINS	Chapter 9 Terrestrial Ecology	Non-statutory sites are considered in the PEIR.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>The SoS notes the concerns of the Marine Management Organisation (MMO) regarding the scoping out of surveys of fish or other features of the River Thames. The proposed works have the potential for noise and vibration from boring activities to impact upon migratory fish, however the Environment Agency have accepted the scoping out of fish surveys due to the selection of the long bored option for tunnel construction. The SoS recommends that clear justification is provided within the ES if these surveys are to be scoped out of the assessment. (Para 3.55 of PINS Report)</p>	PINS	Chapter 10 Marine Ecology	Further consultation with MMO will be undertaken and if agreed, Chapter 10 of the PEIR will provide clear justification for the scoping out of fish surveys.
Effects on All Travellers (see Scoping Report Section 6.7)			
<p>The SoS notes that the applicant intends to consult the London Boroughs of Newham, Tower Hamlets and Greenwich regarding rights of way and usage where appropriate. The SoS welcomes both this local authority consultation and the applicant's proposed consultation with the users of key community facilities to characterise usage, travel patterns and catchment areas. (Para 3.56 of PINS Report)</p>	PINS	Transport Assessment (TA)	TfL have been working with Newham, Tower Hamlets and Greenwich regarding development of the preliminary Transport Assessment (TA) and have met on a number of occasions to discuss the scope of the assessment and results as they emerge. The TA sets out the pedestrian and cycle routes that would be affected during construction and on completion of the scheme.
<p>The SoS recommends that the Transport Assessment is completed as soon as possible as the findings will be needed to inform other relevant ES chapters. The SoS recommends that the applicant consults the Highways Agency regarding the scope of the transport assessment. (Para 3.57 of PINS Report)</p>	PINS	Transport Assessment (TA)	The environmental specialists have been working closely with the transport assessment team as the assessment has developed to inform the PEIR. TfL has met with Highways England to discuss the Scheme and information has been shared to help inform the preliminary Transport Assessment (TA).

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>The SoS recommends that the applicant gains agreement from the relevant local authorities regarding the total area to be considered within the transport assessment. (Para 3.58 of PINS Report)</p>	<p>PINS</p>	<p>Transport Assessment (TA)</p>	<p>The scope of the Preliminary Transport Assessment (TA) has been developed in discussion with Newham, Tower Hamlets and Greenwich. Whilst the TA focuses on the transport impacts within the East London sub-region, where the Scheme is expected to have transport impacts, outside of this area these are also duly considered.</p>
<p>The SoS notes that user charging on both Silvertown and Blackwall Tunnel's is being proposed as a means to manage traffic levels and reduce congestion on the surrounding network. The ES assessment should consider the delivery mechanism and long term effectiveness of this mitigation proposal. The SoS reminds the applicant that mitigation relied upon for the purposes of the assessment but which is outside of the DCO's effective control will need to be appropriately secured. (Para 3.59 of PINS Report)</p>	<p>PINS</p>	<p>Transport Assessment (TA)</p>	<p>The PEIR and the preliminary Transport Assessment reflect the scope of the charging regime.</p>
<p>The SoS notes the comments of LBTH in regard to the need for the construction traffic assessment to incorporate construction staff movements. It is recommended that likely construction traffic routes are established as early as possible to aid in the identification of relevant receptors. (Para 3.60 of PINS Report)</p>	<p>PINS</p>	<p>Transport Assessment (TA)</p>	<p>The Preliminary Transport Assessment (TA) identifies indicative construction routes and will assess a worst case scenario in terms of lorry movements. Construction staff movements are also considered.</p>
<p>The SoS notes the comments of LBTH in regard to the consideration of multi-modal tunnel options and recommends that clarification around why the tunnel will not be multi-modal is provided in the ES. (Para 3.61 of PINS Report)</p>	<p>PINS</p>	<p>Chapter 3 Alternatives</p>	<p>Noted. Further clarification is provided in the PEIR in the Alternatives chapter.</p>
<p>Geology and Soils (see Scoping Report Section 6.8)</p>			

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
The SoS notes that the proposed study area for the assessment will comprise the project footprint including the construction compound and storage areas and an area 500m around the project; it is recommended that the proposed area is agreed with the relevant stakeholders. (Para 3.62 of PINS Report)	PINS	Chapter 12 Geology and Soils	Relevant stakeholders have been consulted on the proposed study area of the assessment as part of the statutory consultation including the PEIR.
The SoS notes that the mobilisation of contaminants in the soil that would otherwise be immobile will be considered in the assessment, it is recommended that appropriate cross-reference is made to the chapter on Water Environment. The SoS notes and welcomes that mitigation measures will be implemented. Reference is also made to disposal sites; these should be taken into account in the assessment. (Para 3.63 of PINS Report)	PINS	Chapter 12 Geology and Soils	Reference has been made to the Water Environment, Chapter 16 where appropriate. Disposal sites will be taken into consideration in the ES.
The SoS notes the comments of the Environment Agency in regard to the Greenwich Peninsula Environmental Method Statement which details how projects on the peninsula can be developed to prevent the mobilisation of existing contaminants, the applicant should take this document into account in making their assessment and developing the project design. (Para 3.64 of PINS Report)	PINS	Chapter 12 Geology and Soils	Greenwich Peninsula Environmental Method Statement has been taken into account in the assessment.
The SoS notes the comments of National Grid Gas Plc in regard to the existing gas pipelines which lie close to the order limits. The applicant should remain aware that National Grid has a Deed of Grant of Easement for each pipeline, preventing the erection of permanent or temporary buildings or structures, changes to existing ground levels, storage of materials etc. (Para 3.65 of PINS Report)	PINS	Utilities	We have been working with the statutory undertakers regarding works near utility networks and any diversions required. We have requested C3 estimates. A utilities strategy has been produced as part of the engineering reference design, this will be shared with statutory undertakers.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>The SoS recommends that where construction traffic cannot use existing roads it is agreed with National Grid at which locations construction traffic would cross any pipelines. The applicant should also note that written permission is required from National Grid before any works can commence in the National Grid easement strip. (Para 3.66 of PINS Report)</p>	PINS	Utilities	<p>Noted, as above, we are working with statutory undertakers and a utilities strategy has been produced and consulted on. This would address any specific requirements relating to temporary works around utilities during construction. Advice has been provided directly to the engineering team from the various undertakers.</p>
<p>The SoS recommends that the applicant takes note of National Grid's requirements regarding the laying of cables across any pipeline as appropriate. (Para 3.67 of PINS Report)</p>	PINS	Utilities	<p>Noted, as above, we are working with statutory undertakers and a utilities strategy has been produced and consulted on. This would address any specific requirements relating to temporary works around utilities during construction. Advice has been provided directly to the engineering team from the various undertakers.</p>
<p>The SoS recommends that the applicant has an awareness of the Health and Safety Executive's guidance document HS(G) 47 'Avoiding Danger from Underground Services' and National Grid's specification for Safe Working in the vicinity of National Grid High Pressure gas pipelines and associated installations – requirements for third parties T/SP/SSW22. (Para 3.68 of PINS Report)</p>	PINS	Utilities	<p>Method statements will be prepared for all construction works which will take into consideration the relevant HSE and utility company requirements.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
The SoS notes that any excavations within 3m of a National Grid High Pressure Pipeline or within 10m of an above ground installation the exact depth and position of the pipeline will need to be confirmed on site under the supervision of a National Grid representative. (Para 3.69 of PINS Report)	PINS	Utilities	Noted, as above, we are working with statutory undertakers and a utilities strategy has been produced and consulted on. This would address any specific requirements relating to temporary works around utilities during construction. Advice has been provided directly to the engineering team from the various undertakers.
The SoS notes the assessment will focus on construction effects but advises that operational effects should also be assessed. (Para 3.70 of PINS Report)	PINS	Chapter 12 Geology and Soils	Permanent operational impacts have been considered in the PEIR.
Materials			
The SoS welcomes the applicant's intention that consultation will take place with the relevant London Boroughs and the Environment Agency to obtain information about waste management facilities that could be utilised during the proposed developments construction. (Para 3.71 of PINS Report)	PINS	Chapter 13 Materials	NA
The SoS notes that the proposed study area for the materials assessment will be limited to the boundaries of the construction site within which materials will be used and wastes generated and managed however the SoS recommends that detailed information is provided within the ES regarding the transport of materials to the proposed site and the disposal of spoil from the site. This should detail where spoil will be temporarily stored and how spoil will be disposed of. (Para 3.72 of PINS Report)	PINS	Chapter 13 Materials Transport Assessment (TA)	Transport of materials has been considered in the Preliminary Transport Assessment. Storage and disposal of spoil will be considered in the Materials Chapter.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
The SoS notes the concerns of the MMO regarding the lack of information provided in relation to the use of the spoil. It is recommended that information regarding the use of the spoil be provided within the ES and that consideration be given to the Waste Framework Directive. (Para 3.73 of PINS Report)	PINS	Chapter 13 Materials	Information in relation to the use of spoil is included in Chapter 13 - Materials of the PEIR.
The SoS notes that should barges be used to deliver materials and remove spoil the impact of such barge movements upon marine ecology and navigation should be assessed in the ES. (Para 3.74 of PINS Report)	PINS	Chapter 13 Materials	Noted, A Navigational Risk Assessment has been undertaken for the Scheme, barge movements will also be considered in Chapter 10 Marine Ecology assessment in the PEIR and ES.
		Chapter 10 Marine Ecology	
		Transport Assessment (TA)	
The SoS notes the comments of the Port of London Authority (PLA) in relation to the potential to use ships to transport materials instead of barges depending on the wharves to be used. The SoS requests that the applicant consider this option. (Para 3.75 of PINS Report)	PINS	Transport Assessment (TA)	Options of river transport are currently being considered.
The SoS notes that the assessment will be undertaken in accordance with HA205/08 Assessment and Management of Environmental Effects. This approach to the assessment is welcomed by the SoS. (Para 3.76 of PINS Report)	PINS	Chapter 13 Materials	NA
The SoS notes the uncertainty regarding materials and the maintenance regime once the proposals are operational. Any assessment will need to ensure that it has considered the worst case. (Para 3.77 of PINS Report)	PINS	Chapter 13 Materials	The worst case has been considered where uncertain elements regarding the materials and maintenance regime are identified.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>The SoS notes that the applicant may require a permit or exemption from the Environment Agency for the treatment, disposal or storage of waste associated with the proposed development. The applicant's attention is drawn to Annex D (relating to the Environment Agency) of the Planning Inspectorate's Advice Note 'Working with public bodies in the infrastructure planning process' which is available on the Advice Note's page of the National Infrastructure Planning website. (Para 3.78 of PINS Report)</p>	<p>PINS</p>	<p>Chapter 13 Materials</p>	<p>Noted, consultation with the Environment Agency is ongoing.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
Noise and Vibration (see Scoping Report Section 6.10)			
The SoS welcomes that the applicant has stated that consultation will take place with the Environmental Health Departments of the London Boroughs of Greenwich, Tower Hamlets and Newham in regard to the noise and vibration assessment. (Para 3.79 of PINS Report)	PINS	Chapter 14 Noise and Vibration	NA
Information should be provided on the types of vehicles and plant to be used during the construction phase. Once operational, noise sources generated should be identified and assessed. Where appropriate, effective measures should be provided to mitigate against noise nuisance (Para 3.80 of PINS Report)	PINS	Chapter 14 Noise and Vibration	Noted, construction noise sources have been included in the noise and vibration assessment.
The SoS welcomes that noise mitigation measures through the construction phase will be incorporated in the Construction Environmental Management Plan (CEMP). It is recommended that consideration should be given to identifying a means of communicating any particularly noisy activities to people using the area nearby and to providing a means of receiving and addressing complaints and concerns. (Para 3.81 of PINS Report)	PINS	Chapter 14 Noise and Vibration	Noted. Communication with local residents will be considered in the Code of Construction Practice (CoCP) and Construction Environmental Management Plan (CEMP).
Noise and vibration impacts on people should be specifically addressed and particularly any potential noise and vibration disturbance at night and other unsocial hours such as weekends and public holidays. Ground-borne vibration during the construction phase should not be scoped out of the assessment. (Para 3.82 of PINS Report)	PINS	Chapter 14 Noise and Vibration	Noise and vibration impacts have been considered in the ES including potential disturbance during unsocial hours. A ground-borne noise assessment of the TBM has now been included in the PEIR. The model has been calibrated using the predict vibration from the Crossrail TBM.
Townscape and Visual (see Scoping Report Section 6.11)			
The SoS welcomes that both the Royal Borough of Greenwich and the London Borough of Newham Councils will be consulted regarding the methodology for the assessment. (Para 3.83 of PINS Report)	PINS	Chapter 15 Townscape and Visual	NA

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
The SoS welcomes that IAN 135/10 criteria will be applied to the assessment. (Para 3.84 of PINS Report)	PINS	Chapter 15 Townscape and Visual	NA
The SoS recommends that any temporary storage of spoil in the vicinity of the proposed development site should be taken into consideration within the assessment of the potential short-term impact on townscape. (Para 3.85 of PINS Report)	PINS	Chapter 15 Townscape and Visual	Spoil storage has been considered within the assessment of potential short-term impacts in the PEIR.
The SoS notes the comments of National Grid Electricity Transmission Plc in regard to the high voltage electricity overhead transmission line which lies close to the proposed order limits. The applicant should note National Grid's right of access to maintain, repair and inspect their asset, the need to maintain the statutory electrical safety clearances at all times and the requirement that no permanent structures are built directly beneath overhead lines. (Para 3.86 of PINS Report)	PINS	Utilities	We have been working with the statutory undertakers regarding works near utility networks and any diversions required. We have requested C3 estimates. A utilities strategy has been produced as part of the engineering reference design, this will be shared with statutory undertakers.
The SoS recommends that site staff should have an awareness of the Health and Safety Executive's guidance in relation to working safely near existing overhead lines Guidance Note GS 6 'Avoidance of Danger from Overhead Electric Lines'. Plant, machinery, equipment, buildings or scaffolding should not encroach within 5.3 metres of any high voltage conductors when those conductors are in their worst conditions of maximum 'sag' and 'swing'. (Para 3.87 of PINS Report)	PINS	Utilities	Method statements will be prepared for all construction works which will take into consideration the relevant HSE and utility company requirements.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>The SoS recommends that where landscape mitigation is proposed, only slow or low growing species of trees and scrubs should be planted beneath and adjacent to the existing transmission line. The applicant should note that drilling and excavation work should not be undertaken if it has the potential to disturb or adversely affect the foundations of an existing tower. (Para 3.88 of PINS Report)</p>	<p>PINS</p>	<p>Utilities</p>	<p>Landscape design and indicative planting is included in the Preliminary Design and Access Statement (DAS). We are working with statutory undertakers and a utilities strategy has been produced and consulted on. This would address any specific requirements relating to temporary works around utilities during construction. Advice has been provided directly to the engineering team from the various undertakers.</p>
<p>The SoS notes the comments of ES Pipelines indicating that though they are not directly affected by the works they would draw the applicants attention to the fact that part of their electricity network is within the 500m study area marked in Figure 6.5 of the Scoping Report which illustrates townscape and visual considerations. (Para 3.89 of PINS Report)</p>	<p>PINS</p>	<p>Utilities</p>	<p>Noted, we are working with statutory undertakers and a utilities strategy has been produced and consulted on. This would address any specific requirements relating to temporary works around utilities during construction. Advice has been provided directly to the engineering team from the various undertakers.</p>
<p>The SoS notes the comments of the Civil Aviation Authority (CAA) regarding the need for the applicant to consider any potential concerns of any relevant aerodrome licence holders/operators. (Para 3.90 of PINS Report)</p>	<p>PINS</p>	<p>Chapter 4 Scheme Description</p>	<p>Noted.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
Night-time lighting should be included in the assessment, including taking into account the design of lighting to minimise any adverse effects notably on local sensitive receptors. (Para 3.91 of PINS Report)	PINS	Chapter 15 Townscape and Visual	A night-time visual assessment has been included in the assessment.
The SoS notes the concerns of the LBTH in regard to viewpoint selection. It is recommended that LBTH are consulted to agree the viewpoints from the LBTH. (Para 3.92 of PINS Report)	PINS	Chapter 15 Townscape and Visual	Because this is a DMRB assessment, the assessment of visual effects is centred on receptors rather than viewpoints that are representative of receptors (viewpoint photographs are only provided to broadly illustrate baseline conditions).
Water Environment (see Scoping Report Section 6.12)			
The SoS welcomes that the Flood Risk Assessment (FRA) will be developed in consultation with key bodies including the Environment Agency (EA). The SoS notes the comments of the EA regarding the need for the FRA to consider impacts caused by and upon all sources of flooding, the current state of the tidal flood defences and the projects possible impacts on them and possible impacts on the development of predicted sea level rise. The assessment should demonstrate that flood defences will be fit for purpose for the lifetime of the development. (Para 3.93 of PINS Report)	PINS	Chapter 16 Water Environment	Noted.
The SoS notes that the applicant will require Flood Defence Consent from the EA for any works within 16m of the landward side of the flood defence. (Para 3.94 of PINS Report)	PINS	Chapter 16 Water Environment	This has been noted and included in the PIER report and will be included in the ES.
The SoS notes that the applicant intends to reference the Thames Estuary 2100 (TE2100) Plan (which outlines how the Thames tidal defences will need to be managed to combat predicted sea level rises over the next 100 years) within the FRA. (Para 3.95 of PINS Report)	PINS	Chapter 16 Water Environment	NA

