

**Application by London Resort Company Holdings for an Order Granting
Development Consent for the London Resort (BC080001)**

Thurrock Council Relevant Representation

- 1.0 This Relevant Representation made is made on behalf of Thurrock Council. Thurrock is a unitary authority located on the northern side of the River Thames, within the county of Essex. Within Chapter 2 (Site Description) of the Environmental Statement (document reference 6.1.2) land at Thurrock, and more specifically land at Tilbury, within the proposed Order Limits is described as the 'Essex Project Site'. The proposed Works Plans (document reference 2.5) show that proposed Works within Thurrock would involve two locations comprising land adjacent to the Port of Tilbury (Work Nos. 3b, 16, 21b and 22) and at the roundabout junction of the A1089 with Dock Road, Thurrock Park Way and Windrush Road (the "Asda roundabout) (Work No. 21a). It is notable that proposed Work No. 16 partly includes land between the Mean Low Water and Mean High Water marks (where Thurrock has jurisdiction as a local planning authority), but also marine works below the Mean Water Mark where the local planning authority has no jurisdiction..
- 2.0 Development Plan Policy Overview
- 2.1 The statutory development plan for Thurrock is the Thurrock Core Strategy and Policies for the Management of Development (as adopted 2015).
- 2.2 Paragraph 3.18 of the Core Strategy identifies Tilbury as a 'Regeneration Area' and paragraph 3.34 states that Tilbury is a key location for employment in the Borough and will provide between 1,600 and 3,800 additional jobs in logistics, port and riverside industries. Paragraph 3.36 of the Core Strategy refers to enhancement of the landscape setting of Tilbury Fort and paragraph 3.37 refers to improvements to public access and informal recreation along the riverside at Tilbury. Table 3 of the Core Strategy lists a number of Strategic Spatial Objectives including increased prosperity and employment growth in Thurrock in the five employment hubs - including Tilbury (SS02) and port-related activity at Tilbury (SS019).
- 2.3 The Council's Core Strategy Spatial Policy for Sustainable Employment Growth (CSSP2) identifies Tilbury Port as an economic cluster and an area for future development. Port operations, logistics, transport and construction are identified as core sectors for Tilbury by this policy. Core Strategy Thematic Policy CSTP28 (River Thames) promotes the economic and commercial function of the river through, inter-alia, safeguarding additional adjacent land required for further port development.

2.4 A number of Core Strategy Thematic transport policies are of relevant to the proposals as follows. Policy CSTP14 Transport in the Thurrock Urban Area: Purfleet to Tilbury) notes the challenge raised by accommodating growth and the generation of additional traffic and includes measures to reduce car traffic. Policy CSTP16 (National and Regional Transport Networks) states that, inter-alia, the Council will work with partners to deliver improvements to national and regional transport networks to ensure growth does not result in routes being above capacity. Finally Thematic Policy CSTP17 (Strategic Freight Movement and Access to Ports) recognises that Thurrock is traditionally an area of port-related and freight activity. This policy sets out a number of measures to support the logistics and port sectors, and the positive impacts of freight activity in Thurrock and beyond.

3.0 Development Plan Policy Designation

3.1 The Order Limits within Thurrock is subject to the following planning policy designations as defined by the Thurrock Core Strategy policies map:

- Primary Industrial and Commercial Areas (Work Nos. 3b (part), 16 (part), 21b (part) and 22);
- River Thames (Work Nos. 3b (part), 16 (part) and 21b (part));
- Green Belt (Work No. 21a (part)); and
- Land for New Development in Primary Areas (Work No. 21a (part)).

3.2 It is notable that some areas within the Order Limits (part of Work No. 16) have no land use policy designations within the Core Strategy.

4.0 Summary of Main Issues / Impacts

4.1 The Council considers that the main issues for consideration and impacts to be assessed for the proposals within Thurrock are as follows:

- Green Belt
- Ecology and nature conservation;
- Landscape and visual impact;
- Heritage assets;
- Flood risk and water resources;
- Soils, hydrogeology and ground conditions;
- Land and river transport;
- Air quality;
- Noise and vibration;
- Land use and socio-economics
- Human health;

- Climate change; and
- Cumulative Impact.

