



## The London Resort Development Consent Order

BC080001

### Environmental Statement Volume 2: Appendices

#### Appendix 12.6 Statutory consultee responses to the Preliminary Environmental Information Report

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Planning Act 2008  
The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009  
Regulation 5(2)(a)  
The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017  
Regulation 12(1)

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**The London Resort**

**Appendix 12.6 Statutory Consultee Responses to the Preliminary Environmental Information Report (Relevant to Terrestrial and Freshwater Ecology; edp5988\_r032)**

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
Natural England - Sean Hanna (Senior Advisor, Sussex and Kent team)	Mitigation hierarchy	1.5	Paragraph 175 of the NPPF details the ‘avoid, mitigate, compensate’ hierarchy. That is, measures to avoid impacts (for example through the location, or scheme design and layout) should be fully explored; where impacts cannot be fully avoided then measures to reduce these impacts should be considered in the mitigation measures and as a last resort habitat compensation measures can be considered. Given the hierarchical approach, Natural England recommends that the design of the Resort should fully reflect the rich environmental assets that are found within and adjacent to the Kent and Essex Sites and is designed in a way that avoids and minimises the impacts from the scheme.	Further detail on the application of the mitigation hierarchy was submitted to Natural England (NE) in a briefing note (Report reference: edp5988_r022 "Ecology Briefing Note - Natural England Consultation") on 21 August 2020. A copy of this report is included in the correspondence to the rear of Appendix 12.5 (Document Reference 6.2.12.5). NE have provided no further comments. In addition, Chapter 12: Terrestrial and Freshwater Ecology and Biodiversity (Document Reference 6.1.12) of the Environmental Statement (ES) has been updated to include further information on how the mitigation hierarchy has been applied.
	Mitigation hierarchy	1.6	Given the conservation significance of the application site, and the Kent Site in particular, a robust assessment of alternative options, which avoid or have a lesser environmental impact should be included within the environmental statement. As part of the London Resort’s commitment to be a sustainable Resort, the avoidance of impacts to biodiversity and geodiversity should be at the heart of the scheme layout and design. As such, Natural England recommends that clarity is provided on how the layout and design of the scheme has avoided and reduced the impact to the ecological and geological assets of the site. Such an approach is in accordance with the sequential ‘avoid, mitigate, compensate’ hierarchy required within Paragraph 175(a) of the National Planning Policy Framework and Section 2.3.6 of the Planning Inspectorate’s July 2020 Scoping Opinion.	
	Environmental surveys - 2020 EIA Scoping Opinion	1.7	Reference is made throughout the Preliminary Environmental Information Report (PEIR) to the formal Scoping Opinion requirements from 2014. Given the changes to the scheme and the updated Scoping Opinion provided by the Planning Inspectorate in July 2020, the environmental statement should ensure that it fully reflects the requirements within the 2020 and the updated advice provided by the consultees.	

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
	Environmental surveys - Essex surveys	1.8	Natural England is further concerned that there is a lack of ecological survey information for the potential direct and indirect impacts to the Essex Site. Whilst the existing car parking facility at the Essex Site may offer limited ecological potential, indirect impacts to the adjacent areas, including the grassland and intertidal habitat (and the species they support) need to be robustly considered within the environmental statement. As such, Natural England recommends that much greater clarity on the potential for direct and indirect impacts resulting from the proposals for the Essex Site is provided. It should be noted that this is likely to require detailed survey information to support the assessment, some of which will require surveys during particular seasons/times of the year."	The scope of ecological surveys has been designed in consideration of the habitats present on site, and following best practice guidance. As acknowledged by NE, the Essex Project Site offers limited ecological potential which is reflected by the level of survey effort applied, in comparison to the Kent Project Site. The Proposed Development makes provision for the use of the existing car park at Tilbury for parking for visitors and hotel guests; and works in/adjacent to the River Thames will be extremely limited, comprising the extension of the existing floating pontoon within an active dockside; and there are no land use changes and no significant indirect impacts anticipated to adjacent habitats. The potential for indirect impacts on the intertidal habitats (and species they support) is provided within ES Chapter 13: Marine Ecology and Biodiversity (Document Reference 6.1.13).
	Environmental surveys - lack of survey information	1.9	In addition to the lack of survey information provided for the Essex Site, we note that a number of project-wide surveys are still in progress with limited or no information provided on these within the PEIR. These include the passage bird invertebrate and breeding bird surveys along with the survey (for what appears to be for all species groups) at Botany Marsh West. As such, our advice is necessarily limited and we will provide more detailed advice when all survey information is available.	Those ecological surveys which were not complete at the time of the PEIR consultation are now complete, with survey results provided in full in Appendix 12.1: Ecology Baseline Report (Document Reference 6.2.12.1).
	Environmental surveys - Habitat balance sheet	1.10	As part of the environmental statement and to aid the discussions on the appropriateness (or otherwise) of the mitigation measures proposed, a habitat balance sheet would be helpful. This should provide full details of the areas of each habitat type directly and indirectly impacted by the Resort and associated infrastructure during construction and operation along with the retained and habitat mitigation areas post development. Such a comparison will be key to ensure that there is no net loss of habitat of conservation value, either for the habitat in its own right or for the species which the habitat supports.	An assessment of habitat losses and gains has been calculated using the Defra Biodiversity Metric 2.0, a copy of which was submitted alongside the PEIR and a final version of which is included in Appendix 12.2: Biodiversity Net Gain Assessment (Document Reference 6.2.12.2). This quantifies the full extent of existing (baseline) habitats across the DCO Order Limits, and quantifies the amount of habitat to be lost, retained, or retained and enhanced, culminating in an overall net biodiversity score.
	Impact assessment for off-site mitigation land	1.11	Notwithstanding Natural England's advice in relation to the need to fully avoid or mitigate impacts, and that the NPPF clearly states compensation should be seen as a 'last resort', we note that the PEIR refers to the potential need for off-site mitigation land. As there is the potential for elements of the off-site mitigation land to be identified through the consideration of the scheme in the DCO process, we would recommend that an assessment is made of the impacts such provision may have on existing habitats and species of conservation value. Such proposals would therefore need detailed survey information to support the assessment, some of which would require surveys during particular seasons/times of the year which would need to be included within the environmental statement.	A number of land holdings are being considered for delivery of off-site mitigation. Potentially suitable land will be subject to an initial Extended Phase 1 Habitat survey followed by an assessment of the potential impacts of any proposals for habitat creation/ enhancement on the existing habitats and species of conservation value. The impact assessment, and design of ecological mitigation measures will be informed by detailed 'Phase 2' ecological surveys as considered necessary following completion of the initial Phase 1 survey. NE will be consulted on the survey proposals.

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
	Residual impacts	1.12	Natural England supports the aspiration of the Resort to deliver biodiversity net gain. However, net gain is in addition to the 'avoid, mitigate, compensate' hierarchy within the National Planning Policy Framework. Disappointingly, the Ecology Chapter of the PEIR reports that a number of significant residual impacts are likely to result... A number of significant residual impacts are also reported in Table 12.5 during the operational phase with many others having a high degree of uncertainty given the lack of clarity on the green infrastructure strategy and the offsetting land.	The PEIR predicted that some significant residual negative effects could occur, subject to further development of the ecological mitigation and enhancement strategy, including the off-site mitigation land. Since the PEIR was submitted, a significant amount of additional baseline information has become available across a range of disciplines, which has enabled more detailed consideration of potential impacts and further development and refinement of the ecology mitigation strategy. Having completed the full assessment informed by this additional information and the proposed mitigation, Chapter 12 of the ES (Document Reference 6.1.12) concludes that there would be no significant residual effects on important ecological features.
	Cumulative effects	1.13	It will be important for any assessment to consider the potential cumulative effects of this proposal, including all supporting infrastructure, with other similar proposals. We advise therefore that a thorough assessment is undertaken of the cumulative effects of the proposed development with any existing developments and current applications through the environmental statement. Unfortunately, no details of the projects that are to be considered as part of the cumulative assessment, nor an indication of the likely cumulative impacts has been provided within Chapter 21 (Cumulative Assessment) of the PEIR. Natural England recommends that a comprehensive cumulative assessment is provided within the environmental statement which may result in greater impacts to environmental features than those currently presented within the PEIR. This cumulative assessment should cover the full breadth of environmental matters which need to be considered within the environmental statement.	Those cumulative impacts that can be foreseen as a result of the Proposed Development in conjunction with the identified schemes, and any possible mitigation measures required, are assessed and fully reported in the ES. Table 12.16 of ES Chapter 12 provides an assessment of these schemes identified within the Cumulative Assessment chapter which were screened in as potentially capable of having cumulative impacts on ecological receptors. The assessment concludes that there are considered to be no significant cumulative effects in combination with the other projects considered.
	Habitat Regulations Assessment	1.14	Given the functional linkage of habitats within the application boundary to the coastal designated sites, a Habitats Regulations Assessment will need to be undertaken (please see further our comments on the designated sites in Section 2 below). Disappointingly, the Terrestrial and Freshwater Ecology Chapter (Chapter 12) of the PEIR makes no reference to the need for such an assessment. Guidance from the Planning Inspectorate contained within their 'Advice note ten: Habitats Regulations Assessment relevant to nationally significant infrastructure projects' <sup>1</sup> strongly advises that applicants engage with the statutory nature conservation body as early on in the process as possible to ensure that sufficient information is provided for the application for it to be validated.	The need for a Habitat Regulations Assessment (HRA) is acknowledged and information to assist the competent authority in making such an assessment is provided in Appendix 12.4: Shadow Habitats Regulations Assessment (Document Reference 6.2.12.4). The Shadow HRA was submitted in draft to NE on 24 September 2020 and comments received on 19 October 2020. The comments made have been considered and addressed within the submitted Shadow HRA.