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
The SoS notes the comments of the LBTH in regard to the need to consider climate change impacts where appropriate in the ES. It is recommended that the development should be assessed against future climate change scenarios as identified in the Mayor of London's Climate Change Adaptation Strategy. (Para 3.96 of PINS Report)	PINS	Chapter 16 Water Environment	Climate change has been considered in the PIER .
The SoS recommends that the assessment takes into consideration both the construction and the operational phases of the development. The potential for accidents should also be addressed. (Para 3.97 of PINS Report)	PINS	Chapter 16 Water Environment	The assessment has taken into consideration both the construction and operational phases in the PEIR including the potential for accidents.
The SoS welcomes that the potential of the proposed project to impact on the water quality of receiving waters from routine runoff will be assessed in accordance with DMRB methodologies for assessing both pollution from routine runoff and the risk of pollution due to accidental spillage. (Para 3.98 of PINS Report)	PINS	Chapter 16 Water Environment	NA
The SoS notes that the study area has been defined, in accordance with DMRB guidelines, to include the application site, downstream reaches of the Rivers Thames and Lea, the Royal Victoria Dock and any other surface or groundwater receptor identified within 500m of the application boundary. (Para 3.99 of PINS Report)	PINS	Chapter 16 Water Environment	NA
The SoS recommends that the section considering the water environment be cross referenced to other topic chapters in the ES as appropriate. (Para 3.100 of PINS Report)	PINS	Chapter 16 Water Environment	Noted.
The SoS notes the comments of the PLA requiring that the ES include information regarding the depth of the tunnel under the River Thames.(Para 3.101 of PINS Report)	PINS	Chapter 4 Scheme Description	Information regarding the depth of the tunnel is included in the scheme description.
The SoS recommends that the ES outlines whether or not the applicant would need to temporarily suspend the public right of navigation along sections of the River Thames. (Para 3.102 of PINS Report)	PINS	Chapter 4 Scheme Description	A navigable channel will be maintained at all times, during construction and operation.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
The SoS notes that the tunnel would involve permanent land take of the PLA's land and recommends that the applicant consults the PLA regarding the need for a River Works Licence. (Para 3.103 of PINS Report)	PINS	Other Consents	NA
The SoS notes that the Scoping Report refers to the proposed highway drainage scheme in paragraphs 2.3.18 and 2.3.20 and that new surface run-off will be gravity drained to an outfall but it is not stated whether or not this will be via the use of an existing outfall or a new outfall, any works below Mean High Water Spring (MHWS) would require a marine licence from the Marine Management Organisation (MMO). (Para 3.104 of PINS Report)	PINS	Chapter 4 Scheme Description	Noted.
		Chapter 16 Water Environment	
The SoS recommends that the applicant provides clarification around whether or not in-river structures will be required. If additional works or activities are identified that may require a Marine Licence it is recommended that the MMO are notified at the earliest opportunity. (Para 3.105 of PINS Report)	PINS	Chapter 4 Scheme Description	The Scheme includes the potential for construction of a temporary jetty, respecting the requirement to maintain the navigable channel. Dredging would be required around the temporary jetty to allow for barge movements. The MMO will be consulted concerning the requirement for a Marine Licence.
The SoS notes that the applicant will need to identify whether any water resources will be required during the construction phase and where this water will be sourced as this will determine whether any permits will be required from the EA. (Para 3.106 of PINS Report)	PINS	Chapter 4 Scheme Description	During the construction phase an additional temporary demand on water resources would result from the need to supply site offices, canteens and welfare facilities. However, it is understood that this will be minimal due to effective water use. Any permits required have been discussed with the EA.
		Chapter 16 Water Environment	

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
The SoS recommends that the applicant refers to the Environment Agency Guiding Principles for Land Contamination to inform the assessment of risk to controlled waters from the development. (Para 3.107 of PINS Report)	PINS	Chapter 16 Water Environment Chapter 12 Geology and Soils	Environment Agency Guiding Principles for Land Contamination to inform the assessment of risk to controlled waters from the development will be followed where applicable in the PEIR.
Cumulative Effects (see Scoping Report Section 6.13)			
The SoS refers the applicant to the additional information in Appendix 3 of the Scoping Opinion regarding interrelationships between environmental factors and cumulative impacts. (Para 3.108 of PINS Report)	PINS	Chapter 17 Cumulative Impacts	Cumulative Impacts have been assessed in Chapters 6 to 17 of the PEIR. Interrelationships will be assessed as part of the ES.
The SoS notes that the traffic model will take into account other transportation schemes as well as future predicted traffic growth as a result of new development. The SoS recommends that, if the River Thames is to be used for the transport of materials to and from the site, that the assessment should ensure it has taken full account of the volume of river traffic arising from other projects, in particular the availability of barges and wharfs as well as suitably qualified staff. (Para 3.109 of PINS Report)	PINS	Chapter 11 Effects on all Travelers Transport Assessment (TA)	The Scheme design assumed, suitable excavated material will be removed from the Silvertown site by river and transported, whenever possible, to a suitable site where the material can be reused, such as Wallasea Island, (an RSPB wetland creation scheme). River traffic from other Schemes will be considered, where possible. In certain Chapters e.g. Chapter 6 - Air Quality and Chapter 14 - Noise the assessment considers that all materials are transported by road as this is the worst case.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
The SoS recommends that the applicant consults all the relevant local authorities to ensure all proposed and consented developments relevant to the project are included within the cumulative assessment. (Para 3.110 of PINS Report)	PINS	Chapter 17 Cumulative Impacts	A list of proposed developments to be considered in the assessment of cumulative effects was compiled through searches of local authority planning portals for planning applications; a review of allocated and proposed sites in local plans; and direct consultation with local authorities whose areas are predicted to be affected by the Scheme.
The SoS welcomes that the interactive cumulative effects with other schemes will be reported in each of the individual environmental topic chapters and the use to be made to Advice Note 9 in terms of identifying other major developments in the area. (Para 3.111 of PINS Report)	PINS	All	NA
The SoS notes that the proposed study area for the cumulative assessment will be based on the scope of each of the individual environmental topic chapters. Justification should be provided for the final study area selected. (Para 3.112 of PINS Report)	PINS	Chapter 17 Cumulative Impacts	Justification for the final study area is provided in Chapter 17 of the PEIR.
The SoS notes the comments of the PLA regarding the inclusion of the Thames Tideway Tunnel within the cumulative assessment. (Para 3.113 of PINS Report)	PINS	Chapter 17 Cumulative Impacts	The Thames Tideway Tunnel has been considered as part of the cumulative impact assessment.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
Scoping Opinion: Appendix 2			
Pending any specific civil aviation regulatory query, the CAA does not wish to be further involved with this consultation.	Aviation	NA	NA
We have just one comment to make regarding the proposal that we would like taken into account. The Canal & River Trust acknowledges the need to provide additional crossings in East London, but these proposed crossings should not interfere with navigation or place an additional restrictions greater than that imposed by the QE2 bridge or the Emirates Cable Car. A tunnel would be acceptable, or a bridge which has a lifting section to accommodate large vessels with a high air draft, navigating to and from West India Dock.	Canal & River Trust London	NA	NA
We are not directly affected by your works, however our electricity network (ref ESPE0258, drawing attached) is in the 500m Study Area as shown on your drawing, ref Fig 6.5.	ESP Utilities	Utilities	Noted.
Damage to ESP Utilities Group's plant can result in uncontrolled gas escapes which may be dangerous. In addition these occurrences can cause expense, disruption of work and inconvenience to the public.	ESP Utilities	NA	NA
Various materials are used for gas mains and services. Cast Iron, Ductile Iron, Steel and Plastic pipes are the most widely found. Modern Plastic pipes are either bright yellow or orange in colour. Cast Iron and Ductile Iron water pipes are very similar in appearance to Cast Iron and Ductile Iron gas pipes and if any Cast Iron or Ductile Iron pipe is uncovered, it should be treated as a gas pipe. ESP Utilities Group do not own any metallic gas pipes but their gas network infrastructures may be connected to Cast Iron, Ductile Iron or Steel pipes owned by Transco. The following general precautions apply to Intermediate Pressure (2-7barg MOP), Medium Pressure (75mbarg-2barg MOP), Low Pressure (up to 75mbarg MOP) and other gas mains and services likely to be encountered in general site works and are referred to within this document as 'pipes'.	ESP Utilities	Utilities	We have been working with the statutory undertakers regarding works near utility networks. A utilities strategy has been produced as part of the engineering reference design, this will be shared with statutory undertakers.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>Locating Gas Pipes It should be assumed when working in urban and residential areas that gas mains and services are likely to be present. On request, ESP Utilities Group will give approximate locations of pipes derived from their records. The records do not normally show the position of service pipes but their probable line can be deducted from the gas meter position. ESP Utilities Group's staff will be pleased to assist in the location of gas plant and provide advice on any precautions that may be required. The records and advice are given in good faith but cannot be guaranteed until hand excavation has taken place. Proprietary pipe and cable locators are available although generally these will not locate plastic pipes.</p>	ESP Utilities	Utilities	We have been working with the statutory undertakers regarding works near utility networks. A utilities strategy has been produced as part of the engineering reference design, this will be shared with statutory undertakers.
<p>Safe working Practices To achieve safe working conditions adjacent to gas plant the following must be observed: Observe any specific request made by ESP Utilities Group's staff. Gas pipes must be located by hand digging before mechanical excavation. Once a gas pipe has been located, mechanical excavation must proceed with care. A mechanical excavator must not in any case be used within 0.5 metre of a gas pipe and greater safety distances may be advised by ESP Utilities Group depending on the mains maximum operating pressure (MOP). Where heavy plant may have to cross the line of a gas pipe during construction work, the number of crossing points should be kept to a minimum. Crossing points should be clearly indicated and crossings at other places along the line of the pipe should be prevented. Where the pipe is not adequately protected by an existing road, crossing points should be suitably reinforced with sleepers, steel plates or a specially constructed reinforced concrete raft as necessary. ESP Utilities Group staff will advise on the type of reinforcement necessary.</p>	ESP Utilities	Utilities	We have been working with the statutory undertakers regarding works near utility networks. A utilities strategy has been produced as part of the engineering reference design, this will be shared with statutory undertakers.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
No explosives should be used within 30 metres of any gas pipe without prior consultation with ESP Utilities Group.	ESP Utilities	Utilities	We have been working with the statutory undertakers regarding works near utility networks. A utilities strategy has been produced as part of the engineering reference design, this will be shared with statutory undertakers.
ESP Utilities Group must be consulted prior to carrying out excavation work within 10 metres of any above ground gas installation.	ESP Utilities	Utilities	We have been working with the statutory undertakers regarding works near utility networks. A utilities strategy has been produced as part of the engineering reference design, this will be shared with statutory undertakers.
Where it is proposed to carry out piling or boring within 15 metres of any gas pipe, ESP Utilities Group should be consulted prior to the commencement of the works.	ESP Utilities	Utilities	We have been working with the statutory undertakers regarding works near utility networks. A utilities strategy has been produced as part of the engineering reference design, this will be shared with statutory undertakers.
Access to gas plant must be maintained at all times during on site works.	ESP Utilities	Utilities	We have been working with the statutory undertakers regarding works near utility networks. A utilities strategy has been produced as part of the engineering reference design, this will be shared with statutory undertakers.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>Proximity of Other Plant A minimum clearance of 300 millimetres (mm) should be allowed between any plant being installed and an existing gas main to facilitate repair, whether the adjacent plant be parallel to or crossing the gas pipe. No apparatus should be laid over and along the line of a gas pipe irrespective of clearance.</p>	ESP Utilities	Utilities	We have been working with the statutory undertakers regarding works near utility networks. A utilities strategy has been produced as part of the engineering reference design, this will be shared with statutory undertakers.
<p>No manhole or chambers shall be built over or around a gas pipe and no work should be carried out which results in a reduction of cover or protection over a pipe, without consultation with ESP Utilities Group.</p>	ESP Utilities	Utilities	We have been working with the statutory undertakers regarding works near utility networks. A utilities strategy has been produced as part of the engineering reference design, this will be shared with statutory undertakers.
<p>Support and Backfill Where excavation of trenches adjacent to any pipe affects its support, the pipe must be supported to the satisfaction of ESP Utilities Group and must not be used as an anchor or support in any way. In some cases, it may be necessary to divert the gas pipe before work commences. Where a trench is excavated crossing or parallel to the line of the gas pipe, the backfill should be adequately compacted, particularly beneath the pipe, to prevent any settlement which could subsequently cause damage to the pipe.</p>	ESP Utilities	Utilities	We have been working with the statutory undertakers regarding works near utility networks. A utilities strategy has been produced as part of the engineering reference design, this will be shared with statutory undertakers.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>In special cases it may be necessary to provide permanent support to the gas pipe, before backfilling and reinstatement is carried out. Backfill material adjacent to gas plant must be selected fine material or sand, containing no stones, bricks or lumps of concrete, etc., placed to a minimum depth of 150mm around the pipes and well compacted by hand. No power compaction should take place until 300 mm of selected fine fill has been suitably compacted. If the road construction is in close proximity to the top of the gas pipe, a "cushion" of selected fine material such as sand must be used to prevent the traffic shock being transmitted to the gas pipe. The road construction depth must not be reduced without permission from the local Highway Authority. No concrete or other hard material must be placed or left under or adjacent to any Cast Iron pipe as this may cause fracture of the pipe at a later date. Concrete backfill should not be used closer than 300 mm to the pipe.</p>	ESP Utilities	Utilities	We have been working with the statutory undertakers regarding works near utility networks. A utilities strategy has been produced as part of the engineering reference design, this will be shared with statutory undertakers.
<p>Damage to Coating Where a gas pipe is coated with special wrapping and this is damaged, even to a minor extent ESP Utilities Group must be notified so that repairs can be made to prevent future corrosion and subsequent leakage.</p>	ESP Utilities	Utilities	We have been working with the statutory undertakers regarding works near utility networks. A utilities strategy has been produced as part of the engineering reference design, this will be shared with statutory undertakers.
<p>Welding or "Hot Works" When welding or other "hot works" involving naked flames are to be carried out in close proximity to gas plant and the presence of gas is suspected, ESP Utilities Group must be contacted before work commences to check the atmosphere. Even when a gas free atmosphere exists care must be taken when carrying out hot works in close proximity to gas plant in order to ensure that no damage occurs.</p>	ESP Utilities	Utilities	We have been working with the statutory undertakers regarding works near utility networks. A utilities strategy has been produced as part of the engineering reference design, this will be shared with statutory undertakers.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
Particular care must be taken to avoid damage by heat or naked flame to plastic gas pipes or to the protective coating on other gas pipes.	ESP Utilities	Utilities	We have been working with the statutory undertakers regarding works near utility networks. A utilities strategy has been produced as part of the engineering reference design, this will be shared with statutory undertakers.
<p>Leakage from Gas Mains or Services</p> <p>If damage or leakage is caused or an escape of gas is smelt or suspected the following action should be taken at once:</p> <ul style="list-style-type: none"> • Remove all personnel from the immediate vicinity of the escape; • Contact Transco's National Gas Escape Call Centre, on: 0800 111 999; • Prevent any approach by the public, prohibit smoking, extinguish all naked flames or other source of ignition for at least 15 metres from the leakage; • Assist gas personnel, Police or Fire Service as requested. 	ESP Utilities	Utilities	We have been working with the statutory undertakers regarding works near utility networks. A utilities strategy has been produced as part of the engineering reference design, this will be shared with statutory undertakers.
Based on the information provided, I can confirm that Energetics does not have any plant within the area(s) specified in your request.	Energetics Design and Build	NA	Noted