4.2 The matters raised at this stage under the headings above will be subject of further review through the future submission of a Local Impact Report (LIR). Thurrock Council's LIR, and any associated Written Representations, will be reported to a future meeting of the Council's Planning Committee and will set out the Council's position in more detail.

4.3 For the purposes of this Relevant Representation, the below paragraphs set out a summary of the main issues and impacts as considered by Council officers. However, as noted above, the LIR and Written Representation will set out Thurrock Council's full formal response as agreed by Planning Committee Members.

4.4 Green Belt

The northern part of Work No. 21a at the Asda roundabout junction would involve development on land designated as Green Belt by the Thurrock Core Strategy policies map. An assessment of the development proposals against relevant policies for the Green Belt, including part 13 of the National Planning Policy Framework, is therefore necessary.

4.5 Ecology and nature conservation

Although the Essex Project Site is of limited value for ecological interests, both land parcels are within SSSI Impact Risk Zones drawn around statutory nature conservation designations close to the site. The Council's Landscape and Ecology Advisor considers that there are potential opportunities for enhancement to ecological and nature conservation interests. Thurrock Council does not intend to comment on the issue of Marine Ecology as this matter is beyond the jurisdiction of the local planning authority.

4.6 Landscape and visual impact

The submitted Landscape and Visual Impact Assessment concludes that the Kent Project Site proposals would result in an adverse impact of Major / Moderate Significance for receptors in Thurrock. The proposed multi-storey car park in Tilbury (Work No. 3b) will also be a prominent feature for local receptors. Accordingly, landscape and visual impact including design quality and mitigations strategies, are relevant issues for consideration.

4.7 Heritage assets

Chapter 14 of the submitted Environmental Statement correctly identifies those areas of known archaeological significance. However, at this stage it is apparent that further archaeological investigation and assessment of the proposals, and in particular the impact of the car park (Work No. 3b), is required.

The Grade II* listed Riverside Station, including floating landing stage is located with the boundaries of Work No. 16. At this stage, it is recommended that further information is submitted to better understand the impact of the proposed works on this designated heritage asset. Outside of the Order Limits for the Essex Project Site are a number of further designated heritage assets, including Tilbury Fort (Scheduled Monument and Grade II* Listed) and The World's End PH (Grade II* Listed). The potential impact on these assets needs to be further understood and additional submissions may be necessary for this purpose.

4.8 Flood risk and water resources

The Tilbury area, including land within the Order Limits is generally flat, low-lying former marshland located on the northern bank of the River Thames. The site is located within high risk flood area (flood zone 3a), although benefits from tidal flood defences. The issue of flood risk and related matters are therefore relevant considerations. The Council's Flood Risk Manager has advised that there are a number of points of detail which need to be clarified regarding discharge details, water quality, etc. These matters will need further consideration.

4.9 Soils, hydrogeology and ground conditions

The Essex Project Site has a history of commercial and industrial uses. Accordingly, there is the potential for ground contamination and this issue, along with proposals for associated remediation and the impacts upon hydrogeology, are relevant considerations. At the time writing the Council's Environmental Health Officer has not commented on the submission and any issues associated with this environmental topic will need to be addressed during the examination.

4.10 Land and river transport

Given the nature of the proposals within the Essex Project Site, the potential impact on the surrounding highways network, including both local and strategic routes, will be a key relevant consideration. The related impact on the local businesses, including ports within Thurrock, which rely on the efficient operation highways network is also a key consideration. The Council's Highways Officer has undertaken an initial review of the submitted Transport Assessment and considers that the potential highways impacts could be significant. A robust and thorough assessment of potential impacts is vital to the consideration of the proposals, alongside the potential for mitigation measures. The views of Highways England are important as the A1089, part of the A13 and the M25 (jct. 30) are strategic road assets.

4.11 Air quality

The proposal would give rise to emissions from construction vehicles on the road network and from vehicles accessing and egressing the parking areas

during the operational phase of development. There are two designated Air Quality Management Areas associated with roads close to the Essex Project Site. The impacts on air quality from the construction and operational phases of development, including emissions from vehicles are relevant considerations. At the time of writing, the Council does have the benefit of advice from an air quality specialist. Therefore, further comments on this topic may be submitted during the course of the examination.