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
	Recreational disturbance (residential accommodation)	1.15	In addition to the impacts to land functionally linked to the coastal Special Protection Areas and Ramsar Sites, the provision of residential accommodation for staff as part of the Resort will need to consider whether this could increase recreational disturbance to the coastal sites. The Thames, Medway and Swale Estuaries Strategic Access Management and Monitoring Strategy <sup>2</sup> provides details on the nature and types of impacts that can result from residential development, the zone of influence and measures that can be taken to mitigate these.	The potential effects of recreational disturbance on the coastal SPAs as a result of the new residents in the proposed residential accommodation has been addressed within the Shadow HRA (Document Reference 6.2.12.4).
	Traffic generated air quality impacts	1.16	Natural England also recommended in our response to the 2020 EIA Scoping Opinion that the potential for traffic generated air quality impacts to designated sites should be considered within the environmental statement which may also need to be included within the Habitats Regulations Assessment.	The potential effect of traffic generated air quality impacts has been addressed within the Shadow HRA (Document Reference 6.2.12.4).
	Habitat Regulations Assessment	1.17	Given the Planning Inspectorate's guidance and our advisory role to the process, Natural England will of course be pleased to advise on the detailed scope of the Habitats Regulations Assessment if requested, including the sites and impact pathways which need to be considered.	Appendix 12.4: Shadow Habitat Regulations Assessment (Document reference: 6.2.12.4) was submitted in draft to NE on 24 September 2020 and comments received on 19 October 2020. The comments made have been considered and addressed within the submitted Shadow HRA (Document reference: 6.2.12.4).
	Survey methodologies	2.1	For clarity, Natural England has not provided comments in relation to the detailed survey methodologies employed to inform the PEIR but we have provided comments where we feel there are significant omissions or further surveys are required. We reserve the right to provide more detailed comments on the surveys undertaken in our future advice.	Full details of the survey methodologies undertaken to inform the DCO application were made available to NE within the 2020 EIA Scoping request and 2020 PEIR and due to the seasonality of the survey work it would have been more helpful to receive any further comments or concerns on survey methodology during the survey season. The scope of surveys undertaken in 2019 and 2020 is considered appropriate and robust for the purposes of identifying potentially significant effects on important ecological features.
	Sites of Special Scientific Interest and sites of European or international importance (Special Areas of Conservation, Special Protection Areas and Ramsar Sites)	2.2	Given the Mucking Flats and Marshes SSSI is the underpinning SSSI for the Thames Estuary and Marshes SPA and Ramsar Site in Essex, we recommend that this site should also form part of the environmental impact assessment. In addition, Natural England advised in our response to the 2020 Scoping Opinion request that the potential for transport generated air quality impacts to the North Downs Woodland Special Area of Conservation should also be fully considered within the environmental statement.	Chapter 12: Terrestrial and Freshwater Ecology and Biodiversity (Document reference: 6.1.12) of the ES has been updated to include the Mucking Flats and Marshes Site of Special Scientific Interest (SSSI), as well as any other underpinning SSSIs to the European sites included in the assessment. The potential for transport generated air quality impacts to the North Downs Woodland Special Area of Conservation has also been considered in Chapter 12: Terrestrial and Freshwater Ecology and Biodiversity (Document reference: 6.1.12) of the ES, including within Appendix 12.4: Shadow Habitat Regulations Assessment (Document reference: 6.2.12.4).

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
	Medway Estuary and Marshes and the Thames Estuary and Marshes Special Protection Areas and wetlands of international importance under the Ramsar Convention (Ramsar Sites) and their underpinning Sites of Special Scientific Interest	2.3	Given that no details have been provided on the nature, location or scale of the 'biodiversity offsetting' land to be provided to address the loss of functionally linked land, Natural England has significant concerns regarding the conclusions reached in the PEIR. Similarly, very little information is provided on the measures to avoid disturbance and the other indirect impacts. Natural England is therefore not able to concur with the conclusions regarding the impacts to these sites at present. We recommend that much greater detail and clarity is provided within the environmental statement.	Whilst the final details of the off-site mitigation land and associated biodiversity offsetting schemes are not yet available, a number of guiding principles regarding the nature, scale and location of such offsets have now been clearly set out within Appendix 12.2: Biodiversity Net Gain Assessment (Document Reference 6.2.12.2) and within Appendix 12.10: General Principles for Offsite Ecological Mitigation (Document Reference 6.2.12.10). These provide a greater level of certainty that relevant effects on important ecological features can be avoided or mitigated, and that a net gain in biodiversity can be achieved.
2.4		Natural England notes that the information contained within the PEIR confirms that the Kent site is functionally linked to one or more of the coastal Special Protection Areas given the results of the wintering bird surveys undertaken. Unfortunately the 2019/2020 wintering bird survey does not appear to have been included within the Technical Appendices accompanying the PEIR consultation as Annex EDP 3 Wintering Bird Surveys (edp5988_r003b) to Appendix 12.1: Ecology Baseline Report only contains a blank sheet meaning we are unable to provide detailed advice at present on the suitability of the methodology or the results.	This report was omitted in error but was issued to NE on 01 October 2020 to inform consultation in respect of the Shadow HRA.	

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
		2.5	<p>From the summary information provided within the Ecology Chapter of the PEIR, Natural England notes that the wintering and passage surveys have focussed on the Kent Site rather than encompassing both the Kent and Essex Sites along with areas outside of the DCO boundary where disturbance to birds may result. We also note that only a single year of recent wintering bird survey has been undertaken (the winter of 2019/20).</p>	<p>The vast majority of development activity (and therefore potential impacts on European Sites) will take place within the Kent Project Site. Works within the Essex Project Site which could potentially cause disturbance to adjacent intertidal habitat will be extremely limited, comprising the extension of the existing floating pontoon within an active dockside. The ES and shadow HRA (Document Reference 6.2.12.4) submitted with the DCO application is informed by a comprehensive suite of wintering, passage and breeding bird survey data collated during winter 2019/2020 through to spring 2020. In addition, this recent data is supplemented by a suite of 'baseline' surveys completed during 2012/2013. Two seasons of bird survey data is submitted along with the DCO application, albeit not in consecutive years. The wetland habitats within the Kent Project Site have not changed significantly in the intervening years between the 2012/2013 baseline surveys and the recent 2019/2020 surveys, and the data collected is more or less consistent across that time period. The wintering wader/ wildfowl assemblage using the Kent Project Site has been valued at the International level and the supporting habitats within the Project Site are being treated as functionally linked to the Ramsar and SPAs on a precautionary basis. Additional surveys will not affect this valuation or significantly alter the impact assessment and mitigation measures being developed. Data from the Tilbury2 application has been used to assess the importance of nearby intertidal habitat for wintering birds for the purposes of the HRA and ES.</p>
		2.6	<p>For projects where significant impacts to birds associated with SPAs and Ramsar Sites are likely to result, Natural England would normally expect a minimum of two years of recent survey data to be provided. The PEIR includes surveys from 2012/13, 2015/16 and references the 2019/20 surveys. Given the nature and scale of the impacts, and the absence of surveys for the Essex Site, it is likely that further survey information will be required to fully understand the impacts to birds associated with the designated site as part of the environmental statement and the Habitats Regulations Assessment. Similarly, the passage bird surveys should have started in mid-August based on previous studies for the Thames.</p>	<p>In response to similar comments made by NE (NE) in the 2020 EIA Scoping Opinion, a briefing note was submitted to NE on 21 August 2020 providing further justification for the scope of bird surveys undertaken (Report reference: edp5988_r022 "Ecology Briefing Note - NE Consultation" provided within Part 6.2.12.5). NE have provided no further comments. The briefing note included the following statement in respect of bird survey data: "The ES and Habitats Regulations Assessment (HRA) to be submitted along with the Development Consent Order (DCO) application will be informed by a comprehensive suite of wintering, passage and breeding bird survey data collated during winter 2019/2020 through to spring 2020. In addition, this recent data is supplemented by a suite of 'baseline' surveys completed by Chris Blandford Associates (CBA) during 2012/2013. Therefore, two seasons of bird survey data is to be submitted along with the DCO application, albeit not in consecutive years.</p> <p>The wetland habitats within the Kent Project Site have not changed significantly in the intervening years between the 2012/2013 baseline surveys and the recent 2019/2020 surveys, and the data collected is more or less consistent across that time period. As set out in the Preliminary Environmental Information Report (PEIR) the wintering wader/wildfowl assemblage using the Kent Project Site has been valued at the International level owing to its association with the nearby Ramsar and SPAs. The assemblage, which is treated as an Important Ecological Feature (IEF) in the Ecological Impact Assessment, has therefore been valued at the highest level, and data from additional surveys will not affect this valuation or significantly alter the impact assessment and mitigation measures being developed."</p>



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				To further assess the ornithological interest at the Project Site a comprehensive desk study, based on Wetland Bird Survey (WeBS) data and local record centre data, has been updated in 2020. Gaps in the WeBS data have been acknowledged and covered through the inclusion of survey data accumulated during the Tilbury2 DCO application.
		2.7	The Thames Estuary and Marshes SPA and Ramsar Site covers habitat on both sides of the Thames. Natural England advise that the area of foreshore and surrounding terrestrial habitat between Tilbury Fort and Coalhouse Fort should be considered as functionally linked to the Thames Estuary and Marshes SPA and Ramsar Site. Surveys for other NSIP schemes have highlighted the importance of the intertidal habitat in the vicinity of Tilbury Fort (in close proximity to the London International Cruise Terminal) with significant congregations of birds recorded.	The assessment of effects Thames Estuary and Marshes SPA and Ramsar Site includes indirect effects on relevant land which is functionally linked to the SPA/Ramsar, taking into account the details of the development proposals and effect-receptor pathways.
		2.8	Natural England therefore recommends that much greater clarity on the potential direct and indirect impacts to habitats supporting birds associated with the SPAs and Ramsar Sites is provided for the Essex Site which may require further wintering and passage bird surveys to be undertaken. There may be the potential for collaborative working with other developments (such as the Lower Thames Crossing and the Thurrock Flexible Generation scheme) to share data if agreement can be reached between the parties.	Owing to the scale and nature of the development within the Essex Project Site, no impacts on habitats associated with the SPAs and Ramsar Sites have been identified. This has been clarified in the ES and Shadow HRA.
		2.9	For other large infrastructure projects within the vicinity of the London Resort, nocturnal vantage point surveys have been useful in gaining a full understanding of how birds associated with the designated sites are using the functionally linked land on both sides of the Thames. It is unclear whether such an approach has been undertaken for this project.	Nocturnal surveys have not been completed. However, dusk dawn vantage point surveys were carried out, with dawn surveys commencing one hour before sunrise and dusk surveys ending one hour after sunset which therefore captured some nocturnal activity. The survey work completed provides a full understanding of how birds associated with the designated sites are using the functionally linked land which is at risk of adverse impacts and no additional surveys are considered necessary.
		2.10	Whilst noting Natural England's concerns above in relation to the survey effort and area, we advise the environmental statement should include a comprehensive assessment of the indirect impacts to the designated site. Such impacts are likely to result from direct loss of functionally linked land, disturbance from noise, lighting, visual impacts, recreational activities and increased boat movements, for example. Where impacts are likely to result these will also need to be considered through a Habitats Regulations Assessment.	The ES and accompanying Shadow HRA include a comprehensive assessment of the indirect impacts to the designated site.