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>Thank you for the opportunity to respond to the Scoping Request for the Silvertown Tunnel Nationally Significant Infrastructure Project (NSIP). As the Government's adviser on all matters pertaining to the historic environment and a consultation body for the purposes of Regulation 10(4) of the Town and Country (Environmental Impact Assessment) (England and Wales) Regulations 1999 ("the EIA Regulations"), English Heritage is pleased to inform consideration of the historic environment at all stages of the NSIP procedure. Accordingly, we have reviewed this consultation in the context of the <i>National Planning Policy Framework</i> (NPPF) and its core principle that heritage assets be conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of this and future generations. Having done this, English Heritage considers that the treatment of non-archaeological heritage is generally acceptable, and, on behalf of the Greater London Archaeological Advisory Service (GLAAS), makes the following observations in respect of archaeological heritage:</p>	English Heritage	Chapter 8 Cultural Heritage	See responses below:
<ul style="list-style-type: none"> The indication of consultation with GLAAS made in the Scoping Request is welcomed but GLAAS wishes to note that it will identify a single point of contact for its engagement with this NSIP in due course; 	English Heritage	Chapter 8 Cultural Heritage	Once notified of the single point of contact, that will be used for engagement with Historic England.
<ul style="list-style-type: none"> English Heritage's Inspector of Ancient Monuments (IoAM) should be consulted in relation to effects within the river, such as scour from barge traffic; 	English Heritage	Chapter 8 Cultural Heritage	Historic England's IoAM has been, and will continue to be consulted throughout the assessment in relation to effects within the river.
<ul style="list-style-type: none"> The entire tunnel site falls within Archaeological Priority Areas (APAs) that are defined in the Greenwich and Newham Local Plans and this needs to be recognised together with the relevant statements of significance referred to (it is noted that Newham is a draft); 	English Heritage	Chapter 8 Cultural Heritage	The assessment recognises that the entire tunnel site lies within APAs and the relevant statements of significance will be referred to in the ES.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<ul style="list-style-type: none"> The main impacts on the north of the river are expected to be in relation to industrial archaeology and deeply buried early prehistoric remains; 	English Heritage	Chapter 8 Cultural Heritage	The assessment recognises that the main impacts on the north of the river are expected to be in relation to industrial archaeology and deeply buried early prehistoric remains.
<ul style="list-style-type: none"> The main impacts south of the river are expected to be in relation to deeply buried prehistoric remains only; 	English Heritage	Chapter 8 Cultural Heritage	The assessment recognises that main impacts south of the river are expected to be in relation to deeply buried prehistoric remains only.
<ul style="list-style-type: none"> Extensive data is available in the Greater London Historic Environment Record (GLHER) (including recent reports not yet fully incorporated) and other data is held by Crossrail; 	English Heritage	Chapter 8 Cultural Heritage	The PEIR baselines make use of all available data.
<ul style="list-style-type: none"> A comprehensive 3D geoarchaeological deposit model of the site and its surroundings based on existing and new boreholes (for which there is much existing data as stated above) will be of critical importance as a Detailed Survey element of the assessment, as this will model the sub-surface topography and enable assessment and further evaluation/mitigation measures to be properly defined and targeted; 	English Heritage	Chapter 8 Cultural Heritage	A comprehensive 3D geoarchaeological deposit model of the site and its surroundings has been produced in consultation with Historic England.
<ul style="list-style-type: none"> Specialist assessment may also be required of scour or other impacts on the river foreshore; 	English Heritage	Chapter 8 Cultural Heritage	The results of a foreshore survey will be incorporated into the ES.
<ul style="list-style-type: none"> As key environmental receptors, the significance of the two APAs should be identified; 	English Heritage	Chapter 8 Cultural Heritage	The significance of the two APAs will be identified in the ES.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<ul style="list-style-type: none"> Methodology will need to extend beyond desk-based assessment as indicated above; and 	English Heritage	Chapter 8 Cultural Heritage	The assessment recognises that the methodology will need to extend beyond desk-based assessment and consultation with Historic England and other relevant consultees is ongoing.
<ul style="list-style-type: none"> Options for reducing impact should be preferred for mitigation, with investigation where that is not possible, and a report and archive will be expected. It should be noted that this advice is based upon information provided by Transport for London. We trust this advice is of assistance in the development of the Silvertown NSIP and we would be glad to discuss any element of it with the Applicant should this be deemed to be of assistance to the process. 	English Heritage	Chapter 8 Cultural Heritage	The assessment will take into account the preference for reducing impacts. Where this is not possible and investigation is required as a form of mitigation, reports and archives will be produced.
<p>We have previously provided advice to TfL on the various alternative schemes that were considered. The decision to progress with the long bored option has removed biodiversity and fisheries concerns for the inter-tidal and estuarine habitats that would have been present for an immersed tunnel option.</p>	Environment Agency	Chapter 10 Marine Ecology	Noted.
<p>We do not anticipate that fish will be affected by this proposal. Any impacts to fish during construction have been removed through the choice to progress the long bored option, which involves no marine works. We do not envisage vibrations from the boring machine will have an impact on fish. Therefore, we accept the scoping out of fish surveys.</p>	Environment Agency	Chapter 10 Marine Ecology	Noted.
<p>The use, treatment, disposal or storage of waste could require an Environmental Permit or exemption. For more information please see the link below; https://www.gov.uk/environmental-permit-check-if-you-needone/overview</p>	Environment Agency	Chapter 13 Materials	Noted, consultation with the Environment Agency is ongoing.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>Use of river transport options We support the consideration to remove waste by river, which we consider to be a sustainable option that also will help the Thames continue to act a functioning river, in line with the London Plan.</p>	<p>Environment Agency</p>	<p>Chapter 13 Materials</p>	<p>NA</p>
<p>Re-use of waste We support the intention to re-use waste where possible.</p>	<p>Environment Agency</p>	<p>Chapter 13 Materials</p>	<p>Re-use of materials will be considered in the mitigation measures section of Chapter 13- Materials where possible dependent on the level of contamination of excavated materials .</p>
<p>The baseline information does not reference the Greenwich Peninsula Environmental Method Statement, which details how any scheme on the peninsula should be developed to stop the mobilisation of existing contaminants. It is important that this</p>	<p>Environment Agency</p>	<p>Chapter 12 Geology and Soils Chapter 16 Water Environment</p>	<p>See previous comments.</p>
<p>We are pleased that pedestrian impacts and mitigation measures will be considered. We support the principles of the Thames Path because of the passive recreation of the river it provides to the public. It is important that impacts on public access to and public enjoyment of the river are considered.</p>	<p>Environment Agency</p>	<p>Transport Assessment (TA) Chapter 7 Community and Private Assets</p>	<p>The Scheme design (Chapter 4) has incorporated improvements to access by non-motorised users at the northern (Silvertown) portal, where a positive impact has been recorded. Chapter 7 of the PEIR has made reference to the Thames Path National Trail and considered how users might be affected by the Scheme during construction.</p>
<p>The Design Manual for Roads and Bridges contains suggested categories for use for EIA scoping. The Water Environment section provided in the Scoping Report will need to contain a wide variety of issues, some of which overlap with other sections, such as Geology and Soils, as mentioned in the Report.</p>	<p>Environment Agency</p>	<p>Chapter 16 Water Environment</p>	<p>See previous comments.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>We understand from TfL that a full Flood Risk Assessment (FRA) will be provided as an Appendix to the Environmental Statement. This is important to ensure that flood risk is adequately considered and represented. The FRA will need to consider impacts by and on all sources of flooding, the current state of the tidal flood defences and the project's possible impacts on them and possible impacts on the development of predicted sea level rise. It should be demonstrated that flood defences will be fit for purpose for the lifetime of the development. Flood Defence Consent will be needed from the Environment Agency for any works within 16 m of the landward side of the flood defence.</p>	<p>Environment Agency</p>	<p>Chapter 16 Water Environment</p>	<p>See previous comments.</p>
<p>Climate change, predicted sea level rise and flood defences There is currently no reference to the Thames Estuary 2100 (TE2100) Plan, which outlines how the Thames tidal defences will need to be managed to combat predicted rises in sea level over the next 100 years. The TE2100 Plan was published in November 2012 and includes anticipated future requirements for the raising of defences that will likely be included in the red line boundary for this development. There is reference in the Scoping report to a possible need to raise defences in the future but this is not linked to climate change or to the TE2100 Plan. The need to plan for future defence raisings is an important issue that, we advise, must be considered within the FRA within the Environmental Statement. We understand, following our meeting, that TfL will include the TE2100 Plan in their EIA.</p>	<p>Environment Agency</p>	<p>Chapter 16 Water Environment</p>	<p>See previous comments.</p>
<p>Highway drainage proposals should refer to sustainable drainage principles, which we understand TfL will do.</p>	<p>Environment Agency</p>	<p>Chapter 16 Water Environment</p>	<p>Sustainable drainage designs have been referenced in Chapter 4 - Scheme Design of the PIER.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>The Water Framework Directive (WFD) classification information on the Greenwich Tertiaries Groundwater Body has not been included in the Scoping Report. We understand that TfL will now include this information. WFD objectives for all of the water bodies should be considered. The EIA should assess the hydrogeological impacts of the development. There is a need to assess and understand the potential impacts of carrying out dewatering works during the operational lifetime of the scheme. We strongly advise that possibilities of, and mitigation measures against, contaminant mobilisation are assessed.</p>	<p>Environment Agency</p>	<p>Chapter 12 Geology and Soils</p>	<p>Mitigation measures against contaminant mobilisation have been assessed. Potential impacts of carrying out dewatering works during the operational lifetime of the Scheme will be fully assessed in the ES.</p>
<p>There is also a risk of saline intrusion during dewatering activities. There is already a rising trend of water salinity in Greenwich Tertiaries. Hence, dewatering works should be designed and carried out in a way that will reduce the risk of increased saline intrusion. In addition, relevant monitoring should be put in place to enable the observation of and mitigation against any negative impacts.</p>	<p>Environment Agency</p>	<p>Chapter 12 Geology and Soils</p>	<p>Noted, dewatering during construction is assessed in the Geology and Soils Chapter in the PEIR. Potential impacts of carrying out dewatering works during the operational lifetime of the Scheme will be fully assessed in the ES.</p>
<p>The use of certain grouts/drilling fluids may be prohibited if they contain hazardous pollutants which may pose unacceptable risk to groundwater.</p>	<p>Environment Agency</p>	<p>Chapter 12 Geology and Soils</p>	<p>Noted.</p>
<p>An Environmental Permit or registered exemption are needed from us to discharge anything other than clean, uncontaminated water to inland freshwaters (e.g. rivers, lakes and streams), groundwater (e.g. boreholes), estuaries and coastal waters.</p>	<p>Environment Agency</p>	<p>Chapter 16 Water Environment</p>	<p>Any permits required have been discussed with the Environment Agency. Potential disapplication in the DCO will be considered and discussed further with the EA prior to the finalisation of the ES and submission of the DCO.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>TfL should identify early on if water resources will be required during the construction phase and where this water will be sourced. This will also help inform whether any permits are required from the Environment Agency. TfL have confirmed to us that they will identify water requirements for construction and consider potential sources and capacities. Dewatering activity that will be carried out during the construction period is exempt from the abstraction licensing regime at present. However, any secondary uses of water (obtained through dewatering activity), that are not directly related to the operations, will be licensable. We advise that TFL refer to the Environment Agency Guiding Principles for Land Contamination (please find the link below) for the type of information that we require in order to assess risks to controlled waters from the site. Local Authorities advise on risk to other receptors, such as human health. https://www.gov.uk/government/publications/managing-and-reducing-landcontamination.</p>	Environment Agency	Chapter 16 Water Environment	During the construction phase an additional temporary demand on water resources would result from the need to supply site offices, canteens and welfare facilities. However, it is understood that this will be minimal due to effective water use. Any permits required have been discussed with the Environment Agency.
<p>We can confirm that Fulcrum Pipelines Limited have no comments to make on this scoping report. Please note that we are constantly adding to our underground assets and would strongly advise that you consult us again prior to undertaking any excavations. Please note that other gas transporters may have plant in this locality which could be affected. We will always make every effort to help you where we can, but Fulcrum Pipelines Limited will not be held responsible for any incident or accident arising from the use of the information associated with this search. The details provided are given in good faith, but no liability whatsoever can be accepted in respect thereof. If you need any help or information simply contact Fulcrum on 0845 641 3060</p>	Fulcrum Pipelines Ltd.	Utilities	Noted, as above, we are working with statutory undertakers and a utilities strategy has been produced and consulted on. This would address any specific requirements relating to temporary works around utilities during construction. Advice has been provided directly to the engineering team from the various undertakers.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>This application falls within the consultation distance of two major hazard sites, the East Greenwich gasholder station and Brenntag UK. The consultation distance of each site is divided into zones based on the Hazardous Substances Consent held by the site. Any change to the consent may result in a change to the zones. Based on the existing granted consents, the surface development is within the inner zone of both sites with the new grade separated junction in the inner zone of one site. In line with PADHI+ guidance, HSE would advise against dual carriageways within the HSE inner consultation zone. This would apply even though there is an existing dual carriageway.</p>	<p>Health and Safety Executive</p>	<p>N/A</p>	<p>Method statements will be prepared for all construction works which will take into consideration the relevant HSE and utility company requirements.</p>
<p>Hazardous Substances Consent The presence on, over or above land of certain hazardous substances, at or above set threshold quantities (Controlled Quantities), may require Hazardous Substances Consent (HSC) under the planning (Hazardous substances) Act 1990 as amended. The substances, alone or when aggregated with others, for which HSC is required, and the associated Controlled Quantities, are set out in The Planning (Hazardous Substances) Regulations 1992 as amended particularly by The Planning (Hazardous Substances) (Amendment) (England) Regulations 2009 and 2010, as well as Planning (Control Of Major Accident Hazards) Regulations 1999. Hazardous substances consent would be required if the site is intending to store or use any of the Named Hazardous substances or categories of substances and preparations at or above the controlled quantities set out in schedule 1 of these regulations. Further information on HSC should be sought from the relevant hazardous substances authority who should be aware of any pending consent applications.</p>	<p>Health and Safety Executive</p>	<p>N/A</p>	<p>Method statements will be prepared for all construction works which will take into consideration the relevant HSE and utility company requirements.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>Explosives sites After completion, HSE will have no objection to the tunnel development, as it will not impinge upon any of our licensed explosive sites. However, during the construction phase, it appears that land controlled by General Marine (Tugs and barges) Ltd. Is to be included in the 'temporary land take for temporary works or site compounds'. Therefore, during the construction phase, General marine would be unable to handle any explosives at their premises. HSE will be contacting the company regarding this matter.</p>	<p>Health and Safety Executive</p>	<p>N/A</p>	<p>Method statements will be prepared for all construction works which will take into consideration the relevant HSE and utility company requirements.</p>
<p>The Scoping report contains little detail on the intended scope of traffic modelling and in this respect it is assumed that a separate Transport Assessment will be prepared as part of the full submission. If this is not the case and the Transport Assessment is to be included within the scope of the EIA then we would wish to have further input into the scope of the section of the EIA covering transport issues. If a separate transport Assessment is to be prepared, we wish to be consulted on its content, and early involvement in the process would be welcomed.</p>	<p>Highways Agency</p>	<p>Transport Assessment (TA)</p>	<p>A separate Transport Assessment has been prepared.</p>
<p>Following an assessment I can confirm that no objection is raised to the EIA scoping report submitted in respect of the above proposal. Please note that the Council do wish to be consulted at all further stages of this proposal.</p>	<p>Bexley Council Development Control.</p>	<p>NA</p>	<p>NA</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>In February 2013 The London Borough of Tower Hamlets (LBTH) provided comments on the Mayor of London’s Transport for London (TfL) River Crossings consultation. The previous consultation response recognised the predicted growth in traffic associated with the new development and population forecasts for East London which will inevitably impact on demand for cross river movement. The Council also recognised the existing problems of extremely poor air quality, congestion and resilience of the existing Blackwell tunnels to incidents. It was agreed that action needed to be taken, but officers were concerned that the proposals set out in the consultation did not deliver sufficient benefits. This previous response should read alongside this latest consultation response.</p>	<p>Tower Hamlets</p>	<p>Chapter 7 Community and Private Assets</p>	<p>Noted.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>Potential significant effects on LBTH LBTH have reviewed the EIA scoping report, and due to its proximity to the LBTH, it is considered that the proposed development has the potential to affect environmental receptors within the Borough . Of particular concern to LBTH are those that have the potential to lead to significant environmental effects, including:</p> <ul style="list-style-type: none"> • Increase in traffic on LBTH road network • Changes to noise and vibration as a result of construction work and once operational; • Changes to air quality as a result of construction work ad once operational; • Changes to socio economic as a result of changes to employment ; • Disturbance and mobilisation of any historic contamination ; • Changes to flood risk and surface drainage ; • Visual effects and effects on townscape character resulting from the development ; • The generation and disposal of waste; and • Potentially significant cumulative effects <p>The Council would seek environmental, social and economic mitigation measures to reduce any adverse effects on the proposed Silvertown Tunnel.</p>	Tower Hamlets	All	Noted. These areas of concern are all included in the PEIR.
<p>Scoped out No information is provided on why wind microclimate or daylight and sunlight have been scoped out of the EIA. This may be because there are no likely significant effects, but this has not been explained in the EIA scoping report. The ES should provide clarification as to why these disciplines are not considered likely to generate significant effects and therefore have been scoped out of the EIA.</p>	Tower Hamlets	Chapter 5 Assessment Methods	The PEIR provides justification for why wind and microclimate effects have been scoped out.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>Climate change should be considered as part of the EIA, where appropriate. This does not need to be a standalone assessment, but can be incorporated into the relevant discipline assessments e.g.. increased risk of flooding. The UK climate predictions 2009 should be utilised and potential ways to mitigate the development's impact on climate change should highlighted as detailed in the LBTH EIA scoping guidance (e.g.. Reduced energy usage, minimising CO2 emissions during construction). The development should be assessed against future climate change scenarios as identified in the Mayors climate change Adaption Strategy which are the same as recommended in LBTH's EIA scoping guidance.</p>	Tower Hamlets	Chapter 16 Water Environment	<p>A separate climatic factors topic will not be included within the PEIR. Instead, climatic factors will be considered in the Air Quality (carbon) (Chapter 6), Materials (selection of materials in the design process) (Chapter 13) and the Water Environment (flood risk mitigation and adaptation) (Chapter 16) assessments. Climate adaptation is considered as part of the Scheme description, for example, as addressed in drainage design, which allows a 20% capacity for climate change.</p>
General			
<p>The ES should clearly illustrate the effects identified. For example, highlighting the effect in bold can assist the reader in identifying the effects of the proposed development quickly and easily.</p>	Tower Hamlets	All	<p>The significance of effect is included in bold in all PEIR assessments.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
Environmental Disciplines			
Traffic and transport			
The construction traffic assessment should consider both vehicles bringing in/out materials and equipment as well as construction staff movements and the effects this will have on the network capacity. Likely construction traffic routes should be established, so that receptors can be appropriately assessed.	Tower Hamlets	Transport Assessment (TA)	This information is included in the Transport Assessment and the Effects on all Travellers Chapter in the PEIR.
The EIA scoping report identifies the potential to utilise water transport as a mode during construction. Consideration should be given to the effect that an increase in river-borne traffic may have on the estuary, specifically in relation to both commercial and recreational navigation. It is unclear why data from 2012 is being utilised as the baseline data, rather than more up to date data given that it is now mid-way through 2014.	Tower Hamlets	Chapter 4 Scheme Description	A Navigational Risk Assessment (NRA) has been undertaken. This considers the effect of an increase in river-borne traffic.
The council is disappointed to see that the proposed Silvertown Tunnel will not be designed to accommodate pedestrians and cyclists. The Council believes that there should be more emphasis on sustainable means of transport, as well as improving connectivity by walking, cycling and public transport to assist the regeneration of this part of London.	Tower Hamlets	Chapter 4 Scheme Description	Pedestrians and cyclists would not be able to use the Silvertown Tunnel for reasons of safety, security and poor amenity. They would, however, continue to be able to make use of the nearby EAL, which was constructed as part of the package of river crossings in east London, expressly to facilitate pedestrian and cyclist crossings.
TfL should consider multi-modal double deck tunnels which would help provide a more long term sustainable transport solution e.g. integrating DLR route within the Silvertown Tunnel. This approach would greatly improve the reach of the DLR network for passengers in East and South-East London. It would increase rail capacity (and provide for better walking and cycling connectivity) as well as reduce pressure on the existing limited rail river crossings in this part of London.	Tower Hamlets	Chapter 4 Scheme Description	Noted.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>Consideration needs to be given to road users using local residential roads as cut through routes to and from the Silvertown Tunnel, A13 and Blackwell Tunnel, and the effects that this may have on local residents. Receptors of specific concern are Aberfeldy Estate, Virginia Quay and South Poplar. LBTH is currently working with TfL and the London Legacy Development Corporation (LLDC) on improvements to the A12, including public realm and potential new crossings. The proposed Silvertown Tunnel should not compromise these improvements. Predicted changes to traffic levels and flows that may require mitigation measures will be on the A12 and A13.</p>	Tower Hamlets	Transport Assessment (TA)	Noted.
Air Quality			
<p>As noted in the EIA scoping report, the whole of the LBTH has been designated as an Air Quality Management Area (AQMA). This means that even small increases in emissions can lead to significant effects. It is therefore not considered appropriate for an increase in emissions, however small, to be categorised as negligible. The ES should set out the proposed approach to defining the future baseline. Current thinking is that the anticipated improvement in background air quality resulting from vehicle emission controls is now likely to occur. When predicting future air quality a conservative approach should be taken.</p>	Tower Hamlets	Chapter 6 Air Quality	See responses to previous comments.
Community and private assets			
<p>Item 4 of table 6.8 sets out the 'Significance of the receptors' – it is assumed that this should in fact be referred to as the 'sensitivity of receptors'</p>	Tower Hamlets	Chapter 7 Community and Private Assets	This is correct and will be updated in the PEIR.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
Cultural Heritage			
<p>With respect to item 4 of Table 6.9, reference should also be given to Conservation Areas and locally listed buildings. Note that the eastern end of the Borough is designated Archaeological Priority Zone. It is essential that consultation is undertaken with Greater London Archaeology Service (GLAAS). It is recommended that GLAAS are engaged early in the EIA process. With respect to Item 4 of Table 6.9 and Table B5 of Appendix B, English Heritage has previously advised that there should also be no distinction drawn between Grade I and II* Buildings and Grade II buildings. The degree of protection afforded to listed buildings by the legislation does not distinguish between grades and as a national designation all grades should be regarded as 'high' importance.</p>	Tower Hamlets	Chapter 8 Cultural Heritage	<p>The assessment will make reference to conservation areas and locally listed buildings. The assessment is being undertaken in accordance with DMRB, which does make a distinction between grades of listed buildings.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>English Heritage has also previously advised that there should be no distinction in sensitivity between conservation areas. As a local designation arising from powers in national legislation they should be designated heritage assets of 'high' importance. If a distinction is then to be drawn in townscape terms between those of consistent architectural or townscape character that should be reflected in the magnitude of change and not in their importance. Table 1 will therefore need to be updated accordingly.</p>	Tower Hamlets	Chapter 8 Cultural Heritage	<p>The assessment is being undertaken in accordance with DMRB and the value of assets will be derived in accordance with the table contained with those documents.</p>
Townscape and Visual			
<p>No information has been provided on the viewpoints to be assessed , or which are to be wireless/rendered – views from LBTH will need to be discussed and agreed with the Council. As a minimum, it is asked that London View Management Framework (LVMF) views are rendered. It is also requested that views from open spaces such as parks and waterways are rendered, as well as any within/ close to conservation areas and/ or heritage assets e.g. listed buildings. All judgements on the significance of effects should be fully explained and justified and be based on judgements of the potential effects identified, their magnitude and the sensitivity of the receptor affected.</p>	Tower Hamlets	Chapter 15 Townscape and Visual	<p>Because this is a DMRB assessment, the assessment of visual effects is centred on receptors rather than viewpoints that are representative of receptors (viewpoint photographs are only provided to broadly illustrate baseline conditions).</p>
Cumulative Developments			
<p>No detail has been provided on the cumulative developments to be assessed with the EIA. Reasonably foreseeable schemes within LBTH should be taken into account if it is considered likely that they will contribute to any impacts identified in the EIA. The Council's standard advice is that the EIA should also affect cumulative developments that have been submitted as planning applications but not yet approved should also be included, as the council considers these to be 'reasonably foreseeable'.</p>	Tower Hamlets	Chapter 17 Cumulative Impacts	<p>A description of the developments included in the cumulative impact assessment are included in Chapter 17 of the PEIR.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR			
<p>The following extant planning consents should be considered:</p> <ul style="list-style-type: none"> • Leamouth Peninsula North – PA/10/01864 • Orchard Wharf – PA/10/02778 • Aberfeldy Estate redevelopment – PA/11/02716 • Blackwall reach Development – PA/12/00001 • Wood Wharf – PA/13/296 • New Union Wharf PA/12/00360 • Land on West side of Leamouth Road – PA/07/0039 	Tower Hamlets	Chapter 17 Cumulative Impacts	Noted.			
• 60 Portree Street and Lanrick House, Lanrick road – PA/08/01669						
• Building C, New Providence Wharf, Blackwall Way – PA/06/02101						
• Alberta House – PA/07/00241						
• Prestons Road – PA/11/1668						
• Virginia Quays – PA/11/1462						
• Canning Town and Custom House – 11/00662/LYGDC)						
• Rathbone Market, Barking Road – 08/02263/LTGDC						
• Crossrail – Eastern tunnels logistics site (Planning references: 09/00912/AOD, 09/00787/AOD 09/00912/ AOD, 10/01016/AOD and 11/ 00157/AOD)						
<p>The EIA will need to carefully and quantifiably (e.g. using data in other ESs) assess cumulative effects, and demonstrate this in the ES. It is recommended that the list of cumulative developments is reviewed regularly to ensure that all relevant current applications are captured for EIA purposes.</p>				Tower Hamlets	Chapter 17 Cumulative Impacts	Noted, a quantitate cummulative impact assessment will be undertaken where possible.
Conclusion						
<p>LBTH would welcome the opportunity to consult further on the EIA for this scheme both pre and post submission.</p>				Tower Hamlets	NA	Noted.
<p>Based on the information provided in the Report, the MMO has identified the following activities which may require licensing under the 2009 Act:</p>				Marine Management Organisation	NA	N/A