4.12 Noise and vibration

The proposal would give rise to noise for human and ecological receptors from the construction phase and operational phase of the development. The impacts of noise and vibration from construction activities and during the operational phase of the development are relevant considerations. The Council's Environmental Health Officer concludes that there are no matters of fundamental disagreement with the applicant's assessment.

4.13 Land use and socio-economics

Proposed Work Nos. 3b and 22 involve development on land currently operated by the Port of Tilbury as new vehicle storage and car parking associated with port activities. The potential impacts of the loss or displacement of land used by the Port are matters to be considered. The potential for residents and businesses in Thurrock to share in the economic benefits of the proposals, such as the Outline Employment and Skills Strategy, is a relevant consideration.

4.14 Human health

The Council's Public Health Officer has reviewed the relevant chapter of the Environment Statement and raises a number of queries and points for clarification under the headings of: population and health; active travel; construction worker housing, health and wellbeing; and cumulative impacts.

4.15 Climate change

The emission of greenhouse gases during the construction phase and throughout the lifetime of the development and their resultant impact upon climate change is a relevant consideration.

4.16 Cumulative Impact

Proper consideration will need to be given to the Port of Tilbury expansion project (referred to as Tilbury 2) as an existing and partly implemented DCO, along with the Lower Thames Crossing (submitted as an application for a DCO in 2020 but subsequently withdrawn) and the Thurrock Flexible Generation Plant (DCO application currently undergoing examination). Relevant consideration will also be given to any planning applications within or adjacent to the Order Limits, particularly any significant planning proposals.

4.17 Thurrock Council internal consultee comments

Appendix 1 to this Relevant Representation provides the full text of the responses received by the local planning authority from internal Council consultees. These responses are provided for the benefit of both the Examining Authority and the applicant to highlight those matters where further information and / or clarification may be required. It should be noted that Thurrock Council's formal response will be provided via the Local Impact Report and Written Representations. Therefore, Appendix 1 is provided without prejudice to the Council's future submissions.

Appendix 1
Thurrock Council internal consultee responses

Thurrock Council – Landscape & Ecology Advisor:

Summary

- There are no issues regarding effects on terrestrial ecology within Thurrock due to the little amount of any habitat that will be directly affected by the scheme.
- There could be potential opportunities to use land around Tilbury Fort for Biodiversity Net Gain especially for wetland, grassland and invertebrates enhancements.
- Thurrock Council will not be commenting on Marine Ecology.
- The LVIA considers that the scheme would have significant effects on the residents of Grays, principally those in the south of the town due to the scale of the proposed development in an area which currently has little large-scale development and lighting when viewed from the north of the river. Thurrock Council agrees with this assessment.
- The visual effects on residents of Tilbury will be less as the site is already within an area dominated by large-scale commercial building; however the proposed multistorey car park will be significantly larger than any other building in the locality.
- The scale of the scheme means effects must be mitigated through good quality design.
- The cycleway link between Tilbury station and the ferry will be adversely affected by increased traffic and therefore mitigation measures to enhance its setting should be provided.

Terrestrial Ecology

APP-013 and APP-014 Sheets 8 & 9 show the limited amount of vegetation present within the redline boundaries close to the proposed car park and Asda roundabout. The vegetation that is present is predominately amenity grass and some shrub beds.

It is agreed that the proposed scheme would not any significant adverse effects on Terrestrial Ecology in Thurrock.

The proposed brown roof for the Tilbury multistorey car park would have some biodiversity benefits, however the success of this will be dependent on the opportunities to provide improved linking habitat within the local area.

During discussions with the project ecologists they asked if there may be areas that could be used for offsite mitigation and biodiversity net gain. It is considered that there is potential for areas of grazing marsh surrounding Tilbury Fort to be used if there are insufficient sites in Kent.

Marine Ecology

Thurrock Council will not be commenting on Marine Ecology and will differ to Natural England and the Environment Agency and MMO on these matters.

Landscape and Visual

It is accepted that the EIA has been undertaken in accordance with Rochdale Envelope principles. The Parameter Plans confirm that Gate 1 will be the biggest component with heights up to AOD +100m. More localised elements will extend up to AOD+128m and the 'Foadarche' within London Resort Plaza being up to AOD+130m. The proposed multistorey car park in Tilbury would be up to AOD+42m.