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
		2.11	Notwithstanding the comments made above, Natural England acknowledges that Section 12.75 of the PEIR concludes that areas of Botany Marsh and Black Duck Marsh on the Kent Site appear to be functionally linked to the SPA(s) and Ramsar Site(s). Section 3.30 of Appendix 12.1 details that: 'A combined total of up to 44 species were recorded during 2012/13, 2014/15 and 2019/20 intertidal and high tide surveys. Of the 30 Ramsar/SPA/SSSI qualifying species mentioned in the designation citations, a total of 22 have been recorded either low or high tide. Of the 22 Ramsar/SPA qualifying species which have stated peak population counts, EDP recorded an overall total of 12 over the course of the 2019/20 high and low tide surveys, with the numbers recorded during surveys at either low or high tide between 0.07% and 8.66% of the peak population counts stated in the citations.'	No response required.
		2..12	Unfortunately, without being able to review the 2019/20 survey methodology or data, it is not possible for Natural England to provide detailed advice in respect of the functionally linked land in Kent at present. It is unclear whether the '30 Ramsar/SPA/SSSI qualifying species' include the named species and/or the broader range of species which make up the assemblage. Once this information is shared with Natural England, we will be pleased to provide more detailed advice.	This 2019/20 survey methodology and data was omitted from the PEIR in error but was issued to NE on 01 October 2020 to inform consultation in respect of the Shadow HRA.
		2.13	<p>Natural England notes that Table 12.5 Ecology Impact Assessment Summary that for both the Thames Estuary and Marshes and the Medway Estuary and Marshes SPAs and Ramsar Sites that the scheme will result a number of direct and indirect impacts.</p> <p>During the construction phase these are detailed as:</p> <ul style="list-style-type: none"> <li>• Permanent direct loss of functionally linked wetland habitat of significance at the district level</li> <li>• Indirect chemical and dust pollution of functionally linked land on a temporary basis of significance at the district level</li> <li>• Visual and aural disturbance of birds using functionally linked land on a temporary basis of significance at the district level</li> </ul> <p>During the operational phase these are detailed as:</p> <ul style="list-style-type: none"> <li>• Visual and aural disturbance of functionally linked land by increased river traffic which is considered not to be significant despite there being a residual minor negative impact and a confidence level of uncertain</li> <li>• Increased recreational disturbance of functionally linked habit which is not co</li> </ul>	No response required.

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
		2.14	Natural England is concerned that the consideration of water quality and quantity to the freshwater grazing marsh and reedbed habitats on the Kent Site have not been included within the PEIR. In addition, the impacts of lighting on these terrestrial habitats and the intertidal habitat around the passenger ferry terminals does not appear to have been considered. We therefore recommend that these are fully considered within the environmental statement.	The ES has been updated to include assessment of these potential impacts.
	Darenth Woods SSSI	2.25	Areas of the Darenth Woods SSSI, which is a nationally important ancient woodland, fall within the development consent order boundary. Chapter 12 of the PEIR suggests that the only impact pathways are disturbance, lighting and air quality impacts and are not significant (Table 12.5: Ecology Impact Assessment Summary). No details of the impacts (for example traffic or air quality data) appears to have been provided within the PEIR or the appendices; as such Natural England is not able to provide advice in relation to Darenth Woods SSSI at present. Full details of the potential impacts (and where necessary any mitigation measures) should be included within the environmental statement	The ES includes a thorough assessment of the potential for traffic-generated air quality impacts to Darenth Woods SSSI both during construction and operation. This takes into account the baseline information and mitigation recommended within Chapter 16: Air Quality (Document Reference 6.1.16) of the ES
		2.26	It would also be helpful if confirmation can be provided that there will be no direct impacts to the SSSI given that the DCO boundary encompasses areas of the SSSI; no such confirmation appears to have been provided within the PEIR.	The Proposed Development will result in no direct land take from within the SSSI. Whilst the DCO boundary previously included the ancient woodland parcels between the A2 and A296 slip roads, these have since been removed and will not be affected by The London Resort proposals, which will be limited to minor highway works in this area such as road markings and signage. As a point of clarity, a small number of individual trees will be lost on the edge of 'The Thrift' Ancient Woodland on the southern boundary of the A2 and the slip road as a result of the separate A2 Bean and Ebbsfleet Junction improvement works which was permitted in May of this year.
		2.27	As the air quality assessment has not detailed the impacts to ecological features (see below), Natural England is not able to concur with the conclusions at present and recommend further clarity is provided within the environmental statement.	The ES includes a thorough assessment of the potential for traffic-generated air quality impacts to relevant ecological features both during construction and operation. This takes into account the baseline information and mitigation recommended within Chapter 16: Air Quality (Document Reference 6.1.16) of the ES
	Inner Thames Marshes and West Thurrock Lagoon and Marshes SSSIs	2.28	As with the Medway Estuary and Marshes and the South Thames Estuary and Marshes SSSI (and associated SPAs and Ramsar Sites), Table 12.5 of the PEIR highlights that impacts will result from direct loss of functionally linked habitat and disturbance during the construction along with increased visual, aural and recreational disturbance during the operational phase.	No response required.
		2.29	The measures proposed within the PEIR rely on providing compensatory habitat for the loss of functionally linked land. Natural England has significant concerns with this approach and the conclusions reached within the PEIR. Similarly, very little information is provided on the measures to avoid disturbance and the other indirect impacts.	Whilst the final details of the off-site mitigation land are not yet available, a number of guiding principles regarding the nature, scale and location of such land have now been clearly set out within Appendix 12.10: General Principles for Offsite Ecological Mitigation (Document Reference 6.2.12.10). These provide a greater level of certainty that relevant effects on important ecological features can be avoided or mitigated.

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
		2.30	As the West Thurrock Lagoon and Marshes SSSI (where it is proposed to reroute a public right of way to avoid impacts) has not been subject to any ecological surveys and is not included within the DCO boundary, it is unclear how the effectiveness of these measures can be assessed. Given these concerns, Natural England is therefore not able to concur with the conclusions regarding the impacts to these sites at present. We recommend that much greater detail and clarity is provided within the environmental statement.	The Proposed Development does not propose to reroute a Public Right of Way (PRoW) in the West Thurrock Lagoon and Marshes SSSI. Reference was made in the PEIR to the re-routing of the existing PRoW on the Kent Project Site to avoid sensitive areas for birds and mitigate potential disturbance of functionally linked habitats to the West Thurrock and Marshes SSSI, but there are no proposals to re-route any PRoWS outside of the DCO Order Limits.
	Wouldham to Detling Escarpment SSSI and the North Downs Woodland Special Area of Conservation (SAC)	2.31	Section 12.74 of Chapter 12 of the PEIR states that 'it is considered highly unlikely that the Proposed Development will have any adverse effects on North Downs [Woodland] or Peters Pit SAC. Consequently, both designations are scoped out of the EclA and not considered further'. Natural England's advice in relation to the 2020 Scoping Report details that the potential for traffic generated air quality impacts during the construction and operation of the Resort, both alone and in-combination with other plans or projects should be fully considered within the environmental statement.	The ES and Shadow HRA includes a thorough assessment of the potential for traffic-generated air quality impacts to North Downs Woodlands SAC and Peters Pit SAC during construction and operation. This takes into account the baseline information and mitigation recommended within Chapter 16: Air Quality (Document Reference 6.1.16) of the ES
		2.32	The consideration of traffic generated air quality impacts should be in accordance within the advice note entitled 'Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001)'5. Depending on the results of traffic modelling this may also need to be considered within the scope of the Habitats Regulations Assessment.	The air quality assessment has been undertaken in accordance with Advice Note NEA001.
	Air quality impacts	3.1	Natural England welcomes confirmation within Chapter 16 Air Quality of the PEIR that an assessment of air quality impacts to ecological designated sites will be undertaken. However, the methodology and objectives appear to relate to human receptors rather than ecological receptors. The air quality assessment should consider the potential for impacts to designated sites using the site and habitat specific criteria available on the Air Pollution Information System10.	The air quality assessment includes potential impacts on ecological receptors and has been undertaken with reference to the Air Pollution Information System.

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		3.2	<p>The environmental statement will need to consider whether there will be an increase in deposition to designated sites from the project. Such impacts may, for example, result from the following:</p> <ul style="list-style-type: none"> <li>• an increase in road traffic generated air quality impacts to designated sites within 200 metres of the affected road network (both during construction and operation);</li> <li>• impacts from river traffic during construction and operation of the scheme;</li> <li>• impacts from any energy generation (including energy from waste) facilities associated with the project; and</li> <li>• project generated dust.</li> </ul> <p>Where impacts are likely to occur, full details of the mitigation measures will be implemented need to be included within the environmental statement.</p>	The air quality assessment considers effects through increased deposition.
		3.3	Where impacts to a Special Protection Area, Special Area of Conservation and/or Ramsar Site may result, these impacts will need to be considered through a Habitats Regulations Assessment. The assessment should be in accordance with the guidance contained within 'Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001)'11.	The ES and Shadow HRA includes a thorough assessment of the potential for traffic-generated air quality impacts to North Downs Woodlands SAC and Peters Pit SAC during construction and operation. This takes into account the baseline information and mitigation recommended within Chapter 16: Air Quality (Document Reference 6.1.16) of the ES
		3.4	Natural England will be pleased to advise further on the scope of the air quality assessment in relation to designated sites if this would be helpful.	No response required.
	Regionally and Locally Important Sites	4.1	The PEIR highlights significant direct and indirect impacts to a number of local wildlife sites within the zone of influence, many of which support species and habitats of principal importance or conservation concern. Natural England recommends the advice of the relevant county wildlife trust or the local authority is sought in respect of these sites. We have however provided comments in relation to the habitats and species of principal importance and will be pleased to engage in relation to protected species through the pre- application period.	Consultation meetings have been held with both Kent Wildlife Trust and Kent County Council to discuss the impacts of the Proposed Development and associated mitigation. Both parties were consulted formally through the PEIR consultation, and their responses have been taken into consideration in the ES. Further details are provided within Appendix 12.7: Non-statutory consultee responses to the Preliminary Environmental Information Report (Relevant to Terrestrial and Freshwater Ecology) (Document Reference 6.2.12.7).