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<ul style="list-style-type: none"> • Construction of the tunnels – The Report notes that the tunnels will be bored beneath the Thames. All work within the marine environment, including both beneath and above the tidal extents of rivers, will require a marine licence under the 2009 Act. It should be noted, however, that there is an exemption relating to bored tunnels in the Marine Licensing (Exempted Activities) (Amendment) Order 2013, as follows: 	<p>Marine Management Organisation</p>	<p>Chapter 4 Scheme Description</p>	<p>Noted.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
Bored tunnels			
(1) Article 4 applies to a deposit or works activity carried on wholly under the sea bed in connection with the construction or operation of a bored tunnel.	Marine Management Organisation	Chapter 4 Scheme Description	Noted, Consultation is currently ongoing with the Marine Management Organisation (MMO).
(2) Paragraph (1) is subject to conditions 1 and 2.			
(3) Condition 1 is that notice of the intention to carry on the activity must be given to the licensing authority before the activity is carried on.			
(4) Condition 2 is that the activity must not significantly adversely affect any part of the environment of the UK marine area or the living resources that it supports.			
(5) But article 4 does not apply to any such deposit carried on for the purpose of disposal.			
Construction of drainage water outfalls – Section 2 of the Report refers to highway drainage. Paragraphs 2.3.18 and 2.3.20 state that surface run-off will be ‘gravity drained to an outfall’. The Report does not state if this will be via the use of an existing outfall or if a new outfall will be required. Any works below MHWS, including both the construction of a new outfall or works to existing infrastructure, such	Marine Management Organisation	Chapter 16 Water Environment Chapter 4 Scheme Description	No new surface water drainage outfalls are proposed below MHWS. Construction of the jetty would be undertaken in line with MMO license requirements.
• Construction of in-river structures – Item 12 of section 6.5 of the Report mentions a ‘requirement for in-river structures’, however, notes that ‘this is not currently envisaged’. On this matter the MMO would highlight that further clarification is required.	Marine Management Organisation	Chapter 4 Scheme Description	Noted, Consultation on the proposed temporary jetty is currently ongoing with the MMO.
The Report includes limited detail regarding work activities and their associated methodologies. Further detail is required in order to ascertain what, if any, activities require licensing under the 2009 Act, and to enable a thorough and robust assessment of their impacts upon the marine environment.	Marine Management Organisation	Chapter 4 Scheme Description	Noted, Consultation on the proposed temporary jetty is currently ongoing with the MMO.
Any additional works or activities in the marine area which may require a marine licence under the 2009 Act should be notified to the MMO at the earliest opportunity and the impacts of such works considered in the EIA process.	Marine Management Organisation	Chapter 4 Scheme Description	Noted, Consultation on the proposed temporary jetty is currently ongoing with the MMO.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
General comments			
<p>The Report provides a broad overview of the Project; however, due to the high level nature of the document and lack of Project detail, confidence in the assessments made is limited. For example, as stated in section 3 of this document, only a broad overview of the works to be undertaken has been provided. This limits the confidence that all relevant elements of the project have been scoped with regards to impact pathways and receptors.</p>	Marine Management Organisation	Chapter 4 Scheme Description	Noted, Consultation on the proposed temporary jetty is currently ongoing with the MMO. Further detail will be provided in the ES, when available.
Chapter 2 – The Scheme			
<p>Paragraph 2.3.26 of the Report provides a brief description of the tunnel design, however, does not state how far below the river bed the tunnels will be bored. Further information is required regarding the exact location of the tunnels, their depth below the river bed and a more detailed works methodology regarding tunnel construction.</p>	Marine Management Organisation	Chapter 4 Scheme Description	Information regarding the depth of the tunnel is included in the Scheme description.
<p>Paragraph 2.3.44 of the Report discusses waste and the disposal of excavated material from tunnelling activity. It is noted that, due to the location of the works in close proximity to the Thames, removal by barge would be a likely option. No further detail is provided to advise how this material will be used. The MMO would highlight that consideration should be given to the Waste Framework Directive.</p>	Marine Management Organisation	Chapter 16 Water Environment	All suitable excavated material will be removed from the Silvertown site by river and transported, whenever possible, to a suitable site where the material can be reused, such as Wallasea Island, (an RSPB wetland creation scheme). For certain Chapters e.g. Air Quality and Noise a worst case of transportation by road has been assessed.
<p>Paragraph 2.3.47 also refers to the possible use of barges to transport tunnel segments and other bulk materials to the site. The impact of such barge movements on marine receptors such as marine ecology and navigation should be assessed.</p>	Marine Management Organisation	Chapter 10 Marine Ecology	This will be considered in Chapter 10 - Marine Ecology assessment in the PEIR and ES.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
As stated in paragraph 3.1 of this document, the construction of in-river structures such as jetties to support the use of barges, would constitute a licensable activity. Further detail should be provided and the impacts of such construction activities assessed as part of the EIA process.	Marine Management Organisation	Chapter 4 Scheme Description	Noted, Consultation on the proposed temporary jetty is currently ongoing with the MMO. Further detail will be provided in the ES, when available.
Chapter 3 – Consideration of alternatives			
Chapter 3 of the Report sets out a consideration of alternatives and discusses the possible use of immersed tube tunnel construction, however, states that this was not taken forward due to the associated higher environmental risks associated with this option.	Marine Management Organisation	NA	Noted.
The MMO supports the use of construction methods which minimise the impact upon the environment and should be advised of any amendment to the proposed works methodology, in particular, if a decision is made to use immersed tube tunnel construction.	Marine Management Organisation	NA	Noted.
Chapter 5 – Environmental impact assessment methodology			
The MMO is content with the proposed method of assessment as outlined in Chapter 5 of the Report	Marine Management Organisation	NA	NA
Chapter 6 – Scope of the EIA			
Chapter 6 of the Report provides a high level overview of the proposed scope of the EIA, including environmental topics to be covered. This includes limited scope with regards to marine aspects with no consideration given to impacts upon river navigation, marine ecology, hydrodynamics, recreational and commercial fishing, or other marine users.	Marine Management Organisation	Chapter 10 Marine Ecology	A marine ecology assessment is included in Chapter 10 of the PEIR. Further consultation with MMO will be undertaken and if agreed, the ES will provide clear justification for the scoping out of fish surveys.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>In particular, section 6.6 states that ‘given that the tunnel is to be created by directional drilling underneath the river, it is not considered that detailed surveys for fish or other features of the River Thames are necessary. These are therefore scoped out of the assessment.’ The proposed works have the potential for noise and vibration from boring activities to impact upon migratory fish. If no impact is expected then clear justification should be given as to why this has been scoped out.</p>	<p>Marine Management Organisation</p>	<p>Chapter 10 Marine Ecology</p>	<p>Justification is provided in Chapter 10 - Marine Ecology of the PEIR.</p>
<p>As with all works within the marine environment, the MMO would expect to see a thorough and robust assessment of impacts upon marine receptors and clear justification provided for topics/impacts/receptors which have been scoped out.</p>	<p>Marine Management Organisation</p>	<p>Chapter 16 Water Environment</p>	<p>Noted.</p>
<p>Particular consideration should be given in relation to the bored tunnels exemption as outlined at section 3.1 of this document. In order for the exemption to apply, it must be demonstrated in the EIA that the construction of the tunnel does not adversely affect the environment of the UK Marine area or the living resources that it supports. Therefore, any potential for adverse impact on the marine environment should be adequately assessed and scoped out of consideration in the EIA, in order to effectively deliver this requirement.</p>	<p>Marine Management Organisation</p>	<p>Chapter 10 Marine Ecology</p>	<p>This has been considered in Chapter 10 - Marine Ecology assessment in the PEIR and ES.</p>
<p>Consultation process and next steps</p>			
<p>The MMO welcomes further consultation and recommends that Transport for London discuss the licensing requirements under the 2009 Act with the MMO at the earliest opportunity.</p>	<p>Marine Management Organisation</p>	<p>Other Consents</p>	<p>Noted, Consultation on the is currently ongoing with the MMO.</p>
<p>National Grid Electricity Transmission</p>			