The LVIA (Table 11-13) assesses the effects on Visual receptors in Grays to be Major/Moderate (Adverse) Significant; these include residents and users of Grays Beach. The visual representations show the indicative scheme and the maximum parameter heights. The indicative scheme as illustrated would not have significant effects; however It is not clear what will be the quantity of elements that are towards the maximum parameter heights. It is envisaged that these elements are the IP experiences that they are likely to be lit and therefore visually prominent at night.

The scale of the proposed Kent scheme means that standard screening and buffering is impractical and therefore the overall quality of the scheme and integrated mitigation through lighting strategies etc will be key to minimise adverse visual impacts.

The effects on viewpoints from Tilbury (64 & 65) have been assessed as Minor (Adverse) Not Significant. While sited in an industrial/commercial setting the car park will be up to 42m high and therefore a prominent feature for local residents. The quality of its design will be vital for minimising the adverse effects.

The main features shown within Landscape Strategy and Landscape Masterplan the Tilbury Terminal are the brown roof and some wildflower planting on verges. Indicative illustrations do show planting and areas of public realm within the site, particularly leading to the terminal, and these are referred to within the Landscape Strategy. More detail is required to ensure that good quality public realm is provided to mitigate the effects of the scheme on the setting.

APP – 263 Public Right of Way and Public Access Strategy Sheet 4 of 4

The plans show the rights of way leading towards Tilbury Fort but does not address the cycleway link between Tilbury Station and the Ferry. While the surface is adequate the setting is more. The proposal would lead to significantly more vehicles using the road adjacent to this cycleway. The upgrading of the public realm surrounding this route needs to be included so that existing and new users are not detrimentally impacted by the scheme.

Thurrock Council – Archaeology Advisor:

There have been two meetings with the heritage specialists from the applicants explaining the work they have undertaken to date. Unfortunately the work undertaken in Thurrock is limited.

The Cultural Heritage and Archaeology chapter correctly identifies those areas of known archaeological significance. There is concern that they have not assessed the archaeological impact especially of the car parking element of the proposal within Thurrock. Within paragraph 14.146 of vol 1 chapter 14 it states *The magnitude of the effect is dependent upon the depth of deposits and the depth of the proposals in this area, which are both currently unknown, although the Development Proposals allow for a basement level. As a worst case scenario (allowing for excavation for a basement level) a high magnitude of impact is assumed but as the significance and presence of the deposits is unknown the significance of effect is also unknown.*

At present the applicants have undertaken no assessment on site as to the potential archaeological deposits present and their significance.

Within the archaeological mitigation section paragraph 14.251 there is no indication that further archaeological investigations are proposed to be undertaken on the development areas to provide an understanding of the below ground deposits. These should have been undertaken to inform the DCO process as is happening with the Lower Thames Crossing.

It is pleasing to see that there is a recognition that there is the potential for the furthering of cultural heritage knowledge and appreciation via the use of various media and we would hope this would extend across to the Essex side of the river and that the museum has been contacted.

Further discussions with the archaeological consultants will be needed to ensure that appropriate assessment of the below ground deposits is to be undertaken, ideally in advance of the decision by the Inspector.

Thurrock Council – Built Heritage Advisor:

The proposed London Resort has been separated into two project sites, the Essex Project Site and the Kent Project Site. Both of which have the potential to impact the significance to heritage assets within Thurrock through change to their settings. The Essex Project Site also includes the alterations to the Grade II* listed River Station.

Within the Essex Project Site Boundary

The proposed works include the alteration and extension to the Riverside Station, including floating landing stage (Grade II* Listed Building, List Entry 1111547). The Built Heritage Statement (Appendix 14.2 – Built Heritage Statement, December 2020, Document reference: 6.2.14.2, Revision: 00) has begun to assess the significance of the building, however it is recommended that a more detailed assessment should be produced through the determination period.

Limited information has been provided on proposed works at this stage. However, the Built Heritage Statement states the works will enhance the significance through repair works and increased use, and the proposed pontoon, an extension to the listed landing stage, will cause no harm to the significance (paragraphs 7.2.2 – 7.2.7). Concerns are raised regarding these assessments (and their conclusion) as based on the information submitted, it is difficult to assess the potential for impact.