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
	Protected Species - Species protected by the Wildlife and Countryside Act 1981 (as amended) and by the Conservation of Habitats and Species Regulations 2017 (as amended)	5.1	Natural England notes that a number of protected species have been undertaken/are ongoing within the application boundary. These, as with the other surveys, appear to primarily focus on the Kent Site rather than both the Kent and Essex Sites. Whilst there may be limited habitat for protected species within the boundary of the Essex Site, both the Kent and Essex Site should be subject to robust ecological surveys.	The scope of ecological surveys has been designed in consideration of the habitats present on site, and following best practice guidance. As acknowledged by NE, the Essex Project Site offers limited ecological potential which is reflected by the level of survey effort applied, in comparison to the Kent Project Site. The level of survey effort is considered robust to adequately assess the ecological value of the Essex Project Site, determine predicted impacts and devise appropriate mitigation where necessary.
		5.2	From the information provided within the PEIR, the Resort will result in impacts to a number of protected species including bats, dormice, Schedule 1 bird species, widespread reptiles, otters and water voles. Natural England will be pleased to work with the London Resort to better understand the impacts and mitigation proposals for protected species, especially those for which Natural England will need to provide licensing advice through the Letter of No Impediment to be submitted with the DCO application.	A suite of ecological mitigation strategies for protected/priority species is included within Appendix 12.3: Ecological Mitigation and Management Framework (Document Reference 6.2.12.3). The individual mitigation strategies for dormice, bats, water vole, otter, birds, and invertebrates were subject to further consultation and detailed discussion with NE via its Discretionary Advice Service prior to submission of the DCO application.
		5.3	Of particular note for the Kent Site is the record of the barbastelle bat which would be the first confirmed record of the species in the county if the record can be validated.	The data presented within the PEIR included a preliminary analysis of the bat data recorded to date using Analook filters, but, owing to the sheer volume of data recorded (>30,000 files), did not include full manual spectrogram analysis of every call. The recordings provisionally identified as barbastelle by the Analook filters were subsequently analysed manually and confirmed through consultation with Kent Bat Group to not be barbastelle bats. All calls have now been subject to full manual spectrogram analysis without any auto-ID software used.
	Habitats and species of principal importance and conservation concern	6.1	Natural England is concerned with the approach taken to valuing habitats and species of principal importance and conservation concern within the PEIR. For example, ancient woodland, which is an irreplaceable habitat, is valued as being of conservation importance at the county level (alongside local nature reserves and local wildlife sites). Similarly, habitats and species of principal importance for England under Section 41 of the Natural Environment and Rural Communities Act (2006) are valued at the local level alongside 'common and relatively widespread species' (Section 12.24 of Chapter 12 to the PEIR). Given that species and habitats of principal importance are national priorities for conservation in England, the impacts of the development on significant nature conservation assets may be under reported using the valuing criteria within the PEIR.	The approach taken to valuing habitats has been revised in light of NE's comments.

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
		6.2	Guidance for road schemes contained within the Design Manual for Roads and Bridges <sup>12</sup> , (whilst accepting these are not applicable to the entire London Resort proposal), values priority habitats as being of national conservation importance (Table 3.9). Consequently, Natural England recommends much greater clarity is provided within the environmental statement on the criteria that have been used to value the ecological receptors that are to be impacted by the London Resort proposal.	The CIEEM EclA Guidelines recommend that the value of areas of habitat and plant communities should be measured against published selection criteria where available. Examples include criteria for Local Wildlife Site selection in Kent and criteria for Priority Habitats/Habitats of Principal Importance in England, although the value of specific Priority Habitats must then be judged on a case by case basis.
	Species of principal and conservation importance	6.3	From the information provided within the PEIR, Natural England is concerned by the nature and scale of the impacts to all species of conservation concern, in particular birds, invertebrates and vascular plants; further details for these groups are provided below.	No response required.
	Birds	6.4	Unfortunately the 2019/2020 wintering bird survey report (Annex EDP 3) is not included within the technical appendices to the PEIR and as such Natural England is not able to provide comments on the likely impacts to these species at present. Once this information has been shared with Natural England, we will be pleased to provide more detailed advice.	The Applicant's Ecologist were in regular contact with NE officers following submission of the PEIR and it was not confirmed that the wintering bird report was missing. The report was subsequently issued to NE on 01 October 2020
6.5		Acknowledging that the 2020 breeding bird survey was still underway at the time the PEIR was finalised, the information detailed within the PEIR confirms that 93 species of conservation concerns have been recorded. This includes 17 Red List species of conservation concern and a further 29 Amber List species. In addition, a number of species protected under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended), namely peregrine falcon, spotted crane, bearded tit, marsh harrier, Cetti's warbler, Mediterranean gull, greenshank, redwing and kingfisher were recorded on the Kent Site.	No response required.	
6.6		Given the absence of recent detailed survey information within the PEIR for wintering, passage and breeding birds, Natural England is not able to provide detailed advice in relation to the potential impacts to these species. However, given the significant direct habitat loss that will result from the project, we are not able to concur with the conclusions reached within the PEIR at present. Much greater detail should be provided in relation to the nature of the impacts and the proposed avoidance, mitigation measures within the environmental statement.	The Applicant's Ecologist were in regular contact with NE officers following submission of the PEIR and it was not confirmed that the wintering bird report was missing. The report was subsequently issued to NE on 01 October 2020	
6.7		Natural England is keen to work with the London Resort to understand the importance of the habitats within the application boundary for birds, both in relation to the designated sites and species of wider conservation concern. From the information provided to date, the Kent Site appears to be of significant conservation value for its breeding and wintering birds.	A consultation meeting was held with NE on 10 August 2020 where the impacts upon birds was discussed. A draft 'Breeding and Wintering Bird Mitigation Strategy' was issued to NE for comment via their Discretionary Advice Service on 05 October 2020.	

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
	Invertebrates	6.8	Despite the PEIR stating that the invertebrate assemblage is of national importance, it is disappointing that residual impacts to habitats which support the invertebrate assemblage from the Kent Site are likely to occur. Natural England is concerned that despite the PEIR concluding that the invertebrate assemblage is of 'national importance', there is a residual 'moderate negative' impact predicted; at present we are not able to concur with the nature of the impact nor the acceptability of the mitigation proposals.	The PEIR predicted that some significant residual negative effects could occur, subject to further development of the ecological mitigation and enhancement strategy, including the off-site mitigation land. Since the PEIR was submitted, a significant amount of additional baseline information has become available across a range of disciplines, which has enabled more detailed consideration of potential impacts and further development and refinement of the ecology mitigation strategy. Having completed the full assessment informed by this additional information and the proposed mitigation, Chapter 12 of the ES (Document Reference 6.1.12) concludes that there would be no significant residual effects on important ecological features.
		6.9	As mentioned in our email of the 22 May 2020 to Karl Craddick of Savills in his consultant planning role for the London Resort, following the publication, in 2019, of the Joint Nature Conservation Committee's Guidelines on the selection of Sites of Special Scientific Interest (SSSI) for invertebrate features <sup>13</sup> , Natural England is looking across the Thames Estuary to assess any possible SSSI designations. Natural England has not yet formed a view as to whether any areas of land are of special interest, but we are keen to work constructively with you to understand the London Resort's invertebrate survey results in more detail. Whilst our assessment of evidence is not yet finalised, the survey results and the conclusions drawn within the PEIR state that the assemblage of invertebrates across the Kent Site is of 'national importance', confirming the previous assessment by the Project Team. Our advice to the London Resort has and continues to be to avoid possible impacts on areas that appear to be important for their biodiversity and geological value.	No response required.
		6.10	Whilst the surveys for invertebrates have focussed on the Kent Site, Natural England recommends that the potential impacts to the Essex Site are also considered within the environmental statement. In particular, the land adjacent to the proposed multi-storey car parks at the London International Cruise Terminal is known to have a semi-natural character and may support species of conservation concern. No assessment of the suitability of these habitats for invertebrates appears to have been included within the PEIR. Whilst the habitat appears to be outside of the DCO boundary, there are the potential for indirect impacts to the habitat which may result from lighting, surface water drainage and air quality, for example. If the semi-natural habitats surrounding these carparks is unsuitable for invertebrates or is unlikely to be impacted, evidence should be provided to demonstrate this. However, if invertebrate assemblages have potential to be impacted, this should be considered.	The scope of ecological surveys has been designed in consideration of the habitats present on site, and following best practice guidance. As acknowledged by NE, the Essex Project Site offers limited ecological potential which is reflected by the level of survey effort applied, in comparison to the Kent Project Site. The Proposed Development makes provision for the use of the existing car park at Tilbury for parking for visitors and hotel guests; there are no land use changes and no significant indirect impacts anticipated to adjacent habitats



Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
		6.11	<p>Section 12.1.128 of the PEIR summarises the 2015 invertebrate surveys as follows: ‘The entire site should be considered as 2 different ecological systems: a) A dry, well-drained habitat, predominately grassland with a scrub element and patches of intermittent disturbance (substantially present both north and south of Manor Way)</p> <p>b) A wetland habitat, with varying water flow through individual areas. Mostly north of Manor Way, although there are small examples to the south.</p> <p>Both these systems are of high (National) ecological importance. This means that the entire site is of high (National) ecological importance. It is also of high importance when considered among local sites for which there is information.’</p>	No response required.
		6.12	<p>The 2015 invertebrate reports that 1,992 invertebrate species were recorded across the Kent Site in 2012 and 2015 with 38 Red Data Book and 187 Nationally Scare Species Recorded. Whilst it is acknowledged that much of the survey information from 2020 has yet to be collated, 262 species have been recorded of which 22 are of conservation concern including ‘flagship species of Open mosaic habitat on previously developed land’.</p>	No response required.
		6.13	<p>Table 12.5 of the PEIR summarises the mitigation proposals as aiming to enhance remaining habitat. This may provide benefits for some species but given the varying ecological requirements for the species (particularly those of conservation concern) recorded across the site, much greater certainty on the mitigation measures should be provided to ensure there is no residual impact for all species. Further information is required on the nature of the habitat enhancements and how this will provide the habitat requirements for all of the species impacted by the proposal.</p>	A suite of ecological mitigation strategies for protected/ priority species is included within Appendix 12.3: Ecological Mitigation and Management Framework (Document Reference 6.2.12.3). The individual mitigation strategies for dormice, bats, water vole, otter, birds, and invertebrates were subject to further consultation and detailed discussion with NE via its Discretionary Advice Service prior to submission of the DCO application.
		6.14	<p>Natural England has significant concerns regarding the impacts to what is assessed as being a vascular plant assemblage of ‘national importance’ within the PEIR. We are also concerned regarding the proposed avoidance and mitigation measures for vascular plants at present. Given the varying ecological requirements of these species, much greater detail on the mitigation strategy will need to be provided before Natural England is able to advise on the acceptability or otherwise of the strategy to maintain (and enhance) the populations of plants which the project has assessed as being of national importance.</p>	The vascular plant mitigation strategy has been developed in further detail and is included within Appendix 12.3: Ecological Mitigation and Management Framework (Document Reference 6.2.12.3).