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
National Grid Electricity Transmission has a high voltage electricity overhead transmission line which lies within or in close proximity to the proposed order limits. This line forms an essential part of the electricity transmission network in England and Wales and include the following:	National Grid.	Utilities	Noted.
<ul style="list-style-type: none"> • ZR 400kV Overhead Transmission Line – Barking-West Ham The following points should be taken into consideration: National Grid’s Overhead Line/s is protected by a Deed of Easement/Wayleave Agreement which provides full right of access to retain, maintain, repair and inspect our asset. 	National Grid.	Utilities	Noted, as above, we are working with statutory undertakers and a utilities strategy has been produced and consulted on. This would address any specific requirements relating to temporary works around utilities during construction. Advice has been provided directly to the engineering team from the various undertakers.
Statutory electrical safety clearances must be maintained at all times. Any proposed buildings must not be closer than 5.3m to the lowest conductor. National Grid recommends that no permanent structures are built directly beneath overhead lines. These distances are set out in EN 43 – 8 Technical Specification for “overhead line clearances Issue 3 (2004) available at: http://www.nationalgrid.com/uk/LandandDevelopment/DDC/devnearo hl_final/appendixIII/appIII-part2	National Grid.	Utilities	Noted, as above, we are working with statutory undertakers and a utilities strategy has been produced and consulted on. This would address any specific requirements relating to temporary works around utilities during construction. Advice has been provided directly to the engineering team from the various undertakers.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>If any changes in ground levels are proposed either beneath or in close proximity to our existing overhead lines then this would serve to reduce the safety clearances for such overhead lines. Safe clearances for existing overhead lines must be maintained in all circumstances. Further guidance on development near electricity transmission overhead lines is available here: http://www.nationalgrid.com/NR/rdonlyres/1E990EE5-D068-4DD6-8C9A-4D0B06A1BA79/31436/Developmentnearoverheadlines1.pdf</p>	National Grid.	Utilities	<p>Noted, as above, we are working with statutory undertakers and a utilities strategy has been produced and consulted on. This would address any specific requirements relating to temporary works around utilities during construction. Advice has been provided directly to the engineering team from the various undertakers.</p>
<p>The relevant guidance in relation to working safely near to existing overhead lines is contained within the Health and Safety Executive's (www.hse.gov.uk) Guidance Note GS 6 "Avoidance of Danger from Overhead Electric Lines" and all relevant site staff should make sure that they are both aware of and understand this guidance.</p>	National Grid.	Utilities	<p>Method statements will be prepared for all construction works which will take into consideration the relevant HSE and utility company requirements.</p>
<p>Plant, machinery, equipment, buildings or scaffolding should not encroach within 5.3 metres of any of our high voltage conductors when those conductors are under their worse conditions of maximum "sag" and "swing" and overhead line profile (maximum "sag" and "swing") drawings should be obtained using the contact details above.</p>	National Grid.	Utilities	<p>Noted, as above, we are working with statutory undertakers and a utilities strategy has been produced and consulted on. This would address any specific requirements relating to temporary works around utilities during construction. Advice has been provided directly to the engineering team from the various undertakers.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>If a landscaping scheme is proposed as part of the proposal, we request that only slow and low growing species of trees and shrubs are planted beneath and adjacent to the existing overhead line to reduce the risk of growth to a height which compromises statutory safety clearances.</p>	<p>National Grid.</p>	<p>Utilities</p>	<p>Noted, as above, we are working with statutory undertakers and a utilities strategy has been produced and consulted on. This would address any specific requirements relating to landscaping and temporary works around utilities during construction. Advice has been provided directly to the engineering team from the various undertakers.</p>
<p>Drilling or excavation works should not be undertaken if they have the potential to disturb or adversely affect the foundations or “pillars of support” of any existing tower. These foundations always extend beyond the base area of the existing tower and foundation (“pillar of support”) drawings can be obtained using the contact details above.</p>	<p>National Grid.</p>	<p>Utilities</p>	<p>Noted, as above, we are working with statutory undertakers and a utilities strategy has been produced and consulted on. This would address any specific requirements relating to temporary works around utilities during construction. Advice has been provided directly to the engineering team from the various undertakers.</p>
<p>Due to the scale, bulk and cost of the transmission equipment required to operate at 275kV or 400kV we only support proposals for the relocation of existing high voltage overhead lines where such proposals directly facilitate a major development or infrastructure project of national importance which has been identified as such by government.</p>	<p>National Grid.</p>	<p>Utilities</p>	<p>We have been working with the statutory undertakers regarding works near utility networks and any diversions required. We have requested C3 estimates. A utilities strategy has been produced as part of the engineering reference design, this will be shared with statutory undertakers.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR	
To view the Development Near Lines Documents. Please use the link below: http://www.nationalgrid.com/uk/LandandDevelopment/SC/devnearohl_final/	National Grid.	Utilities	Noted.	
To view the National Grid Policy's for our Sense of Place Document. Please use the link below: http://www.nationalgrid.com/uk/LandandDevelopment/DDC/	National Grid.	Utilities	Noted.	
Gas Distribution				
National Grid has Gas Distribution pipelines located within and in close proximity to the order limits. Details are as follows:	National Grid.	Utilities	Noted.	
• High or Intermediate pressure (above 2 bar) Gas Pipelines and associated equipment	National Grid.	Utilities	Noted, as above, we are working with statutory undertakers and a utilities strategy has been produced and consulted on. This would address any specific requirements relating to temporary works around utilities during construction. Advice has been provided directly to the engineering team from the various undertakers.	
• Low or Medium pressure (below 2 bar) gas pipes and associated equipment. (As a result it is highly likely that there are gas services and associated apparatus in the vicinity)	National Grid.	Utilities		
Above ground gas sites and equipment has also been identified as being located within or in close proximity to the order limits.	National Grid.	Utilities		
Specific Comments – Gas Infrastructure				
The following points should be taken into consideration:				
• National Grid 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.	National Grid.	Utilities		
Pipeline Crossings:				
• Where existing roads cannot be used, construction traffic should ONLY cross the pipeline at previously agreed locations.	National Grid.	Utilities		

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<ul style="list-style-type: none"> 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. 	National Grid.	Utilities	
<ul style="list-style-type: none"> The type of raft shall be agreed with National Grid prior to installation. 	National Grid.	Utilities	Noted, as above, we are working with statutory undertakers and a utilities strategy has been produced and consulted on. This would address any specific requirements relating to temporary works around utilities during construction. Advice has been provided directly to the engineering team from the various undertakers.
<ul style="list-style-type: none"> No protective measures including the installation of concrete slab protection shall be installed over or near to the National Grid pipeline without the prior permission of National Grid. 	National Grid.	Utilities	
<ul style="list-style-type: none"> National Grid will need to agree the material, the dimensions and method of installation of the proposed protective measure. 	National Grid.	Utilities	
<ul style="list-style-type: none"> The method of installation shall be confirmed through the submission of a formal written method statement from the contractor to National Grid. 	National Grid.	Utilities	
<ul style="list-style-type: none"> Please be aware that written permission is required before any works commence within the National Grid easement strip. 	National Grid.	Utilities	
<ul style="list-style-type: none"> A National Grid representative shall monitor any works within close proximity to the pipeline to comply with National Grid specification T/SP/SSW22. 	National Grid.	Utilities	
<ul style="list-style-type: none"> A Deed of Consent is required for any crossing of the easement 	National Grid.	Utilities	
Cables Crossing:			
<ul style="list-style-type: none"> Cables may cross the pipeline at perpendicular angle to the pipeline i.e. 90 degrees. 	National Grid.	Utilities	Noted, as above, we are working with statutory undertakers and a utilities strategy has been produced and consulted on. This would address any specific requirements relating to temporary works around utilities during construction. Advice has been
<ul style="list-style-type: none"> A National Grid representative shall supervise any cable crossing of a pipeline. 	National Grid.	Utilities	
<ul style="list-style-type: none"> Clearance must be at least 600mm above or below the pipeline. 	National Grid.	Utilities	
<ul style="list-style-type: none"> Impact protection slab should be laid between the cable and pipeline if cable crossing is above the pipeline. 	National Grid.	Utilities	
<ul style="list-style-type: none"> A Deed of Consent is required for any cable crossing the easement. 	National Grid.	Utilities	

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<ul style="list-style-type: none"> 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. 	National Grid.	Utilities	provided directly to the engineering team from the various undertakers.
General Notes on Pipeline Safety:			
<ul style="list-style-type: none"> You should be aware of the Health and Safety Executives guidance document HS(G) 47 "Avoiding Danger from Underground Services", and National Grid's specification for Safe Working in the Vicinity of National Grid High Pressure gas pipelines and associated installations - requirements for third parties T/SP/SSW22. 	National Grid.	Utilities	Method statements will be prepared for all construction works which will take into consideration the relevant HSE and utility company requirements.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<ul style="list-style-type: none"> National Grid will also need to ensure that our pipelines access is maintained during and after construction. 	National Grid.	Utilities	
<ul style="list-style-type: none"> Our pipelines are normally buried to a depth cover of 1.1 metres however; actual depth and position must be confirmed on site by trial hole investigation under the supervision of a National Grid representative. Ground cover above our pipelines should not be reduced or increased. 	National Grid.	Utilities	
<ul style="list-style-type: none"> If any excavations are planned within 3 metres of National Grid 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 National Grid 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. 	National Grid.	Utilities	Noted, as above, we are working with statutory undertakers and a utilities strategy has been produced and consulted on. This would address any specific requirements relating to temporary works around utilities during construction. Advice has been provided directly to the engineering team from the various undertakers.
<ul style="list-style-type: none"> Excavation works may take place unsupervised no closer than 3 metres from the pipeline once the actual depth and position has been confirmed on site under the supervision of a National Grid representative. Similarly, excavation with hand held power tools is not permitted within 1.5 metres from our apparatus and the work is undertaken with NG supervision and guidance. 	National Grid.	Utilities	
<p>To view the SSW22 Document, please use the link below: http://www.nationalgrid.com/uk/LandandDevelopment/DDC/GasElectricNW/safeworking.htm</p>	National Grid.	Utilities	Noted.
<p>To view the National Grid Policy's for our Sense of Place Document. Please use the link below: http://www.nationalgrid.com/uk/LandandDevelopment/DDC/</p>	National Grid.	Utilities	Noted.
<p>To download a copy of the HSE Guidance HS(G)47, please use the following link: http://www.hse.gov.uk/pubns/books/hsg47.htm</p>	National Grid.	Utilities	Noted.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
Further information in relation to National Grid's gas transmission pipelines can be accessed via the following internet link: http://www.nationalgrid.com/uk/LandandDevelopment/DDC/gastransmission/gaspipes/	National Grid.	Utilities	Noted.
Further Advice			
We would request that the potential impact of the proposed scheme on National Grid's existing assets as set out above is considered in any subsequent reports, including in the Environmental Statement, and as part of any subsequent application. Where the promoter intends to acquire land, extinguish rights, or interfere with any of National Grid apparatus protective provisions will be required in a form acceptable to it to be included within the DCO.	National Grid.	Utilities	Noted, as above, we are working with statutory undertakers and a utilities strategy has been produced and consulted on. This would address any specific requirements relating to temporary works around utilities during construction. Advice has been provided directly to the engineering team from the various undertakers.
Where any diversion of apparatus may be required to facilitate a scheme, National Grid is unable to give any certainty with the regard to diversions until such time as adequate conceptual design studies have been undertaken by National Grid. Further information relating to this can be obtained by contacting the email address below.	National Grid.	Utilities	We have been working with the statutory undertakers regarding works near utility networks and any diversions required. We have requested C3 estimates. A utilities strategy has been produced as part of the engineering reference design, this will be shared with statutory undertakers.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
National Grid requests to be consulted at the earliest stages to ensure that the most appropriate protective provisions are included within the DCO application to safeguard the integrity of our apparatus and to remove the requirement for objection. All consultations should be sent to the following: DCOConsultations@nationalgrid.com as well as by post to the following address: The Company Secretary, 1-3 The Strand, London WC2N 5EH	National Grid.	Utilities	Noted, National Grid is a statutory consultee and will be consulted throughout the statutory consultation and DCO process.
In order to respond at the earliest opportunity National Grid will require the following:			
• Draft DCO including the Book of Reference and relevant Land Plans	National Grid.	Utilities	Noted, as above, we are working with statutory undertakers and a utilities strategy has been produced and
• Shape Files or CAD Files for the order limits	National Grid.	Utilities	
NATS anticipates no impact from the proposal and has no comments to make on the Scoping Request.	NATS	NA	Noted.
The scoping request is for a proposal that does not appear, from the information provided, to affect any nationally designated geological or ecological sites (Ramsar, SPA, SAC, SSSI, NNR) or landscapes (National Parks, AONBs, Heritage Coasts), or have significant impacts on the protection of soils (particularly of sites over 20ha of best or most versatile land), nor is the development for a mineral or waste site of over 5ha.	Natural England	Chapter 9 Terrestrial Ecology	Noted.
At present therefore it is not a priority for Natural England to advise on the detail of this EIA. We would, however, like to draw your attention to some key points of advice, presented in annex to this letter, and we would expect the final Environmental Statement (ES) to include all necessary information as outlined in Schedule 4 of the Town & Country Planning (Environmental Impact Assessment) Regulations 2011. If you believe that the development does affect one of the features listed in paragraph 3 above, please contact Natural England at consultations@naturalengland.org.uk , and we may be able to provide further information.	Natural England	Chapter 9 Terrestrial Ecology	Noted.
1. General Principles			