At this stage further information is required to begin to understand the impact on the designated heritage asset:

- Detailed Heritage Assessment of the building and landing stage – to provide a detailed baseline and inform the proposals
- Condition survey – identifying works that need to be carried out
- Detailed existing and proposed drawings – including works being proposed to the main building and the floating landing stage. No information has been provided on how the pontoon going to be attached to the listed structure.
- Structural report by a conservation specialist - to understand the potential impact of the increased footfall/use on the structure
- Conservation management plan – to ensure that the building will be regularly maintained, and the increased use of the floating landing stage will not result in its deterioration.

Further information may be required once the full scope of the proposed works are provided and understood.

Outside the Application Boundary

The Cultural heritage and archaeology ES Chapter (Environmental Statement, Volume 1: Main Statement, Chapter 14 – Cultural heritage and archaeology, Document reference: 6.1.14, Revision: 00, December 2020) and Built Heritage Statement (Appendix 14.2 – Built Heritage Statement, December 2020, Document

reference: 6.2.14.2, Revision: 00) identifies and assesses the following designated heritage assets:

- Tilbury Fort (Scheduled Monument, List Entry 1021092) and the Officer's Barracks, Tilbury Fort (Grade II* Listed Building, List Entry 1375568)
- World's End Inn (Grade II Listed Building, List Entry 1111632)
- Wharf Public House (Grade II Listed Building, List Entry 1147907)
- Church of St Clement (Grade I Listed Building, List Entry 1147660)

The NPPF Annex 2: Glossary defines the setting of a heritage asset '*The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.*' As part of the assessment of impact due regard should be the potential for wider effects of the proposed development, as set out in Historic England's GPA3: The Setting of Heritage Assets (Second edition, December 2017), this can include but is not limited to: '*Change to built surroundings and spaces; Change to skyline, silhouette; Noise, odour, vibration, dust, etc; Lighting effects and 'light spill'; Change to general character (eg urbanising or industrialising); Changes to public access, use or amenity; Changes to land use, land cover, tree cover; Changes to communications/accessibility/permeability, including traffic, road junctions and car-parking, etc.*' Further assessment should be undertaken, particularly in regards to Tilbury Fort, that incorporates the potential for wider effects.

The Built Heritage Statement, under Section 3, sets out that the methodology has been informed by the ZTV (Environmental Statement, Volume 3: Figures, Figure 11.9 ZTV of Proposed Parameters, Document reference: 6.3.11.9, Revision: 00, December 2020) which covers 5km. However cross referencing the ZTV with the Designated Heritage Map (Environmental Statement, Volume 3: Figures Figure 14.3 – The Project Sites and Designated Heritage, Assets within 5km, Document reference: 6.3.14.3) demonstrates a number of designated heritage assets have the potential to be impacted.

Although within the Built Heritage Statement it is maintained that heritage assets beyond 1km were assessed as part of a site walkover (paragraph 3.2.1), it would be expected that viewpoints were selected to demonstrate that there would be no impact, particularly in areas with groups of heritage assets, heritage assets that are sensitive and those where special interest is derived due to their importance strategic location. As such the below recommends further assessment on surrounding heritage assets and the additional viewpoints based on the map of Photo viewpoint Locations (Environmental Statement, Volume 3: Figures, Figure 11.10 Photo viewpoint Locations, Document reference: 6.3.11.10, Revision: 00, December 2020).

Heritage assets to be scoped in and fully assessed:

- Coalhouse Fort battery and artillery defences (Scheduled, List Entry 1013943)

- West Tilbury Conservation Area and the heritage assets within
- The Riverside Station, including floating landing stage (Grade II* Listed Building, List Entry 1111547) – potential visual impacts to the setting not addressed.

Viewpoints to be included for verified views

It is expected that a number of the selected viewpoints shown in map of Photoviewpoint Locations are included for verified viewed and assessed for the potential impact on the heritage assets.