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
		6.15	Section A1.8 of Appendix 12.1 to the PEIR details that the botanical survey undertaken for the Kent Site in 2016 recorded eleven nationally scarce plants across the site (man orchid, divided sedge, hairy vetchling, brackish water-crowfoot, sickle clover, Borrer's saltmarsh grass, round-leaved wintergreen, stiff saltmarsh grass, slender hare's ear, bithynian vetch, yellow vetchling). Eight of these species were recorded during the 2020 update surveys and the Kent Site is assessed as being of national importance for its plant assemblage within the PEIR.	No response required.
		6.16	Despite the reported national significance of the plant assemblage and the significant direct loss of habitat based upon the masterplan, the impacts are assessed as being significant at the regional level. The residual impacts are considered negligible as plants and seed will be transplanted and the success of this is dependent upon the green infrastructure strategy for the site which is as yet uncertain.	The vascular plant mitigation strategy has been developed in further detail and is included within Appendix 12.3: Ecological Mitigation and Management Framework (Document Reference 6.2.12.3). This has been prepared in parallel with the Landscape Strategy (Document Reference 6.2.11.7).
	Habitats of principal importance and conservation concern	6.17	Based upon the public ally available Natural England Priority Habitat Inventory dataset <sup>14</sup> , the following priority habitats or habitats of conservation importance appear to be present within the development consent order boundary: <ul style="list-style-type: none"> <li>• Ancient woodland;</li> <li>• Coastal and floodplain grazing marsh;</li> <li>• Deciduous woodland;</li> <li>• Open mosaic on previously developed land; and</li> <li>• Saltmarsh.</li> </ul>	No response required.
6.18		In addition, the botanical survey undertaken in 2012 <sup>15</sup> , included within the appendices to the Scoping Report, highlights that some of the grassland areas within the Kent Site demonstrated affinities to species rich neutral (MG5) grassland. This does not appear to be reflected within the updated surveys not the PEIR.	The detailed updated botanical surveys of the Kent Project Site in May 2020 did not record grassland which resembles the MG5 NVC community.	
6.19		Reference is made within the PEIR and supporting documents to the Kent Site being selected as it is largely brownfield, former industrial land. Brownfield sites are often very rich in the wildlife they support . As detailed within the appendices supporting the PEIR, the Swanscombe Peninsula supports a rich and diverse array of protected, priority and notable species along with a significant number of species of conservation concern.  Paragraphs 117 and 118 of the NPPF (and the associated footnotes) provide confirmation that the preferential reuse of brownfield sites should not be promoted 'where this would conflict with other policies in this Framework, including causing harm to designated sites of importance for biodiversity'.	Further detail on site selection and the application of the mitigation hierarchy was submitted to Natural England (NE) in a briefing note (Report reference: edp5988_r022 "Ecology Briefing Note - Natural England Consultation') 21 August 2020. A copy of this report is included in the correspondence to the rear of Appendix 12.5 (Document Reference 6.2.12.5). NE have provided no further comments. In addition, Chapter 12: Terrestrial and Freshwater Ecology and Biodiversity (Document Reference 6.1.12) of the Environmental Statement (ES) has been updated to include further information on how the mitigation hierarchy has been applied. The ecological value of the brownfield habitats within the Project Site is fully acknowledged and addressed within the ES.	

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
		6.20	Given that much of the land within the development consent order boundary is included within the national Priority Habitat Inventory, Natural England would expect the environmental statement to fully detail how the proposal has been designed to avoid and fully mitigate the impacts to all of the priority habitats resulting from this proposal. Such information on how impacts are to be avoided (for example through changes to the scheme design), mitigated or fully compensated do not appear to have been provided within the PEIR unfortunately.	
		6.21	Whilst the PEIR details that, for most habitats, there will be no or limited residual impacts given the habitat mitigation measures are to be provided through the proposed 'offsetting', no details of the habitat areas to be lost compared to those to be created has been provided within the PEIR. This approach does not appear to be in accordance with the 'avoid, mitigate, compensate' hierarchy.	Whilst the final details of the off-site mitigation land and associated biodiversity offsetting schemes are not yet available, a number of guiding principles regarding the nature, scale and location of such offsets have now been clearly set out within Appendix 12.2: Biodiversity Net Gain Assessment (Document Reference 6.2.12.2) and within Appendix 12.10: General Principles for Offsite Ecological Mitigation (Document Reference 6.2.12.10). These provide a greater level of certainty that relevant effects on important ecological features can be avoided or mitigated, and that a net gain in biodiversity can be achieved.
		6.22	Natural England has significant concerns regarding the conclusions within the PEIR in relation to the impacts to priority habitats and the effectiveness of the mitigation measures proposed.	Details on the mitigation strategy in respect of priority habitats are provided within Appendix 12.3: Ecological Mitigation and Management Framework (Document Reference 6.2.12.3). This has been prepared in parallel with the Landscape Strategy (Document Reference 6.2.11.7).
	Cumulative and in-combination effects	9.1	A full consideration of the implications of the whole scheme should be included in the environmental statement. All supporting infrastructure should be included within the assessment.	The ES includes an assessment of both the construction and operational stages of the Proposed Development, as well as consideration of potential cumulative effects from other development projects in the surrounding landscape.
9.2		Natural England notes that a five kilometre zone has been used for identifying projects to be considered as part of the cumulative impact assessment (Section 21.7, Chapter 21 Cumulative Assessment). The application of a buffer may not be sufficient for consideration of some environmental impacts and it would seem more appropriate for the projects to be considered on the likely cumulative pathways rather than distance. For example, traffic generated air quality impacts to designated sites from projects are likely to need to be considered at a distance greater than five kilometres.	The final process of identification of potential cumulative sites used a variety of Zones of Influence specific to the topic in question and extended much further than the initial 5km zone. Further details are provided in Chapter 21: Cumulative Assessment (Document Reference 6.1.21) of the ES	
9.3		For clarity, given the potential indirect impacts to Special Protection Areas, Special Areas of Conservation and Ramsar Sites, the consideration of in-combination impacts will need to include plans in addition to projects as part of the assessment.	In combination effects are considered within the Shadow HRA however direct impacts on European Sites have been screened out at Stage 1 (screening stage).	

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
		9.4	<p>The environmental statement should include an impact assessment to identify, describe and evaluate the effects that are likely to result from the project in combination with other projects and activities that are being, have been or will be carried out. The following types of projects should be included in such an assessment, (subject to available information):</p> <ul style="list-style-type: none"> <li>• existing completed projects;</li> <li>• approved but uncompleted projects;</li> <li>• ongoing activities;</li> <li>• plans or projects for which an application has been made and which are under consideration by the consenting authorities; and</li> <li>• plans and projects which are reasonably foreseeable, i.e. projects for which an application has not yet been submitted, but which are likely to progress before completion of the development and for which sufficient information is available to assess the likelihood of cumulative and in-combination effects.</li> </ul>	Chapter 12 of the ES provides this assessment (Document Reference 6.1.12).
	Environmental enhancement and mitigation measures	10.1	In addition to the required mitigation and compensatory measures for impacts to biodiversity and geodiversity assets from the London Resort, Natural England welcomes the commitment that the scheme will deliver a net benefit for biodiversity and the wider environment.	No response required.
10.2		Such enhancements should consider the terrestrial, aquatic and marine habitats and species. The environmental statement should fully detail the environmental enhancements that will be provided by the applicant.	Proposed on-site enhancements are detailed within Appendix 12.3: Ecological Mitigation and Management Framework (Document Reference 6.2.12.3) and proposals for off-site enhancements are outlined in Appendix 12.10: General Principles for Offsite Ecological Mitigation (Document Reference 6.2.12.10).	
10.3		However, as mentioned above the delivery of net gain should be considered when the impacts from the scheme have been fully avoided, mitigated or, as a last resort, compensated. Given the PEIR reports that there will be residual ecological impacts, these need to be fully addressed within the environmental statement.	Chapter 12 of the ES provides details on the proposed enhancement measures to be provided by the Proposed Development. In particular, details on habitat creation and enhancement, and long term management and monitoring are provided within Appendix 12.3: Ecological Mitigation and Management Framework (Document Reference 6.2.12.3).	
10.4		As part of an overall enhancement package, Natural England recommends that options for reconnecting habitats through the creation of new semi-natural habitat, linking in with local priorities this part of the Thames estuary. Similarly, we would encourage the applicant to work closely with other major projects on both sides of the Thames to deliver a coherent, landscape scale mitigation and enhancement strategy.	General Principles for Offsite Ecological Mitigation are provided within Appendix 12.10 (Document Reference 6.2.12.10), which include providing off-site land within the Greater Thames Nature Improvement Area.	
10.5		Where habitat mitigation will be required for any of the habitats or species impacted by the development, the long-term security and management of the site(s) needs to be secured and we recommend that the mechanism for this should be detailed within the environmental statement.	The Ecological Mitigation and Management Framework (ES Appendix 12.3; Document Reference 6.2.12.3) establishes a framework for the long term delivery of ecological mitigation and management, which is to be secured through the Development Consent Order.	

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
The Environment Agency			The chapter identifies the Tilbury Port side of being of low ecological value due to mainly hard standing (which will be low value) but also mentions areas of bare ground. We would like to better understand what assessment has been undertaken to determining the low ecological value of these areas of bare ground, particularly for terrestrial invertebrates.	An initial scoping study was completed in April 2020 along with a single invertebrate sampling event in May 2020. As described within the Ecology Baseline Report (Document Reference 6.2.12.1), following the May sampling event, on account of its relatively small size and unexceptional grassland and scrub habitat, it was decided that no further sampling would be undertaken in Area 19 - Tilbury Docks, Essex. The habitat selected tentatively within the scoping study, comprised a short stretch of road verge grassland and scrub habitat around TQ 64582 75464. Thus, no further sampling was undertaken within the Essex Project Site, with all remaining sample areas being located in the Kent Project Site.
		table 12.3	We would like to clarify how areas of swamp/reedbed has been assessed in terms of intrinsic value. For example, the reedbed habitat area is exceptionally extensive, and a rare habitat type for south east England, but only gets County level of interest. We would therefore question the assessment.	Areas of swamp/ reedbed have been identified, mapped and described following completion of a Phase 1 Habitat Survey, completed in accordance with the industry-standard Joint Nature Conservation Council (JNCC) (2010) 'Handbook for Phase 1 Habitat Survey - A Technique for Environmental Audit'. In assessing the importance of this habitat, consideration has been given to it's status as a Priority Habitat, it's current condition, and Local Wildlife Site selection criteria. On balance, it was considered that the reedbed was of County level.
			Biodiversity Net Gain (BNG) is mentioned, although no information is presented in the PEIR review. The River Metric will need to be utilised for the River Ebbsfleet due to the proximity of the road to the watercourse. We need confirmation that this has been carried out for the watercourse to enable the use of the BNG tool.	Within the current draft of the Environment Bill, as submitted to Parliament, Nationally Significant Infrastructure Projects (NSIPs) are exempt from the requirement to deliver 10% net gain. Nevertheless, the Applicant is submitting the Biodiversity Metric 2.0 on a voluntary basis to demonstrate a commitment to delivering net gain in accordance with the NPPF (see 'Biodiversity Net Gain Assessment', Document Reference 6.2.12.2). Due to the limitations of the Biodiversity Metric 2.0 tool, in that indirect (degradation) impacts upon linear features cannot be calculated, no assessment of impacts upon rivers has been made within the metric. No direct, measurable (for the purposes of BNG calculations) loss of length of either the River Thames or River Ebbsfleet are anticipated as a result of the Proposed Development. The potential for indirect effects to the River Ebbsfleet are addressed within the Ecological Impact Assessment presented in Chapter 12: Terrestrial and Freshwater Ecology and Biodiversity (Document Reference 6.1.12).
			Generic information appears to be used on different habitat and species assessments. It should be tailored to the habitat and species. We therefore question how this has been carried out. The habitat information is very simply displayed with very little detailed information. The site is more complex than this, and the mix of vegetation communities should be correctly provided. For example the modern flood embankment, and the older embankment seaward of it have very different habitat types, and the seaward area has a variety of vegetation communities. This variety and interest is not captured in the basic mapping.	The habitats present on the Project Site have been identified, mapped and described within Chapter 12 through a combination of industry-standard Phase 1 Habitat Survey, and detailed botanical survey where areas of higher botanical value are present. A detailed description of the habitats present is provided within the Ecology Baseline Report (Document Reference 6.2.12.1).