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>Schedule 4 of the Town & Country Planning (Environmental Impact Assessment) Regulations 2011, sets out the necessary information to assess impacts on the natural environment to be included in an ES, specifically:</p> <ul style="list-style-type: none"> • 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. 	<p>Natural England</p>	<p>All</p>	<p>In relation to Ecology the CIEEM Guidelines for Ecological Impact Assessment (EclA) are being used as a basis for determining which ecological receptors are relevant to the proposals, the magnitude of effects on these receptors and mitigation and enhancement measures.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
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.	Natural England	Chapter 17 Cumulative Impacts	Cumulative impacts are considered in each chapter in the PEIR and Chapter 17.
All supporting infrastructure should be included within the assessment.	Natural England	Chapter 4 Scheme Description	All supporting infrastructure has been described in the ES and assessed in the relevant chapters.
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 (EcIA) have been developed by the Institute of Ecology and Environmental Management (IEEM) and are available on their website. EcIA is the process of identifying, quantifying and evaluating the potential impacts of defined actions on ecosystems or their components. EcIA may be carried out as part of the EIA process or to support other forms of environmental assessment or appraisal.	Natural England	Chapter 9 Terrestrial Ecology	The CIEEM Guidelines for Ecological Impact Assessment (EcIA) are being used as a basis for determining which ecological receptors are relevant to the proposals, the magnitude of effects on these receptors and mitigation and enhancement measures.
The National Planning Policy Framework (NPPF) sets out guidance in S.118 on how to take account of biodiversity interests in planning decisions and the framework that local authorities should provide to assist developers.	Natural England	Chapter 9 Terrestrial Ecology	Noted.
2.2. Internationally and Nationally Designated Sites			

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>Natural England undertakes an initial assessment of all development consultations, by determining whether the location to which they relate falls within geographical 'buffer' areas within which development is likely to affect designated sites. The proposal is located outside these buffer areas and therefore appears unlikely to affect an Internationally or Nationally designated site. However, it should be recognised that the specific nature of a proposal may have the potential to lead to significant impacts arising at a greater distance than is encompassed by Natural England's buffers for designated sites.</p>	<p>Natural England</p>	<p>Chapter 9 Terrestrial Ecology</p>	<p>Noted.</p>
<p>The ES should therefore thoroughly assess the potential for the proposal to affect designated sites, including Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites and Sites of Special Scientific Interest (SSSI). Should the proposal result in an emission to air or discharge to the ground or surface water catchment of a designated site then the potential effects and impact of this would need to be considered in the Environmental Statement Local Planning Authorities, as competent authorities under the provisions of the Conservation of Habitats and Species Regulations 2010 (the 'Habitats Regulations'), should have regard to the Habitats Regulations Assessment process set out in Regulation 61 of the Habitats Regulations in their determination of a planning application. 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. Statutory site locations can be found at www.magic.gov.uk. Further information concerning particular statutory sites can be found on the Natural England website.</p>	<p>Natural England</p>	<p>Chapter 9 Terrestrial Ecology</p>	<p>Impacts on statutory designated sites, including Internationally designated sites, are considered in the PEIR.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
2.3. Protected Species			
<p>The ES should assess the impact of all phases of the proposal on protected 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.</p>	Natural England	Chapter 9 Terrestrial Ecology	<p>The desk study includes data on protected and notable species. The CIEEM Guidelines for Ecological Impact Assessment (EclA) have been used as a guide to determine the Zones of Influence that are relevant for each ecological receptor and impacts will be assessed at construction and operational phases.</p>
<p>The conservation of species protected by law is explained in Part IV and Annex A of Government Circular 06/2005 <i>Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System</i>. 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.</p>	Natural England	Chapter 9 Terrestrial Ecology	<p>The area affected by the proposal is being surveyed for the relevant species using approved survey methods and competent ecologists (as defined by CIEEM). This be reported in the ES along with relevant assessment and mitigation.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
Natural England has adopted standing advice for protected species. It provides a consistent level of basic advice which can be applied to any planning application that could affect protected species. It also includes links to guidance on survey and mitigation.	Natural England	Chapter 9 Terrestrial Ecology	Noted.
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.	Natural England	Chapter 9 Terrestrial Ecology	Noted.
2.4. Regionally and Locally Important Sites			
The ES should thoroughly assess the impact of the proposals on non-statutory sites, for example Local Wildlife Sites (LoWS), Local Nature Reserves (LNR) and Regionally Important Geological and Geomorphological Sites (RIGS). Natural England does not hold comprehensive information on these sites. We therefore advise that the appropriate local biological record centres, nature conservation organisations, Local Planning Authority and local RIGS group should be contacted with respect to this matter.	Natural England	Chapter 9 Terrestrial Ecology	The desk study will include data on designated statutory and non-statutory sites. The CIEEM Guidelines for Ecological Impact Assessment (EclA) will be used as a guide to determine the Zones of Influence that are relevant for each ecological receptor and impacts will be assessed at construction and operational phases.
2.5. Biodiversity Action Plan Habitats and Species			
The ES should thoroughly assess the impact of the proposals on habitats and/or species listed in the UK Biodiversity Action Plan (BAP). These Priority Habitats and Species are listed as 'Habitats and Species of Principal Importance' within the England Biodiversity List, recently published under the requirements of S14 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 in the Defra publication ' Guidance for Local Authorities on Implementing the Biodiversity Duty '.	Natural England	Chapter 9 Terrestrial Ecology	The CIEEM Guidelines for Ecological Impact Assessment (EclA) have been used as a basis for determining which ecological receptors are relevant to the proposals, the magnitude of effects on these receptors and mitigation and enhancement measures. Relevant HPIE and SPIE will be included in the assessment.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>Government Circular 06/2005 states that 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. The record centre for the relevant Local Authorities should be able to provide the relevant information on the location and type of BAP habitat for the area under consideration.</p>	<p>Natural England</p>	<p>Chapter 9 Terrestrial Ecology</p>	<p>The CIEEM Guidelines for Ecological Impact Assessment (EclA) are being used as a basis for determining which ecological receptors are relevant to the proposals, the magnitude of effects on these receptors and mitigation and enhancement measures. Relevant HPIE and SPIE will be included in the assessment.</p>
<p>3. Landscape, Access and Recreation</p>			
<p>3.1. Landscape and Visual Impacts</p>			
<p>The consideration of landscape impacts should reflect the approach set out in the <i>Guidelines for Landscape and Visual Impact Assessment</i> (Landscape Institute and the Institute of Environmental Assessment and Management, 2013, 3rd edition), the <i>Landscape Character Assessment Guidance for England and Scotland</i> (Scottish Natural Heritage and The Countryside Agency, 2002) and good practice. 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 would expect the cumulative impact assessment to include those 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.</p>	<p>Natural England</p>	<p>Chapter 15 Townscape and Visual</p>	<p>NA - The SoS agrees that IAN 135/10 will be followed for the assessment and that landscape character will be scoped out - instead townscape will be considered. Cumulative effects will be assessed in line with the overarching methodology set out in the introductory chapters of the ES.</p>
<p>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.</p>	<p>Natural England</p>	<p>Chapter 15 Townscape and Visual</p>	<p>NCA 81 and any relevant local character areas are referred to in Chapter 15 - Townscape and Visual.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
3.2. Access and Recreation			
<p>The ES should include a thorough assessment of the development's effects upon public rights of way and access to the countryside and its enjoyment through recreation. With this in mind and in addition to consideration of public rights of way, the landscape and visual effects on Open Access land, whether direct or indirect, should be included in the ES. Natural England would also expect to see consideration of opportunities for improved or new public access provision on the site, to include linking existing public rights of way and/or providing new circular routes and interpretation. We also recommend reference to 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.</p>	<p>Natural England</p>	<p>Chapter 15 Townscape and Visual</p>	<p>Chapter 15 - Townscape and Visual considers visual effects on PRoW; any other effects will be considered in Chapter 7 - Community and Private Assets of the PEIR.</p>
			<p>Chapter 7 Community and Private Assets</p>
4. Land use and soils			
<p>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 112 of the NPPF. We also recommend that soils should be considered under a more general heading of sustainable use of land and the valuing of the ecosystem services they provide as a natural resource in line with paragraph 109 of the NPPF.</p>	<p>Natural England</p>	<p>Chapter 12 Geology and Soils</p>	<p>The impacts from the development to soils in light of the BMV and NPPF will be address under a general heading of sustainable use of land and the valuing of the ecosystem services.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>Soil is a finite resource that fulfils many important functions and services (ecosystem services) for society; for instance as a growing medium for food, timber and other crops, as a store for carbon and water, as a reservoir of biodiversity and as a buffer against pollution. It is therefore important that the soil resources are protected and used sustainably. The Natural Environment White Paper (NEWP) <i>'The Natural Choice: securing the value of nature'</i> (Defra , June 2011), emphasises the importance of natural resource protection, including the conservation and sustainable management of soils and the protection of BMV agricultural land.</p>	<p>Natural England</p>	<p>Chapter 12 Geology and Soils</p>	<p>The soils and geology chapter will address the importance of natural resource protection (soils), including conservation and sustainable management of soils and protection of BMV agricultural land.</p>
<p>Development of buildings and infrastructure prevents alternative uses for those soils that are permanently covered, and also often results in degradation of soils around the development as result of construction activities. This affects their functionality as wildlife habitat, and reduces their ability to support landscape works and green infrastructure. Sealing and compaction can also contribute to increased surface run-off, ponding of water and localised erosion, flooding and pollution.</p>	<p>Natural England</p>	<p>Chapter 12 Geology and Soils</p>	<p>Noted, these potential impacts are covered in a range of topics in the PEIR and are addressed in several chapters. These include Geology and Soils and Terrestrial Ecology.</p>
<p>Defra published a Construction Code of Practice for the sustainable use of soils on construction sites (2009). The purpose of the Code of Practice is to provide a practical guide to assist anyone involved in the construction industry to protect the soil resources with which they work.</p>	<p>Natural England</p>	<p>Chapter 12 Geology and Soils</p>	<p>Guidance from the Code of Practice has been included within the soils and geology chapter.</p>
<p>As identified in the NPPF new sites or extensions to new sites for Peat extraction should not be granted permission by Local Planning Authorities or proposed in development plans. General advice on the agricultural aspects of site working and reclamation can be found in the Defra Guidance for successful reclamation of mineral and waste sites.</p>	<p>Natural England</p>	<p>Chapter 12 Geology and Soils</p>	<p>Guidance for agricultural aspects of site working and reclamation will be included in the soils and geology chapter, if required.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
5. Air Quality			
<p>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). Further information on air pollution modelling and assessment can be found on the Environment Agency website.</p>	Natural England	Chapter 6 Air Quality	<p>A number of designated ecological sites were identified as being potentially affected by the Scheme. These were those sites within 200m of 'affected roads' (as defined by the AQ screening criteria in DMRB). A long list was created and then an ecologist passed comment on which of the ecological sites were nitrogen sensitive and therefore required assessment. the following SSSIs were considered in the assessment, Epping Forest (by the A12 at Wanstead), Darenth Wood, Inner Thames Marshes, Oxleas wood, and West Thurrock marshes.</p>
6. Climate Change Adaptation			
<p>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 109), which should be demonstrated through the ES.</p>	Natural England	Chapter 9 Terrestrial Ecology	<p>The ES will ensure that the influence of climate change is included when determining the effects of the proposals and in developing relevant mitigation. The existing network of green sites will be scrutinised to determine who the proposals can fit into these.</p>
Tunnel Design			

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>It is understood that the Silvertown Tunnel would be a 1.0km long bored tunnel with an 11m internal diameter. There would be cut and cover tunnel approaches. Whilst reference is made to “maximising cover to the river bed at the tunnel low point” and that the “tunnel will be constructed at such a depth that it would not directly impact on the River Thames” what the PLA needs to understand and what the ES needs to address, is the depth of the tunnel under the River Thames. This includes not only the tunnel itself but also any scour protection/rock armour that the applicant may be considering placing on top of the tunnel. The depth of the tunnel, its alignment and any tunnel protection could have implications for users of the River Thames. For example, the PLA is currently undertaking some work for the applicant identifying existing moorings or other works in the river in this area. It may, depending on the depth of the tunnel be necessary at the applicant’s expense, to relocate existing moorings or other works. Where would these moorings and works be relocated to? What are the navigational, river regime and environmental implications of any relocations? It may also be necessary to determine the impact of the tunnel on the foundations of the cable car tower.</p>	<p>Port of London Authority</p>	<p>Chapter 4 Scheme Description</p>	<p>The maximum depth of the tunnel is described in Volume 1, Chapter 4 - Scheme Description. Consultation with the Port of London Authority is ongoing.</p>
<p>It should also be confirmed whether the applicant would be looking for an exclusion zone(s) around the tunnel and whether there would be any limitations in the area. For example, would there be a limitation on anchoring due to the depth of the tunnel which would impact on river users. Would the applicant be looking to temporarily or permanently extinguish the public right of navigation?</p>	<p>Port of London Authority</p>	<p>Chapter 4 Scheme Description</p>	<p>Identification of potential anchorage restrictions will be discussed further with the PLA and details will be included in the ES. A preliminary Navigational risk assessment is included in Appendix 4.B of the PEIR.</p>
<p>It is noted that the tunnel would involve permanent land take of the PLA’s land. Discussions will be needed with the PLA about the need for a River Works Licence.</p>	<p>Port of London Authority</p>	<p>Other Consents</p>	<p>Noted, consultation with the PLA is ongoing.</p>
<p>Use of the River/Materials</p>			

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>It is noted and welcomed that the applicant will be looking to use the river for the removal of spoil and the delivery of tunnel lining segments and that this will be reviewed as part of the ES. Further details will be required on this aspect of the project, including projections for spoil removal and the sizes and types of vessels involved. For example, it might be possible depending on the wharf to be used, to use ships to transport materials rather than barges. It is therefore recommended that a full analysis of potential wharves in the area which could be utilised in connection with the delivery of construction and waste materials is undertaken. The ES should demonstrate how the use of the river for the transport of construction and waste materials is to be maximised in line with planning policy.</p>	<p>Port of London Authority</p>	<p>Chapter 13 Materials</p>	<p>Consultation with the PLA is ongoing. The Materials Chapter in the PEIR provides current projections for spoil removal and demonstrate how the use of the river for the transport of construction and waste materials is to be maximised in line with planning policy.</p>
<p>Community and Private Assets</p>			

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>The land required for the Scheme has been confined to the Scheme's safeguarded area – this includes Thames Wharf, Alexandra Wharf and Royal Victoria Dock. Thames Wharf is safeguarded by Ministerial Direction and planning policy seeks to protect it for waterborne cargo handling uses. The planning policy section of the ES will need to address this and demonstrate how capacity and viability of the safeguarded wharf is not adversely affected as a result of the proposed development both during construction and on completion of the tunnel. Reference is made to the Newham Core Strategy and Thames Wharf. It refers to the Core Strategy's proposed release of Thames Wharf from SIL and there being scope to reconfigure the safeguarded wharf on the site to the adjacent Carlsberg-Tetley) or to remove the wharf safeguarding at Thames Wharf if a consolidated wharf can be delivered at Thameside West subject to there being no net loss of functionality or wharf capacity. It is suggested that care needs to be taken in the ES in relation to the safeguarded wharf. The drawings in the appendix to the scoping document appear to show the limit of any use of Thames Wharf to being temporary land take for temporary works or site compounds. The ES will therefore need to be very clear about this aspect of planning policy and place the Newham Core Strategy into context, as it applies to the development itself rather than to any wider aspirations of Newham Council.</p>	<p>Port of London Authority</p>	<p>Chapter 7 Community and Private Assets</p>	<p>Chapter 7 of the PEIR refers to the Secretary of States safeguarding document for Thames Wharf and places it into context with other wharves and the surrounding area. The policy review refers to the Newham Core Strategy and identifies Thames Wharf as a strategic site and the role of Thames Wharf as a location for utilising marine logistics. A preliminary Navigational Risk Assessment has been undertaken and is cross referenced in the Chapter.</p>
<p>Ecology and Nature Conservation</p>			