This includes:

- Photoviewpoint 35: South of Coalhouse Fort on circular path – to understand the visual impact to - Coalhouse Fort battery and artillery defences (Scheduled, List Entry 1013943)
- Photoviewpoint 36: Footpath 26, West Tilbury - to understand the visual impact to West Tilbury Conservation Area and the heritage assets within
- Photoviewpoint 38: Fort Road, Tilbury - to understand the visual impact to Tilbury Fort (Scheduled Monument, List Entry 1021092) and the Officer's Barracks, Tilbury Fort (Grade II* Listed Building, List Entry 1375568), World's End Inn (Grade II Listed Building, List Entry 1111632) and the Riverside Station, including floating landing stage (Grade II* Listed Building, List Entry 1111547).

Additional viewpoints based on designation map and ZTV

The following viewpoints should be included for the assessment of impact.

- Viewpoint from the east side of Tilbury Fort and from within – to understand the impact to Tilbury Fort (Scheduled Monument, List Entry 1021092), the Officer's Barracks, Tilbury Fort (Grade II* Listed Building, List Entry 1375568), and the Riverside Station, including floating landing stage (Grade II* Listed Building, List Entry 1111547)
- Viewpoint from Orsett Conservation Area – to understand the impact to the Conservation Area and the heritage assets within
- Viewpoint from Church of St Clement (Grade I Listed Building, List Entry 1147660)
- East Tilbury Conservation Area

At this stage, this list is not exhaustive and as set out in the PPG, local planning authorities non-designated and designated heritage assets can be revealed and identified as part of the decision-making process. Further consultation on the selection of viewpoints would be recommended to ensure that the assessment of impact is reflective of the proposed development.

It is recommended that an overlay of the heritage assets, ZTV and viewpoints is submitted to ensure that the scoping has appropriately considered the heritage assets within the 5km boundary. It is also recommended that the Designated Heritage Map (Environmental Statement, Volume 3: Figures Figure 14.3 – The Project Sites and Designated Heritage, Assets within 5km, Document reference: 6.3.14.3) is updated

and resubmitted as conservation areas within Thurrock have been missed off and a number of conservation areas should be considered as part of the scoping process.

Summary

The Cultural heritage and archaeology ES Chapter (Environmental Statement, Volume 1: Main Statement, Chapter 14 – Cultural heritage and archaeology, Document reference: 6.1.14, Revision: 00, December 2020) and Built Heritage Statement (Appendix 14.2 – Built Heritage Statement, December 2020, Document reference: 6.2.14.2, Revision: 00) has identified that the proposed development will likely cause no harm to the significance of the surrounding designated heritage assets and enhancement to the Grade II* Riverside Station. However, it is considered that the applicant has not fulfilled the requirements of paragraph 189 of the NPPF, as the assessment is not sufficient enough to understand the potential impact of the proposed development on the significance of the identified heritage assets.

We would welcome further discussions through the determination period. At this stage, concerns are raised that the proposals have the potential to cause harm to the significance of a number of heritage assets, as defined and set out under Section 16 of the NPPF.

Thurrock Council – Flood Risk Manager:

A number of comments were raised as part of a pre-application meeting by Essex County Council in the past on the above application and they are as follows:

As discussed, in principle the drainage strategy looks acceptable at this stage in the process, subject to further consideration being given to the following:

- 1) Use of additional SuDS and Source Control features such as Rainwater Harvesting, Rain Gardens, Bio retention areas, SuDS Tree Planters etc. Additional features should be integrated into the proposed landscaping strategy for the development to provide additional amenity and bio-diversity value.*
- 2) Water quality provisions to be made in accordance to the CIRIA SuDS Manual (C753) Simple Index Approach. Where traffic movements are in excess of 300 per day then medium pollution hazard and 2 stages of treatment should be considered in the proposal.*
- 3) Reference should be made to EA guidance on climate change allowances for outfall conditions to the Thames tidal estuary, for consideration as a possible relaxation over current Essex SuDS Design requirements if this is proven not to have a detrimental impact on pluvial flood risk.*
- 4) Provisions to be made for the full tide locking scenario and evidence provided that the drainage system half drains down within 24hrs for the 1 in 30yr RP, to allow capacity for a follow up 1 in 10yr RP storm.*
- 5) Any third-party agreements being secured to discharge to the Thames tidal estuary.*
- 6) Reference should be made to the Thurrock Local Flood Risk Management Strategy (2015) within the FRA to identify any Areas of Critical Drainage (AoCD) that might be impacted by the proposed development.*