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
			<p>In this respect the proposed saltmarsh creation is unlikely to be an acceptable option at Black Duck Marsh. For Broadness Marsh more detailed information on the proposals are needed. The layout of the development in relation to Black Duck Marsh appears likely to have a very significant impact on the marsh due to its proximity, lack of buffer and indeed its intrusion into the wetland at the eastern edge close to Bells Wharf. This is not discussed or justified within the PEIR. The height and proximity and damage caused by the positioning of these features is likely to have a significant impact on the marsh and the wildlife utilising it. Particularly breeding birds.</p>	<p>Full details of the landscape proposals are provided within the Landscape Strategy accompanying the DCO application (see Document Reference 6.2.11.7). Following feedback from the EA the extent of proposed saltmarsh has been reduced, including removing it from the area near Black Duck Marsh. The impacts of the Proposed Development on retained habitats, and supporting species, is discussed in Chapter 12: Terrestrial and Freshwater Ecology and Biodiversity (Document Reference 6.1.12)</p>
			<p>It is unclear if impacts of additional river traffic has been assessed at West Thurrock Lagoon and Marshes SSSI. An assessment of the significance of change close to the inter-tidal areas and saltmarsh will need to be taken into account.</p>	<p>The potential impacts of increased river traffic has been assessed within Chapter 12: Terrestrial and Freshwater Ecology and Biodiversity (Document Reference 6.1.12), where relevant to marine ecology this is discussed within Chapter 13: Marine Ecology and Biodiversity (Document Reference 6.1.13)</p>
		12.97	<p>The Breeding bird assemblage is assessed as County Level significance. However in the 2017 survey data it suggested it was of Regional importance for the number of species of conservation significance. It needs clarification how these assessments have been determined.</p>	<p>The valuation of the breeding bird assemblage has been reviewed following feedback from consultees and analysis of surveys results. Consequently, the assemblage is valued at Regional level.</p>
		12.150	<p>We are seeking clarity on what mitigation is intended for the stated 15% net loss.</p>	<p>Within the current draft of the Environment Bill, as submitted to Parliament, Nationally Significant Infrastructure Projects (NSIPs) are exempt from the requirement to deliver 10% net gain. Nevertheless, the Applicant is submitting the Biodiversity Metric 2.0 on a voluntary basis to demonstrate a commitment to delivering net gain in accordance with the NPPF (see 'Biodiversity Net Gain Assessment', Document Reference 6.2.12.2). The principles underpinning the off-site mitigation are provided within the 'General Principles for Offsite Ecological Mitigation' (Document Reference 6.2.12.10).</p>
		12.151	<p>Ideally BNG work should be carried out on site, or directly, adjacent to the site. We would welcome any ideas or plans that may be being considered for this, and would therefore consider the River Ebbsfleet river corridor and the Swanscombe Marsh waterbodies as ideal areas for habitat creation and improvement works. See earlier comments.</p>	<p>Chapter 12: Terrestrial and Freshwater Ecology and Biodiversity (Document Reference 6.1.12) of the Environmental Statement provides a comprehensive package of mitigation measures for terrestrial and freshwater species/species assemblage recorded within the Project Site. A suite of on-site habitat creation and enhancement measures of benefit to terrestrial, aquatic and marine habitats and species is provided, and illustrated within the Landscape Strategy (Document Reference 6.2.11.7).</p>

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
		12.154	Fish are not specifically mentioned in this section of the report. However, whilst the PEIR does not anticipate any significant issues with regard to freshwater fish populations within the Ebbsfleet River and the other waterbodies on site, there is considerable scope for improving these habitats to a condition where fish would be able to utilise them. The ES should briefly consider future potential for fish populations and identify any elements of the London Resort proposals that would jeopardise such future improvement. Any works to any unsurveyed waterbodies may also show fish to be present, therefore dewatering of any of these areas may need to consider fish rescue and relocation as a possible contingency.	With respect to the River Ebbsfleet mitigation will be limited to habitat creation and enhancement of habitats within the floodplain adjacent and associated with proposed drainage features. No habitat measures are proposed to the Rivers Ebbsfleet itself given its engineered nature and role in flood defence, whilst a fish assemblage will be constrained by the presence of significant culverts preventing movement between the River Thames and Ebbsfleet, regardless of implementation of habitat features specific to this species group. Nevertheless, Chapter 12 of the ES (Document Reference 6.1.12) considers the potential impacts on a fish assemblage with due regard to objectives of the WFD. A summary of this assessment is further provided within a WFD Screening Assessment prepared specific to the River Ebbsfleet and provided at Appendix 12.8 of the ES (Document Reference 6.2.12.8). Improvements to the water quality within retained waterbodies on Swanscombe Peninsula will be made, to the benefit of fish and other aquatic species.
		table 12.5	The hydrology to maintain and enhance Botany Marshes Local Wildlife Site needs to be clearly considered and hydrologically calculated for this area. It will need enough water quantity and quality to maintain it. The edge effect of building over the rest of Botany Marshes will need to be fully assessed for both the construction and operational stage.	Assessment of the hydrological impacts of the Proposed Development is provided within Chapter 17 - Water Resources and Flood Risk (Document Reference 6.1.17), and potential ecological effects within Chapter 12: Terrestrial and Freshwater Ecology and Biodiversity (Document Reference 6.1.12).
			Many issues such as the proximity of the new road to River Ebbsfleet are not considered or summarised in this table. We would need to see the detailed assessment and information to agree with the bold claims regarding the residual impacts of the development and the level of certainty. Particularly regarding disturbance from noise, lighting, hydrology, contamination risk and likelihood of the success of mitigation and compensation schemes. It is unclear how magnitude has been determined.	
Kent County Council	Ecological Mitigation		No specific botanical survey has been carried out and it is presumed that plant species have been recorded during other surveys and, therefore, the number of rare plants within the site may be higher than recorded.	Detailed botanical surveys have been undertaken in 2012, 2016 and 2020 as detailed within Appendix 12.1: Ecology Baseline Report (Document Reference 6.2.12.1)
			Records of brown hare, hedgehog, pygmy shrew, and weasel were identified during the data search, but it is stated that these will not be taken forward into the Environmental Statement as an Important Ecological Feature. However, no specific surveys have been carried out for these species and they may be present within the site and, therefore, impacted by the proposed development. It is the County Council's view that they should be considered within the submission. In addition, the brown hare and hedgehog are priority species (under S41 NERC Act) and impacts to species of principal importance/BAP priority species are: "Capable of being a material consideration in the...making of planning decisions." (paragraph 84, Government Circular (ODPM 06/2005)).	The potential presence of these species within the Project Site is considered within Appendix 12.1: Ecology Baseline Report (Document Reference 6.2.12.1). Their presence could not be ruled out but none were recorded during other survey work. None of these species was deemed to be an Important Ecological Feature for the purposes of identifying potentially significant effects, however the proposed mitigation and enhancement strategy (both on-site and off-site) would very likely benefit all of these mammal species.

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
			<p>In relation to bat surveys, internal examination of buildings could not be carried out as a result of the current Covid-19 restrictions. However, due to the size and nature of the proposed development the County Council would have expected emergence surveys to have been scheduled to ensure it was understood if, and to what extent, bats were roosting within the buildings to ensure the impact on roosting bats was fully understood.</p>	<p>Upon completion of the external preliminary roost assessment, three buildings were considered to have high potential for roosting bats, ten to have moderate potential and ten to have low potential within the DCO order limits. An additional 26 buildings are 'requiring further assessment' as access limitations prevented a full visual inspection. Any buildings requiring demolition will be fully assessed for its potential to support roosting bats in advance of works commencing.</p>
			<p>It is highlighted that the species interest of the site is so high due to the range of habitats present within the site including scrub, woodland, semi-improved grassland, coastal grazing marsh, open mosaic, previously developed land, reedbed and open water.</p>	<p>No response required.</p>
			<p>There are concerns with the conclusions of the PEIR regarding the classification of the importance of the species within the site and in the County Council's opinion that, for many of the species groups, the conclusions are underrated. The following examples demonstrate this point:</p> <ul style="list-style-type: none"> <li>• Reptiles have been assessed as District Level importance even though the presence of three species of reptile make the site suitable to be considered as a Local Wildlife Site. Therefore, the County Council would have been expected for the reptile population to have been assessed as County importance.</li> <li>• Otters have been assessed as Local importance, but these are not common within Kent and, therefore, the presence is of note and the County Council would have expect them to have been assessed as at least of County importance.</li> </ul>	<p>The valuation of the species populations has been undertaken using professional judgement, taking into account a variety of factors including local conservation status, abundance and distribution and usage of the habitats within the Project Site. A lower valuation does not alter the requirement to avoid harm and mitigate impacts on these species nor does it affect the requirement to protect biodiversity as whole.</p>
			<p>As all the surveys have not been completed the importance classification cannot be fully considered and it is advised that those conclusions must only be made once the surveys have been completed.</p>	<p>The final valuation has been informed by the completed surveys.</p>
			<p>Limited information has been provided on what ecological mitigation is required to retain the ecological interest of the site and instead the PEIR details that the following are the key mechanisms to implement the required mitigation.</p> <ul style="list-style-type: none"> <li>• Construction &amp; Environmental Management Plan</li> <li>• Ecological Mitigation &amp; Management Framework Plan</li> <li>• Landscape &amp; Ecological Management Plan</li> <li>• Green Infrastructure Strategy</li> <li>• Sustainable Drainage Scheme</li> <li>• Detailed Lighting Strategy.</li> </ul>	<p>Proposed on-site mitigation measures are detailed within Appendix 12.3: Ecological Mitigation and Management Framework (Document Reference 6.2.12.3) and proposals for off-site mitigation are outlined in Appendix 12.10: General Principles for Offsite Ecological Mitigation (Document Reference 6.2.12.10). Further details will be provided where necessary prior to commencement of development and can be secured by a DCO Requirement.</p>



Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
			<p>Until all the ecological surveys have been completed and it is fully understood what is present on site it is impossible to fully understand what the impact will be, what mitigation is required and if such mitigation is achievable. It is advised that this information is required prior to identifying what mechanisms could be used to implement any mitigation. Also, when the County Council refers to impacts it is referring to both direct and indirect impacts. This includes (but is not limited to) habitat loss, changes to habitat management, increase in noise, increase in lighting, and increase in disturbance.</p>	<p>A full assessment supported by the completed surveys and detailed mitigation strategies is now contained within the ES.</p>
			<p>The proposed development will result in the direct loss of habitat as a result of the implementation of the proposed development and the remaining areas will be required to be multi-functional, providing open space for recreation and SuDS, in addition to the ecological mitigation. Due to the loss of habitat, impacts from the proposed development (including noise and lighting) and the other requirements on the retained habitat (in particular recreation) there are concerns that, due to the ecological interest of the site, there will be a limit to the amount of ecological mitigation which can be implemented successfully on-site and there will be a significant loss of biodiversity.</p>	<p>The ES acknowledges that off-site land/biodiversity offsetting will be required to fully address all negative impacts on ecological features. Whilst the final details of the off-site mitigation land and associated biodiversity offsetting schemes are not yet available, a number of guiding principles regarding the nature, scale and location of such offsets have now been clearly set out within Appendix 12.2: Biodiversity Net Gain Assessment (Document Reference 6.2.12.2) and within Appendix 12.10: General Principles for Offsite Ecological Mitigation (Document Reference 6.2.12.10). These provide a greater level of certainty that relevant effects on important ecological features can be avoided or mitigated, and that a net gain in biodiversity can be achieved.</p>
			<p>It is understood that, due to the limited amount of space within development sites, that open spaces must be multifunctional. However, in this situation it would be fully expected that information would be submitted clearly demonstrating what the constraints on site are and that those requirements would not negatively impact the ecological mitigation.</p>	<p>The ecological mitigation strategies detailed within Appendix 12.3: Ecological Mitigation and Management Framework (Document Reference 6.2.12.3) have been prepared in parallel with the Landscape Strategy (Document Reference 6.2.11.7) and take account of the multifunctionality of the open spaces.</p>
			<p>The Swanscombe Peninsula currently has limited recreational access, so the site is largely undisturbed. The creation of walking trails within the site would encourage people to use the site and result in an increase in disturbance within site and as such may result in the following:</p> <ul style="list-style-type: none"> <li>• Reduction in breeding bird species/numbers due to an increase in noise/light;</li> <li>• Reduction in bat species/numbers due to increase in light (lighting may be required within the opens space area due to health and safety);</li> <li>• Loss of habitat due to increase in trampling.</li> </ul> <p>The County Council would expect any submitted information to fully assess the impact the proposal would have from an increase in recreational pressure.</p>	

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
			<p>Surface Water Drainage features are required to prevent surface water flooding and any SuDS features will have to be managed in a way that means that they will remain operational. It is agreed that SuDS features can benefit biodiversity but there will be restrictions on the types of habitats that can establish within these areas and the management priority will be for surface water drainage not biodiversity. Therefore, there will be limits on the mitigation that can be incorporated into any SuDS scheme. Due to the proposed recreational usage of the site there may also be requirements to avoid deep water bodies for health and safety reasons and it may not be possible to retain existing habitat types or species present within the site.</p>	<p>The ecological and landscape strategies have been prepared in parallel with the surface water drainage strategy to ensure that the assumed biodiversity benefits of any SuDS are realistic and achievable.</p>
			<p>The PEIR has detailed that there will be a direct impact on Botany Marshes LWS designated sites due to alteration of the hydrological regime through destruction of adjoining wetland but advised that the proposed mitigation is certain subject to design and implementation of suitable drainage and hydrological strategy. The implementation of appropriate mitigation is not certain until it has been clearly demonstrated that an appropriate drainage and hydrological strategy can be implemented and until that point the proposed mitigation is, at best, uncertain.</p>	<p>The final assessment of impacts upon Botany Marshes LWS has been informed by the baseline information and proposed mitigation set out in within Chapter 17: Water Resources and Flood Risk (Document Reference 6.1.17) of the ES.</p>
			<p>The submitted information highlights that, due to the use of the site by wintering birds, the proposed development will have a negative impact on the South Thames Estuary &amp; Marshes SSSI, the Inner Thames Marshes SSSI, the Medway Estuary &amp; Marshes SPA/Ramsar/SSSI and the Thames Estuary &amp; Marshes SPA/Ramsar site and that mitigation is uncertain due to the requirement for off-site mitigation. To fully understand if the impact can be mitigated details of an off-site mitigation area must be provided and it must demonstrate that the mitigation is achievable and that it can provide suitable habitat in perpetuity. As the proposals will result in a likely significant effect on the designated sites further information will need to be submitted to enable the determining authority to undertake an Appropriate Assessment.</p>	<p>The need for a Habitat Regulations Assessment (HRA) is acknowledged and information to assist the competent authority in making such an assessment is provided in Appendix 12.4: Shadow Habitats Regulations Assessment (Document Reference 6.2.12.4).</p>
			<p>The submitted information has highlighted that there will be a need for off-site species mitigation and the County Council would expect information to be submitted demonstrating that suitable mitigation areas can be created within Kent and ideally within the immediate surrounding area. Due to the size of any off-site mitigation areas and the habitat creation requirements, it may not be possible for the proposed designated sites and the species mitigation to be located within the same area. It must be clearly demonstrated that the mitigation can be implemented and retained in perpetuity.</p>	<p>General Principles for Offsite Ecological Mitigation are provided within Appendix 12.10 (Document Reference 6.2.12.10), which include providing off-site land within the Greater Thames Nature Improvement Area.</p>

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
			The County Council would expect ecological surveys to have been carried out on the proposed off-site mitigation areas. This will enable consideration of whether the proposed off-site mitigation is appropriate and any requirements for habitat creation would not negatively impact any species currently present within the site.	A number of land holdings are being considered for delivery of off-site mitigation. Potentially suitable land will be subject to an initial Extended Phase 1 Habitat survey followed by an assessment of the potential impacts of any proposals for habitat creation/ enhancement on the existing habitats and species of conservation value. The impact assessment, and design of ecological mitigation measures will be informed by detailed 'Phase 2' ecological surveys as considered necessary following completion of the initial Phase 1 survey.
			There is a need for any future submissions on ecology to clearly demonstrate that LRCH has worked collaboratively with other specialists to ensure it is fully understood what the direct and indirect impacts from the proposal are and if the mitigation proposed is achievable.	No response required.
			The submitted information has stated the proposed development is aiming to implement Net Gain but would result in the loss on-site of 355 units. However, the information provided on Net Gain is in a format (pdf document as opposed to excel) that makes it difficult to interrogate the data and reach a conclusion on the validity of this statement. To enable full consideration of this issue the County Council request information of the Net Gain metric in an accessible format along with corresponding maps showing the locations of the habitats detailed within the metric. The loss of habitat (in Net Gain terms) may be higher than 15% and in situations where Net Gain is proposed information needs to be submitted demonstrating that it can be implemented and retained in perpetuity.	This information is provided in Appendix 12.2: Biodiversity Net Gain Assessment (Document Reference 6.2.12.2).
Gravesham Borough Council		6.1	The chapter illustrates that there is potentially significant nature conservation interest on the Peninsula and the linkage with the North Kent Marshes Ramsar/SPA which are of international importance. Other consultees are better placed to produce detailed technical comments on this matter.	No response required.
		6.2	It will be necessary for the Environmental Statement to show that the impacts can be mitigated by the enhancement of the undeveloped areas that are retained at Botany Marsh and Black Duck Marsh. These will be in the context of a dramatic change in the level of human disturbance in the area, both inside the resort complex but also from the other changes to access to the Peninsula.	The ecological mitigation strategies (including proposals to enhance the undeveloped areas of the Project Site) detailed within Appendix 12.3: Ecological Mitigation and Management Framework (Document Reference 6.2.12.3) have been prepared in parallel with the Landscape Strategy (Document Reference 6.2.11.7) and take account of the multifunctionality of the open spaces.

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
		6.3	The Ramsar / SPA is also under pressure from new development in Gravesend (and further east in Medway) so this factor needs to be taken into account. There is a tariff payable <sup>5</sup> by residential development within a 6km of Thames Estuary Marshes. This would include any residential development in Gravesham in the Ebbsfleet or at Pepper Hill, but not on Botany Marshes. As currently understood this proposal would not trigger such a payment directly but the principal may be applicable due to direct and indirect impacts on nature assets or from additional development pressures.	The potential effects of recreational disturbance on the coastal SPAs as a result of the new residents in the proposed residential accommodation has been addressed within Appendix 12.4: Shadow Habitats Regulations Assessment (Document Reference 6.2.12.4).
		6.4	It is noted that Buglife are starting a petition that the marshes be designated an SSSI. This implies, at the very least, that there is significant ecological interest in the area. The remaining areas of fresh marsh may not be sufficient.	No response required.
		6.5	The implications for the Bakers Hole SSSI with its geological and archaeological significance need to be fully explored and how the issues that arise are going to be addressed. Crossing this area in an acceptable way poses significant challenges.	Baker's Hole SSSI is designated for its geological interest, as such impacts are addressed within the Cultural Heritage Chapter of the ES (Document Reference 6.1.14).
Dartford Borough Council - Appendix A	Onsite Mitigation		Limited information has been provided on what ecological mitigation required to retain the ecological interest of the site and instead the report details that the following are the key mechanisms to implement the required mitigation. <ul style="list-style-type: none"> <li>• Construction and Environmental Management Plan</li> <li>• Ecological Mitigation and Management Framework Plan</li> <li>• Landscape and Ecological Management Plan</li> <li>• Green Infrastructure Strategy</li> <li>• Sustainable Drainage Scheme</li> <li>• Detailed Lighting Strategy.</li> </ul>	Proposed on-site mitigation measures are detailed within Appendix 12.3: Ecological Mitigation and Management Framework (Document Reference 6.2.12.3) and proposals for off-site mitigation are outlined in Appendix 12.10: General Principles for Offsite Ecological Mitigation (Document Reference 6.2.12.10). Further details will be provided where necessary prior to commencement of development and can be secured by a DCO Requirement.
			We highlight that until all the ecological surveys have been completed and it is fully understood what is present on site it is impossible to fully understand what the impact will be, what mitigation is required and if it is achievable. We advise that this information is required prior to identifying what mechanisms could be used to implement it. We highlight that when we refer to impacts we refer to both direct and indirect impacts. This includes (but not limited to) habitat loss, changes to habitat management, increase in noise, increase in lighting and increase in disturbance.	A full assessment supported by the completed surveys and detailed mitigation strategies is now contained within the ES.