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>Clarification should be provided in the ES of any works proposed in the River Thames. For example, reference is made to it being considered unlikely that <i>“the Scheme would cause any significant disturbance to wading birds as the area of mud appears to be very limited and the current baseline situation appears to include a lot of industrial activity, boat and vehicle movements adjacent to the river in this location.”</i> What disturbance does the applicant consider might be likely from a bored tunnel to wading birds? The document implies that any effects would be indirect from elevated noise levels or the risk of accidental spillages during construction. What spillages does the applicant consider might be possible? Berths would have working practices to maintain clear berthing for the barges so spillages are avoided. Does the applicant mean pollution from liquid spills? How the dewatering/drainage might be managed in relation to the river and the tunnel operation should also be explained in the ES (i.e. if there is a spillage and it is raining, is the attenuation going to be affected? Would it flow into the river or the sewage system?)</p>	<p>Port of London Authority</p>	<p>Chapter 10 Marine Ecology</p>	<p>Potential impacts on fisheries and benthic invertebrates are taken into account in the marine ecology assessment of the PEIR.</p>
Cumulative Effects			
<p>It is recommended that the cumulative effects considered should include the Thames Tideway Tunnel the construction of which would be taking place at the same time at the Silvertown Tunnel.</p>	<p>Port of London Authority</p>	<p>Chapter 17 Cumulative Impacts</p>	<p>This Project is considered in the cumulative impacts assessment in all chapters and Chapter 17 of the PEIR.</p>
<p>In order to ensure that health is fully and comprehensively considered the Environmental Statement (ES) should provide sufficient information to allow the potential impact of the development on public health to be fully assessed.</p>	<p>Public Health England</p>	<p>Health Impact Assessment (HIA)</p>	<p>A Health Impact Assessment (HIA) has been undertaken.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>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 ES. PHE however believes 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 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.</p>	<p>Public Health England</p>	<p>Health Impact Assessment (HIA)</p>	<p>A Health Impact Assessment (HIA) has been undertaken, this includes the relevant section of the PEIR which relate to health.</p>
<p>In terms of the level of detail to be included in an ES, we recognise that the differing nature of projects is such that their impacts will vary. Any assessments undertaken to inform the ES should be proportionate to the potential impacts of the proposal, therefore we accept that, in some circumstances particular assessments may not be relevant to an application, or that an assessment may be adequately completed using a qualitative rather than quantitative methodology. In cases where this decision is made the promoters should fully explain and justify their rationale in the submitted documentation.</p>	<p>Public Health England</p>	<p>Chapter 17 Cumulative Impacts</p>	<p>All assessment in the PEIR state where a qualitative rather than a quantitative assessment has been undertaken and provide justification, where necessary.</p>
General approach			
<p>The EIA should give consideration to best practice guidance such as the Government's Good Practice Guide for EIA1. It is important that the EIA identifies and assesses the potential public health impacts of the activities at, and emissions from, the installation. Assessment should consider the development, operational, and decommissioning phases.</p>	<p>Public Health England</p>	<p>Health Impact Assessment (HIA)</p>	<p>A Health Impact Assessment (HIA) has been undertaken which follows the relevant government guidance documents.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>It is not PHE's role to undertake these assessments on behalf of promoters as this would conflict with PHE's role as an impartial and independent body. We note that the information provided states that there will be three associated development projects, but that these will be the subject of separate planning consent applications. We recommend that the EIA includes consideration of the impacts of associated development and that cumulative impacts are fully accounted for.</p>	<p>Public Health England</p>	<p>Chapter 17 Cumulative Impacts</p>	<p>Associated Projects will be considered in the cumulative impact assessment, where possible.</p>
<p>Consideration of alternatives (including alternative sites, choice of process, and the phasing of construction) is widely regarded as good practice. Ideally, EIA should start at the stage of site and process selection, so that the environmental merits of practicable alternatives can be properly considered. Where this is undertaken, the main alternatives considered should be outlined in the ES. The following text covers a range of issues that PHE would expect to be addressed by the promoter. However this list is not exhaustive and the onus is on the promoter to ensure that the relevant public health issues are identified and addressed. PHE's advice and recommendations carry no statutory weight and constitute non-binding guidance.</p>	<p>Public Health England</p>	<p>Chapter 3 Alternatives</p>	<p>Alternatives are considered in Chapter 3 of the PEIR and the Preliminary Engineering Report.</p>
Receptors			
<p>The ES should clearly identify the development's location and the location and distance from the development of off-site human receptors that may be affected by emissions from, or activities at, the development. Off-site human receptors may include people living in residential premises; people working in commercial, and industrial premises and people using transport infrastructure (such as roads and railways), recreational areas, and publicly-accessible land. Consideration should also be given to environmental receptors such as the surrounding land, watercourses, surface and groundwater, and drinking water supplies such as wells, boreholes and water abstraction points.</p>	<p>Public Health England</p>	<p>Chapter 4 Scheme Description</p>	<p>Sensitive Environmental Receptors, have been identified in the baseline of each chapter. All the receptors mentioned in your response have been considered in the PEIR.</p>
Impacts arising from construction and decommissioning			

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
Any assessment of impacts arising from emissions due to construction and decommissioning should consider potential impacts on all receptors and describe monitoring and mitigation during these phases. Construction and decommissioning will be associated with vehicle movements and cumulative impacts should be accounted for.	Public Health England	Health Impact Assessment (HIA)	Noted, construction impacts during construction and decommissioning are included in all Chapter 6 to 17 of the PEIR.
We would expect the promoter to follow best practice guidance during all phases from construction to decommissioning to ensure appropriate measures are in place to mitigate any potential impact on health from emissions (point source, fugitive and traffic-related). An effective Construction Environmental Management Plan (CEMP) (and Decommissioning Environmental Management Plan (DEMP) will help provide reassurance that activities are well managed. The promoter should ensure that there are robust mechanisms in place to respond to any complaints of traffic-related pollution, during construction, operation, and decommissioning of the facility.	Public Health England	Chapter 5 Assessment Methods	A preliminary Code of Construction Practice (CoCP) has been prepared which includes all construction mitigation measure in in the PEIR. This will be developed into a CEMP prior to construction.
Emissions to air and water			
Significant impacts are unlikely to arise from installations which employ Best Available Techniques (BAT) and which meet regulatory requirements concerning emission limits and design parameters. However, PHE has a number of comments regarding emissions in order that the EIA provides a comprehensive assessment of potential impacts. When considering a baseline (of existing environmental quality) and in the assessment and future monitoring of impacts these:	Public Health England	NA	Noted.
• Should include appropriate screening assessments and detailed dispersion modelling where this is screened as necessary	Public Health England	Chapter 6 Air Quality	Assessment does include screening assessments and detailed dispersion modelling.
• Should encompass all pollutants which may be emitted by the installation in combination with all pollutants arising from associated development and transport, ideally these should be considered in a single holistic assessment	Public Health England	Chapter 6 Air Quality Chapter 16 Water Environment	Assessment considers tunnel emissions and road emissions. Noted.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
• Should consider the construction, operational, and decommissioning phases	Public Health England	All	These are assessed in the PEIR.
• Should consider the typical operational emissions and emissions from start-up, shut-down, abnormal operation and accidents when assessing potential impacts and include an assessment of worst-case impacts should fully account for fugitive emissions	Public Health England	Chapter 6 Air Quality	This comment refers to point source modelling of industrial source and therefore not relevant.
• Should include appropriate estimates of background levels	Public Health England	Chapter 6 Air Quality	Defra background maps have been used - which are uplifted as part of long term trend gap analysis cited in HA IAN 170/12.
• Should identify cumulative and incremental impacts (i.e. assess cumulative impacts from multiple sources), including those arising from associated development, other existing and proposed development in the local area, and new vehicle movements associated with the proposed development; associated transport emissions should include consideration of non-road impacts (i.e. rail, sea, and air)	Public Health England	Chapter 17 Cumulative Impacts	Cumulative impacts are covered in Chapters 6 to 17 of the PEIR.
• Should include consideration of local authority, Environment Agency, Defra national network, and any other local site-specific sources of monitoring data	Public Health England	Chapter 6 Air Quality	Data from all of these sources has been utilised.
• Should compare predicted environmental concentrations to the applicable standard or guideline value for the affected medium (such as UK Air Quality Standards and Objectives and Environmental Assessment Levels)	Public Health England	Chapter 6 Air Quality	Assessment compares predicted concentrations against short and long term standards and objectives for relevant pollutants.
• If no standard or guideline value exists, the predicted exposure to humans should be estimated and compared to an appropriate health-based value (a Tolerable Daily Intake or equivalent).	Public Health England	Chapter 6 Air Quality	N/A

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<ul style="list-style-type: none"> 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 	Public Health England	Chapter 6 Air Quality	A collation and review of information available about the site pertaining to historic and recent (contaminative) land use will be undertaken which will form the basis of a preliminary risk assessment which will require a conceptual site model. This will identify any potential pollutant linkages where upon mitigation measures or control might be required.
		Chapter 12 Geology and Soils	
<ul style="list-style-type: none"> Should identify and consider impacts on residential areas and sensitive receptors (such as schools, nursing homes and healthcare facilities) in the area(s) which may be affected by emissions, this should include consideration of any new receptors arising from future development. 	Public Health England	Chapter 6 Air Quality	Future committed receptors have been considered in the assessment. Existing receptors have been considered for the types cited in the comment.
<p>Whilst screening of impacts using qualitative methodologies is common practice (e.g. for impacts arising from fugitive emissions such as dust), where it is possible to undertake a quantitative assessment of impacts then this should be undertaken. PHE's view is that the EIA should appraise and describe the measures that will be used to control both point source and fugitive emissions and demonstrate that standards, guideline values or health-based values will not be exceeded due to emissions from the installation, as described above. This should include consideration of any emitted pollutants for which there are no set emission limits. When</p> <p><i>Additional points specific to emissions to air</i></p> <p>When considering a baseline (of existing air quality) and in the assessment and future monitoring of impacts these:</p> <ul style="list-style-type: none"> Should include consideration of impacts on existing areas of poor air quality e.g. existing or proposed local authority Air Quality Management Areas (AQMA) 	Public Health England	Chapter 6 Air Quality	The operational impacts are dealt with in a quantitative manner. This is relevant to the construction dust assessment which is included in the PEIR. The current IAQM construction dust methodology does not require the applicant to produce a quantitative assessment.
		Chapter 6 Air Quality	
<ul style="list-style-type: none"> Should include consideration of impacts on existing areas of poor air quality e.g. existing or proposed local authority Air Quality Management Areas (AQMA) 	Public Health England	Chapter 6 Air Quality	Receptors in AQMA and AQFA have been considered.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<ul style="list-style-type: none"> Should include modelling using appropriate meteorological data (i.e. come from the nearest suitable meteorological station and include a range of years and worst case conditions) 	Public Health England	Chapter 6 Air Quality	Data from London City Airport 2012 has been used in the assessment.
<ul style="list-style-type: none"> Should include modelling taking into account local topography 	Public Health England	Chapter 6 Air Quality	Modelling has not taken topography into account as terrain data for ADMS roads is too coarse.
<i>Additional points specific to emissions to water</i>			
When considering a baseline (of existing water quality) and in the assessment and future monitoring of impacts these:	Public Health England	NA	N/A
<ul style="list-style-type: none"> Should include assessment of potential impacts on human health and not focus solely on ecological impacts 	Public Health England	Health Impact Assessment (HIA)	A Health Impact Assessment (HIA) has been undertaken, this includes the relevant section of the PEIR which relate to human health.
<ul style="list-style-type: none"> Should identify and consider all routes by which emissions may lead to population exposure (e.g. surface watercourses; recreational waters; sewers; geological routes etc.) 	Public Health England	Chapter 6 Air Quality	Not applicable, and cannot be done with any accuracy.
		Chapter 16 Water Environment	Noted.
<ul style="list-style-type: none"> Should assess the potential off-site effects of emissions to groundwater (e.g. on aquifers used for drinking water) and surface water (used for drinking water abstraction) in terms of the potential for population exposure 	Public Health England	Chapter 16 Water Environment	Noted.
<ul style="list-style-type: none"> Should include consideration of potential impacts on recreational users (e.g. from fishing, canoeing etc.) alongside assessment of potential exposure via drinking water 	Public Health England	Chapter 16 Water Environment	Noted.
Land quality			

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>We would expect the promoter to provide details of any hazardous contamination present on site (including ground gas) as part of the site condition report. Emissions to and from the ground should be considered in terms of the previous history of the site and the potential of the site, once operational, to give rise to issues. Public health impacts associated with ground contamination and/or the migration of material off-site should be assessed³ and the potential impact on nearby receptors and control and mitigation measures should be outlined.</p>	<p>Public Health England</p>	<p>Chapter 12 Geology and Soils</p>	<p>A collation and review of information available about the site pertaining to historic and recent (contaminative) land has been undertaken which forms the basis of a preliminary risk assessment which will require a conceptual site model. This has identified any potential pollutant linkages where upon mitigation measures or control might be required.</p>
<p>Relevant areas outlined in the Government's Good Practice Guide for EIA include:</p>			
<ul style="list-style-type: none"> • Effects associated with the potential for polluting substances that are used (during construction / operation) to cause new ground contamination issues on a site, for example introducing / changing the source of contamination 	<p>Public Health England</p>	<p>Chapter 12 Geology and Soils</p>	<p>A collation and review of information available about the site pertaining to historic and recent (contaminative) land use has been undertaken which will form the basis of a preliminary risk assessment which will require a conceptual site model. This has identified any potential pollutant linkages where upon mitigation measures or control might be required.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<ul style="list-style-type: none"> Impacts associated with re-use of soils and waste soils, for example, re-use of site-sourced materials on-site or offsite, disposal of site-sourced materials offsite, importation of materials to the site, etc. 	Public Health England	Chapter 12 Geology and Soils	A high level review of impacts relating to reuse of soils and materials during construction can be discussed following the completion of the preliminary risk assessment. A detailed assessment will be required during detailed design.
Waste			
The EIA should demonstrate compliance with the waste hierarchy (e.g. with respect to re-use, recycling or recovery and disposal). For wastes arising from the installation the EIA should consider:	Public Health England	Chapter 13 Materials	A Preliminary Site Waste Management Plan has been prepared. This applies the waste hierarchy with a focus on resource efficiency.
<ul style="list-style-type: none"> The implications and wider environmental and public health impacts of different waste disposal options 	Public Health England	Health Impact Assessment (HIA) Chapter 16 Water Environment	A Health Impact Assessment (HIA) has been undertaken, which considers public health impacts.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<ul style="list-style-type: none"> Disposal route(s) and transport method(s) and how potential impacts on public health will be mitigated 	Public Health England	Health Impact Assessment (HIA) Chapter 13 Materials	Waste disposal routes will be considered in the mitigation measures section. Disposal will be the last resort and it will only be considered once all other possibilities have been explored. Potential impacts on public health will be considered in the Health Impact Assessment (HIA) .
Other aspects			
Within the EIA PHE would expect to see information about how the promoter would respond to accidents with potential off-site emissions e.g. flooding or fires, spills, leaks or releases off-site. Assessment of accidents should: identify all potential hazards in relation to construction, operation and decommissioning; include an assessment of the risks posed; and identify risk management measures and contingency actions that will be employed in the event of an accident in order to mitigate off-site effects.	Public Health England	All	This is covered in Chapter 12 - Geology and Soils and Chapter 16 - Water of the PEIR.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>The EIA should include consideration of the COMAH Regulations (Control of Major Accident Hazards) and the Major Accident Off-Site Emergency Plan (Management of Waste from Extractive Industries) (England and Wales) Regulations 2009: both in terms of their applicability to the installation itself, and the installation's potential to impact on, or be impacted by, any nearby installations themselves subject to the 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 report⁴, jointly published by Liverpool John Moores University and the HPA, examined health risk perception and environmental problems using a number of case studies. As a point to consider, the report suggested: "Estimation of community anxiety and stress should be included as part of every risk or impact assessment of proposed plans that involve a potential environmental hazard. This is true even when the physical health risks may be negligible." PHE supports the inclusion of this information within EIAs as good practice.</p>	<p>Public Health England</p>	<p>Chapter 12 Geology and Soils</p>	<p>COMAH Regulations are considered in the Geology and Soils and Water Chapters of the PEIR.</p>
<p>Electromagnetic fields (EMF) [include for installations with associated substations and/or power lines]</p>			
<p>There is a potential health impact associated with the electric and magnetic fields around substations and the connecting cables or lines. The following information provides a framework for considering the potential health impact. In March 2004, the National Radiological Protection Board, NRPB (now part of PHE), published advice on limiting public exposure to electromagnetic fields. The advice was based on an extensive review of the science and a public consultation on its website, and recommended the adoption in the UK of the EMF exposure guidelines published by the International Commission on Non-ionizing Radiation Protection (ICNIRP):- http://www.hpa.org.uk/Publications/Radiation/NPRBArchive/DocumentsOfTheNRPB/Absd1502/</p>	<p>Public Health England</p>	<p>N/A</p>	<p>Noted, however EMF is not considered relevant to the Scheme.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
The ICNIRP guidelines are based on the avoidance of known adverse effects of exposure to electromagnetic fields (EMF) at frequencies up to 300 GHz (gigahertz), which includes static magnetic fields and 50 Hz electric and magnetic fields associated with electricity transmission.	Public Health England	N/A	Noted, however EMF is not considered relevant to the Scheme.
PHE notes the current Government policy is that the ICNIRP guidelines are implemented in line with the terms of the EU Council Recommendation on limiting exposure of the general public (1999/519/EC): http://www.dh.gov.uk/en/Publichealth/Healthprotection/DH_4089500	Public Health England	N/A	Noted, however EMF is not considered relevant to the Scheme.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>For static magnetic fields, the latest ICNIRP guidelines (2009) recommend that acute exposure of the general public should not exceed 400 mT (millitesla), for any part of the body, although the previously recommended value of 40 mT is the value used in the Council Recommendation. However, because of potential indirect adverse effects, ICNIRP recognises that practical policies need to be implemented to prevent inadvertent harmful exposure of people with implanted electronic medical devices and implants containing ferromagnetic materials, and injuries due to flying ferromagnetic objects, and these considerations can lead to much lower restrictions, such as 0.5 mT as advised by the International Electro technical Commission. At 50 Hz, the known direct effects include those of induced currents in the body on the central nervous system (CNS) and indirect effects include the risk of painful spark discharge on contact with metal objects exposed to the field. The ICNIRP guidelines give reference levels for public exposure to 50 Hz electric and magnetic fields, and these are respectively 5 kV m⁻¹ (kilovolts per metre) and 100 µT (microtesla). If people are not exposed to field strengths above these levels, direct effects on the CNS should be avoided and indirect effects such as the risk of painful spark discharge will be small. The reference levels are not in themselves limits but provide guidance for assessing compliance with the basic restrictions and reducing the risk of indirect effects. Further clarification on advice on exposure guidelines for 50 Hz electric and magnetic fields is provided in the following note on the HPA website: http://www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb_C/1195733805036</p>	<p>Public Health England</p>	<p>NA</p>	<p>Noted, however EMF is not considered relevant to the Scheme.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>The Department of Energy and Climate Change has also published voluntary code of practices which set out key principles for complying with the ICNIRP guidelines for the industry. http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/consents_planning/codes/codes.aspx</p>	<p>Public Health England</p>	<p>NA</p>	<p>Noted, however EMF is not considered relevant to the Scheme.</p>
<p>There is concern about the possible effects of long-term exposure to electromagnetic fields, including possible carcinogenic effects at levels much lower than those given in the ICNIRP guidelines. In the NRPB advice issued in 2004, it was concluded that the studies that suggest health effects, including those concerning childhood leukaemia, could not be used to derive quantitative guidance on restricting exposure.</p>	<p>Public Health England</p>	<p>NA</p>	<p>Noted, however EMF is not considered relevant to the Scheme.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>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) was then set up to take this recommendation forward, explore the implications for a precautionary approach to extremely low frequency electric and magnetic fields (ELF EMFs), and to make practical recommendations to Government. In the First Interim Assessment of the Group, consideration was given to mitigation options such as the 'corridor option' near power lines, and optimal phasing to reduce electric and magnetic fields. A Second Interim Assessment addresses electricity distribution systems up to 66 kV. The SAGE reports can be found at the following link: http://sagedialogue.org.uk/ (go to "Document Index" and Scroll to SAGE/Formal reports with recommendations) The Agency has given advice to Health Ministers on the First Interim Assessment of SAGE regarding precautionary approaches to ELF EMFs and specifically regarding power lines and property, wiring and electrical equipment in homes: http://www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb_C/1204276682532?p=1207897920036</p>	<p>Public Health England</p>	<p>NA</p>	<p>Noted, however EMF is not considered relevant to the Scheme.</p>