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
			<p>The proposed development will result in the direct loss of habitat for the implementation of the proposed development and the remaining areas will be required to be multi-functional and provide Open Space for recreation and SuDS in addition to the ecological mitigation. Due to the loss of habitat, impacts from the proposed development (including noise and lighting) and the other requirements on the retained habitat (in particular recreation) we are concerned that, due to the ecological interest of the site, there will be a limit to the amount of ecological mitigation which can be implemented successfully on site and there will be a significant loss of biodiversity within the site.</p>	<p>The ES acknowledges that off-site land/biodiversity offsetting will be required to fully address all negative impacts on ecological features. Whilst the final details of the off-site mitigation land and associated biodiversity offsetting schemes are not yet available, a number of guiding principles regarding the nature, scale and location of such offsets have now been clearly set out within Appendix 12.2: Biodiversity Net Gain Assessment (Document Reference 6.2.12.2) and within Appendix 12.10: General Principles for Offsite Ecological Mitigation (Document Reference 6.2.12.10). These provide a greater level of certainty that relevant effects on important ecological features can be avoided or mitigated, and that a net gain in biodiversity can be achieved.</p>
			<p>We understand that due to the limited amount of space within development sites that open spaces do have to be multifunctional. However in these situation we would fully expect information to be submitted clearly demonstrating what the constraints on site would be and those requirements would not negatively impact the ecological mitigation.</p>	<p>The ecological mitigation strategies detailed within Appendix 12.3: Ecological Mitigation and Management Framework (Document Reference 6.2.12.3) have been prepared in parallel with the Landscape Strategy (Document Reference 6.2.11.7) and take account of the multifunctionality of the open spaces.</p>
			<p>The Swanscombe peninsula currently has limited recreational access so the site is largely undisturbed. The creation of walking trails within the site would encourage people to use the site and therefore result in an increase in disturbance within site and as such it may result in the following:</p> <ul style="list-style-type: none"> <li>• Reduction in breeding bird species/numbers due to an increase in noise / light</li> <li>• Reduction in bat species/numbers due to increase in light (lighting may be required within the opens space area due to H+S)</li> <li>• Loss of habitat due to increase in trampling</li> </ul>	
			<p>Therefore we would fully expect any submitted information to fully assess the impact the proposal would have from an increase in recreational pressure. We highlight that the pressure from recreation would result from the proposed development and existing and proposed housing within the surrounding area.</p>	<p>No response required.</p>

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
			<p>Surface Water Drainage Features are required to prevent surface water flooding and therefore any SuDS Features will have to be managed in a way that means that they will remain operational. We agree that SuDS features can benefit biodiversity but there will be restrictions on the types of habitats that can establish within these areas and the management priority will be for surface water drainage not biodiversity. Therefore there will be limits on the mitigation which can be incorporated in to the SuDS scheme. We highlight that due to the proposed recreational usage of the site there may be requirements to avoid deep water bodies within the site for H+S reasons and therefore it may not be possible to retain existing habitat types or species present within the site. The report has detailed that there will be a direct impact on Botany Marshes LWS designated sites due to alteration of hydrological regime through destruction of adjoining wetland but advised that the proposed mitigation is certain subject to design and implementation of suitable drainage and hydrological strategy. We highlight that the implementation of appropriate mitigation is not certain until it has been clearly demonstrated that an appropriate drainage and hydrological strategy can be implemented – we would suggest that until that point the proposed mitigation is uncertain at best.</p>	<p>The ecological and landscape strategies have been prepared in parallel with the surface water drainage strategy to ensure that the assumed biodiversity benefits of any SuDS are realistic and achievable. The final assessment of impacts upon Botany Marshes LWS has been informed by the baseline information and proposed mitigation set out in within Chapter 17: Water Resources and Flood Risk (Document Reference 6.1.17) of the ES.</p>
			<p>We highlight that there is a need for any future submissions to clearly demonstrate that they have worked collaboratively with other specialists to ensure it is fully understood what the direct and indirect impacts from the proposal is and if the mitigation is achievable.</p>	<p>No response required.</p>
			<p>The submitted information has highlighted that due to the use of the site by wintering birds the proposed development will have a negative impact on South Thames Estuary and Marshes SSSI, Inner Thames Marshes SSSI , Medway Estuary and Marshes SPA/Ramsar/ SSSI and Thames Estuary and Marshes SPA/Ramsar and the mitigation is uncertain due to the requirement of off site mitigation. We highlight to fully understand the if the impact can be mitigated details of an off site mitigation area must be provided and it must be demonstrate that the mitigation is achievable and it can provide suitable habitat in perpetuity. We highlight that as the proposal will result in likely significant effect on the designated sites there will be a need for any further information submitted to enable the determining authority undertake an Appropriate Assessment.</p>	<p>The need for a Habitat Regulations Assessment (HRA) is acknowledged and information to assist the competent authority in making such an assessment is provided in Appendix 12.4: Shadow Habitats Regulations Assessment (Document Reference 6.2.12.4).</p>

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
			<p>The submitted information has highlighted that there will be a need for off site species mitigation and we would expect information to be submitted demonstrating that suitable mitigation areas can be created within Kent and ideally the immediate surrounding area. We highlight that due to the size of any off site mitigation areas and the habitat creation requirements it may not be possible for the proposed designated sites and the species mitigation to be located within the same area. It must be clearly demonstrated that the mitigation can be implemented and retained in perpetuity.</p>	<p>General Principles for Offsite Ecological Mitigation are provided within Appendix 12.10 (Document Reference 6.2.12.10), which include providing off-site land within the Greater Thames Nature Improvement Area.</p>
			<p>We highlight that we expect ecological surveys to have been carried out on the proposed off site mitigation areas. This will enable consideration of whether the proposed off site mitigation is appropriate and any requirements for habitat creation would not negatively impact any species currently present within the site.</p>	<p>A number of land holdings are being considered for delivery of off-site mitigation. Potentially suitable land will be subject to an initial Extended Phase 1 Habitat survey followed by an assessment of the potential impacts of any proposals for habitat creation/ enhancement on the existing habitats and species of conservation value. The impact assessment, and design of ecological mitigation measures will be informed by detailed 'Phase 2' ecological surveys as considered necessary following completion of the initial Phase 1 survey.</p>
			<p>The submitted information has detailed that the applicant is proposing to implement Net Gain and detailed that the proposed development will result in a loss of 355 units however the Net Gain information has been submitted as a PDF rather than a excel Metric and therefore there it is difficult to interrogate the data to consider if we agree with the conclusions. To enable full consideration of this matter we would expect a excel Net Gain Metric and corresponding maps showing the locations of the habitats detailed within the metric. We highlight that the loss of habitat (in Net Gain terms) may be higher than 15%. In situations where Net Gain is proposed we would expect information to be submitted demonstrating that it can be implemented and retained in perpetuity."</p>	<p>This information is provided in Appendix 12.2: Biodiversity Net Gain Assessment (Document Reference 6.2.12.2).</p>
<p>Ebbsfleet Development Corporation</p>	<p>Mitigation</p>		<p>Lack of information: The PEIR has not been developed to any significant degree from the EIA Scoping Report and therefore it is difficult or impossible to provide comments on the likely significant environmental effects of the scheme and whether the proposed mitigation is appropriate. Many of the comments made on the EIA Scoping Report are applicable to the PEIR and these are not repeated in this consultation response. We note that the PEIR was prepared in advance of the Scoping Opinion dated July 2020 - this Scoping Opinion needs to be reviewed and taken into consideration in preparation of the ES.</p>	<p>No response required.</p>

Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
	Cumulative effects		Assessments still to be carried out: Many of the PEIR chapters refer to assessments which have not yet been completed but which the applicant intends to carry out to inform the ES – EDC needs to see these assessments before we can properly consider the likely significant environmental effects of the proposed development. EDC expects to see a draft ES including these assessments for review, comment and proper consultation before the application is submitted.	No response required.
			Scheme description: The description of the scheme needs to be better developed, particularly in relation to construction scenarios and details, and the precise detail of what has been assessed needs to be much clearer: at present it is difficult or impossible to deduce. The PEIR records some operational and construction uncertainties – these need to be reduced as much as possible. There are also some areas of inconsistency in relation to the description of the scheme across the consultation documents including in relation to car parking provision that would benefit from some additional clarity as these lead to questions about the assumptions underpinning the PEIR and the subsequent ES.	No response required.
			Parameter plans: There is a lack of clarity within the methodology section of the PEIR of how the parameter plans have been used, the different scenarios that have informed the assessments and therefore whether a reasonable worst case has been assessed. Also how these parameter plans will be reflected as 'requirements' in the DCO. There should be a greater level of detail provided in this part of the PEIR. Some of the assessment chapters present some further details about the scheme or assessment scenarios that are not included in the Scheme Description or the other up-front chapters – this should be reviewed for the ES.	No response required.
			Assessment scenarios: There should also be consistency between the chapters in terms of the assessment years – and which years are assessed and on what basis needs to be given some careful thought and agreed with EDC.	No response required.
			Management plans: There are various management plans made reference to in the consultation documents but not all of them are consistently referred to in the draft DCO. The DCO application would also benefit from further explanation of how all of the plans will fit together.	No response required.



Consultee	Topic	Paragraph	PEIR Consultation Response	Response/Action Taken
			<p>Mitigation: Mitigation measures are, in many chapters, described only in generic terms, since further assessment work is ongoing and specific mitigation cannot be proposed in advance of those assessments having been completed. It needs to be clear what mitigation measures are 'embedded' and which additional. There are a range of commitments made in the PEIR which are inconsistently reflected in the draft DCO or not reflected at all. We have commented on these individually throughout the consultation response, but would welcome further discussions about how impacts and proposed mitigation from the developing EIA are translated into firm requirements in the DCO. We would also wish to further discuss the mechanism for the discharge of the requirements.</p>	<p>No response required.</p>
			<p>Cumulative schemes: There is very little information provided about cumulative schemes so it is not possible to comment on cumulative impacts. Obviously this is a fundamental omission given the interaction of this major scheme with the garden city proposals. There also appears to have been potentially a slight misinterpretation of the approach recommended in the Planning Inspectorate's Advice Note 17. Whilst some schemes are identified that will be considered in the assessment, there is no detail provided of their ZOIs or the ZOIs of various environmental aspects. Therefore, it is difficult to comment on or understand fully the rationale for the inclusion of those schemes.</p>	<p>No response required.</p>
			<p>Out of date legislation/guidance/etc: The applicant should ensure that current legislation, policy, guidance and development plan documents is considered and referred to in all cases – there are several cases in the PEIR where out of date documents are referred to.</p>	<p>No response required.</p>

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