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>The evidence to date suggests that in general there are no adverse effects on the health of the population of the UK caused by exposure to ELF EMFs below the guideline levels. The scientific evidence, as reviewed by PHE, supports the view that precautionary measures should address solely the possible association with childhood leukaemia and not other more speculative health effects. The measures should be proportionate in that overall benefits outweigh the fiscal and social costs, have a convincing evidence base to show that they will be successful in reducing exposure, and be effective in providing reassurance to the public. The Government response to the SAGE report is given in the written Ministerial Statement by Gillian Merron, then Minister of State, Department of Health, published on 16th October 2009: http://www.publications.parliament.uk/pa/cm200809/cmhansrd/cm091016/wmstext/91016m0001.htm http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/D</p>	Public Health England	NA	Noted, however EMF is not considered relevant to the Scheme.
<p>HPA and Government responses to the Second Interim Assessment of SAGE are available at the following links: http://www.hpa.org.uk/Publications/Radiation/HPAResponseStatementsOnRadiationTopics/rpdadvice_sage2 http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_130703</p>	Public Health England	NA	Noted, however EMF is not considered relevant to the Scheme.
<p>The above information provides a framework for considering the health impact associated with the proposed development, including the direct and indirect effects of the electric and magnetic fields as indicated above.</p>	Public Health England	NA	Noted, however EMF is not considered relevant to the Scheme.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
Liaison with other stakeholders, comments should be sought from:			
<ul style="list-style-type: none"> • The local authority for matters relating to noise, odour, vermin and dust nuisance • The local authority regarding any site investigation and subsequent construction (and remediation) proposals to ensure that the site could not be determined as 'contaminated land' under Part 2A of the Environmental Protection Act • The local authority regarding any impacts on existing or proposed Air Quality Management Areas • The Food Standards Agency for matters relating to the impact on human health of pollutants deposited on land used for growing food/crops • The Environment Agency for matters relating to flood risk and releases with the potential to impact on surface and groundwaters • The Environment Agency for matters relating to waste characterisation and Acceptance the Clinical Commissioning Groups, NHS commissioning Boards and Local Planning Authority for matters relating to wider public health 	Public Health England	NA	Noted.
Environmental Permitting			
Amongst other permits and consents, the development will require an environmental permit from the Environment Agency to operate (under the Environmental Permitting (England and Wales) Regulations 2010). Therefore the installation will need to comply with the requirements of best available techniques (BAT). PHE is a consultee for bespoke environmental permit applications and will respond separately to any such consultation.	Public Health England	Other Consents	Consultation with the Environment Agency is ongoing concerning permitting requirements for the Scheme.
4.0 Other information			

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
This section does not form part of the SoS's Opinion as to the information to be provided in the environmental statement. However, it does respond to other issues that the SoS has identified which may help to inform the preparation of the application for the DCO. (Para 4.1 of PINS Report).	PINS	NA	Noted.
European Protected Species (EPS)			
Applicants should be aware that the decision maker under the Planning Act 2008 (PA 2008) has, as the CA, a duty to engage with the Habitats Directive. Where a potential risk to an EPS is identified, and before making a decision to grant development consent, the CA must, amongst other things, address the derogation tests ² in Regulation 53 of the Habitats Regulations. Therefore the applicant may wish to provide information which will assist the decision maker to meet this duty. (Para 4.2 of PINS Report).	PINS	Chapter 9 Terrestrial Ecology	The CIEEM Guidelines for Ecological Impact Assessment (EclA) are being used as a basis for determining which ecological receptors are relevant to the proposals, the magnitude of effects on these receptors and mitigation and enhancement measures. Relevant EPS will be included in the assessment.
If an applicant has concluded that an EPS licence is required the ExA will need to understand whether there is any impediment to the licence being granted. The decision to apply for a licence or not will rest with the applicant as the person responsible for commissioning the proposed activity by taking into account the advice of their consultant ecologist. (Para 4.3 of PINS Report).	PINS	Chapter 9 Terrestrial Ecology	Noted.
Applicants are encouraged to consult with NE and, where required, to agree appropriate requirements to secure necessary mitigation. It would assist the examination if applicants could provide, with the application documents, confirmation from NE whether any issues have been identified which would prevent the EPS licence being granted. (Para 4.4 of PINS Report).	PINS	Chapter 9 Terrestrial Ecology	Noted, NE will continue to be consulted on the Scheme.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>Generally, NE are unable to grant an EPS licence in respect of any development until all the necessary consents required have been secured in order to proceed. For NSIPs, NE will assess a draft licence application in order to ensure that all the relevant issues have been addressed. Within 30 working days of receipt, NE will either issue 'a letter of no impediment' stating that it is satisfied, insofar as it can make a judgement, that the proposals presented comply with the regulations or will issue a letter outlining why NE consider the proposals do not meet licensing requirements and what further information is required before a 'letter of no impediment' can be issued. The applicant is responsible for ensure draft licence applications are satisfactory for the purposes of informing formal pre-application assessment by NE. (Para 4.5 of PINS Report).</p>	PINS	Chapter 9 Terrestrial Ecology	Noted.
<p>Ecological conditions on the site may change over time. It will be the applicant's responsibility to ensure information is satisfactory for the purposes of informing the assessment of no detriment to the maintenance of favourable conservation status (FCS) of the population of EPS affected by the proposals. Applicants are advised that current conservation status of populations may or may not be favourable. Demonstration of no detriment to favourable populations may require further survey and/or submission of revised short or long term mitigation or compensation proposals. In England the focus concerns the provision of up to date survey information which is then made available to NE (along with any resulting amendments to the draft licence application). This approach will help to ensure no delay in issuing the licence should the DCO application be successful. Applicants with projects in England or English waters can find further information on NE's protected species licensing procedures in relation to NSIP's by clicking on the following link: http://www.naturalengland.org.uk/Images/wml-g36_tcm6-28566.pdf (Para 4.6 of PINS Report).</p>	PINS	Chapter 9 Terrestrial Ecology	Noted.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>In England or English Waters, assistance may be obtained from the Consents Service Unit. The Unit works with applicants to coordinate key non-planning consents associated with nationally significant infrastructure projects. The Unit's remit includes EPS licences. The service is free of charge and entirely voluntary. Further information is available from the following link: http://infrastructure.planningportal.gov.uk/legislation-andadvice/consents-service-unit/ (Para 4.7 of PINS Report).</p>	PINS	Chapter 9 Terrestrial Ecology	Noted.
Health Impact Assessment			
<p>The SoS notes that the applicant intends to submit a stand-alone Health Impact Assessment (HIA) and recommends that the applicant should have regard to the responses received from the relevant consultees regarding health, and in particular to the comments from the Health and Safety Executive in relation to major hazard sites and Public Health England in relation to emissions to air (see Appendix 2). (Para 4.8 of PINS Report).</p>	PINS	Health Impact Assessment (HIA)	All relevant responses have been considered in the preparation of the HIA.
Other regulatory regimes			
<p>The SoS recommends that the applicant should state clearly what regulatory areas are addressed in the ES and that the applicant should ensure that all relevant authorisations, licences, permits and consents that are necessary to enable operations to proceed are described in the ES. Also it should be clear that any likely significant effects of the proposed development which may be regulated by other statutory regimes have been properly taken into account in the ES. (Para 4.10 of PINS Report).</p>	PINS	All	Noted.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
<p>It will not necessarily follow that the granting of consent under one regime will ensure consent under another regime. For those consents not capable of being included in an application for consent under the PA 2008, the SoS will require a level of assurance or comfort from the relevant regulatory authorities that the proposal is acceptable and likely to be approved, before they make a recommendation or decision on an application. The applicant is encouraged to make early contact with other regulators. Information from the applicant about progress in obtaining other permits, licences or consents, including any confirmation that there is no obvious reason why these will not subsequently be granted, will be helpful in supporting an application for development consent to the SoS. (Para 4.11 of PINS Report).</p>	PINS	All	<p>Consultation with consultees concerning other licenses and permits is ongoing. This will be confirmed in the DCO.</p>
Transboundary Impacts			
<p>The SoS notes that the applicant has indicated (Table 6-18 of the Scoping Report) that the development is not likely to have significant impacts on another European Economic Area (EEA) State. (Para 4.12 of PINS Report).</p>	PINS	NA	Noted.
<p>Regulation 24 of the EIA Regulations, which <i>inter alia</i> require the SoS to publicise a DCO application if the SoS is of the view that the proposal is likely to have significant effects on the environment of another EEA state and where relevant to consult with the EEA state affected. The SoS considers that where Regulation 24 applies, this is likely to have implications for the examination of a DCO application. (Para 4.13 of PINS Report).</p>	PINS	NA	Noted.
<p>The SoS recommends that the ES should identify whether the proposed development has the potential for significant transboundary impacts and if so, what these are and which EEA States would be affected. (Para 4.14 of PINS Report).</p>	PINS	NA	<p>Based on the information collated to date as part of the scoping exercise, no significant effects are identified that could impact on another EEA Member State. This position will be clarified as the ES.</p>
Cultural Heritage			

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
The impact on listed buildings and conservation areas would be negligible and therefore I have no comments to make in this regard	London Borough of Newham	Chapter 8 Cultural Heritage	The assessment recognises that the impact on listed buildings and conservation areas would be negligible.
With reference to Archaeology we would take a lead from English Heritage and the GLASS and therefore we would second comments that have been made by them	London Borough of Newham	Chapter 8 Cultural Heritage	The assessment recognises that LBN seconds comments made by Historic England and Glass.
Health Impact Assessment			
The Silvertown Tunnel Health Impact although giving an indication of being comprehensive in its scope as indicated by the listed assessment criteria has not lived up to this expectation. The impression that the report creates is that of undertaking has a rapid initial health impact assessment to be followed by a comprehensive one that addresses impact during and post construction.	London Borough of Newham	Health Impact Assessment (HIA)	Noted.
The challenge therein is that the current report gives a superficial overview to its assessment scoping criteria, making it impossible to assess health consequences of the proposal. Assuming that there was air quality and traffic assessment in the Environmental Impact Assessment, it would have been useful to include, in terms of assessment on health impact, in a manner that is more informative and evidence-based than is currently the case.	London Borough of Newham	Health Impact Assessment (HIA)	Air Quality, traffic and noise impacts are included in the HIA.
It would have added value to see integration in terms of some existing health assessment criteria in the HIA as outlined in the SP2 Health Neighbourhood.	London Borough of Newham	Health Impact Assessment (HIA)	Noted.
The consultation on the Silvertown Tunnel crossing has been robust and engaging for Newham communities and other host Boroughs. It is fair to say that there have been concerns to continue to be raised by some section in the community regarding the perceived risk of more traffic to Silvertown and Royal Docks clogging up local road networks	London Borough of Newham	Health Impact Assessment (HIA)	Noted.

Comment (Ref in the Scoping Opinion Report)	Comment Raised by	Relevant EIA Topic	How this will be addressed in the PEIR
The Sivertown Tunnel Health Impact Assessment as a product delivers on policy planning assessment criteria for health related impact assessment but offer little in terms of health consequences in vivid detail.	London Borough of Newham	Health Impact Assessment (HIA)	Noted
<p>Summary of recommendations:</p> <p>More information on the following;</p> <ul style="list-style-type: none"> • Additional information on proposed are plans for monitoring of health effects • Identification of acceptable trade-off (if any) that are considered acceptable between economic/regeneration and health impacts and mitigation • Air quality and effect on health – mitigation actions planned • Build-up of traffic to Silvertown and the Royal Docks and plans to manage the concern raised by Silvertown community • Additional information on proposed are plans for monitoring of health effects 	London Borough of Newham	Health Impact Assessment (HIA)	<p>N/A</p> <p>N/A</p> <p>These recommendations have been incorporated into the preliminary HIA, where possible.</p>
Waste			
We would not expect there to be a vast amount of operational waste from a road tunnel, beyond standard litter clearances and occasional deep-cleans of the surfaces, ventilation equipment etc.	London Borough of Newham	Chapter 16 Water Environment	Noted.
From a Newham perspective we would probably be most concerned about the environmental impacts of the associated transport movements than the material itself. Presumably the excavated materials will find their way to land reclamation or a similar wetland-creation programme as for Crossrail, and the Environment Agency is going to be the more interested party in that I imagine. However, the transport movements of the waste material could be more impactful on our borough, though I note that there is an option to use river transport as a means of lessening this impact.	London Borough of Newham	Chapter 16 Water Environment	All suitable excavated material will be removed from the Silvertown site by river and transported, whenever possible, to a suitable site where the material can be reused, such as Wallasea Island, (an RSPB wetland creation scheme). In Chapters such as Chapter 6 - Air Quality and Chapter 14 - Noise a worst case of transportation of material by road has been assessed.