I have reviewed the drainage strategy and associated calculation in light of the above and have the following comments:

1. Considering the nature of the development to include 2500 car parking space and 50 buses, it is expected that the site will have a high level of pollution footprint. Hence it is imperative that the design has adequate provision to remove the pollutant through a treatment train. Currently the proposal intend to make use of geocellular storage and some of the permeable pavement. It is not clear as to what proportion of the storage will be dealt by each of these structures. Also the proposed geocellular storage do not provide the water quality benefit intended by a treatment train. Can the applicant revise the strategy in light of this comment?
2. The discharge rate of the site is limited to 38l/s according the calculation provided. In a tide locked situation there could be potential for no flows from the 200mm outfall . If it was to be mitigated there may be a requirement of additional

storage and restrict flows to a minimum of 5l/s/ha. Can the applicant clarify how the above situation will be mitigated?

3. I do not see the reason why green roof could not be used on the multi-storey car park. This should provide the necessary biodiversity and interception storage. Can the applicant reconsider the strategy.
4. How exceedance flows are to be managed on the site.?
5. Can the calculation be revised on the basis of FEH methodology not FSR as this is not a greenfield?
6. As mentioned, no foul water strategy has been submitted as part of the development, which appears strange considering the number of buses and visitors using the area(especially considering waiting times and bus drivers facility). Should facilities be provided as part of future provisions, rainwater harvesting be implemented as part of such facility.
7. Can the applicant confirm if ample consideration has been given to critical drainage areas as mentioned in Essex Council's comments above.

Thurrock Council – Highways Officer:

Summary

It is clear from considering the Transport Assessment as submitted and the accompanying documents and discussions with the applicant that this development will have a significant impact on roads and transport facilities within Thurrock. Nevertheless, it is accepted that the main routes that will be used to access the development proposal in Thurrock are mainly those within the jurisdiction of Highways England. However, it is quite clear other Thurrock routes such as the A13, to the east of the A1089 junction and the A1013 Stanford Road are intrinsically linked with the main strategic routes and are likely to be impacted by the development.

The key issues are bullet pointed below and are expanded upon in this report.

- Assessment of the local road network, specifically, A126, A1306, A1013, Fort Road, against rat-running
- Assessment of St Andrews Road, particularly along new Port access road and its junctions with Ferry Road and Fort Road
- Assessment and mitigation measures for ASDA Roundabout
- Modelling assumptions and outputs
- Proposed car park facility – Quantum, access, and existing car parking (relocation and/or provision)
- Parking Management for Tilbury Town
- Maximising sustainable travel modes (bus, train, ferry, cycle) with infrastructure and urban realm enhancements
- Construction phases of the development
- Impact on local business (including internationally significant ports) and residents
- Little data within TA to assess impact on Thurrock network.

Thurrock Core Strategy policy PMD10 Transport Assessments and Travel Plans

In regards to the Transport Assessment, it continues to state that the impact on the local network will be 'insignificant' due to movements to site being focussed outside of the peak. There has been no evidence to support this statement and it raises key concerns regarding capacity on A1089 Asda roundabout and J30.

Modelling evidence - From a wider prospective resulting from recent workshops, concerns were raised by Kent and TBC regarding modelling data and the assumptions that seem to have been made regarding impact on the network. Following review of the Transport Assessment those concerns remain. In addition a number of points were raised regarding the Lower Thames Crossing and regards modelling runs and whether these were up to date and had included growth scenarios. In addition regarding access from A128 / A13 as a result of Lower Thames Crossing severing this link as part of their proposals and whether two lane reduction on Lower Thames

Crossing, southbound between M25 and A13 has been factored into London Resort modelling.

In addition there needs to be clarification that the modelling takes into account of future growth in Thurrock or elsewhere? We are aware that sensitivity testing has been undertaken for LTC modelling (including growth scenarios). Results from this modelling should be used to inform the TA. London Resort seem to be using 'parts' of the Lower Thames Crossing cordon model, but we did question if the modelling took account of future growth/movement on the network as part of Local Plan aspirations and LTC proposals. Has for instance, the impact at A1014 junction in the Lower Thames Crossing scenario, particularly with regard to the A128 to A1089 movement severance issue been considered? This is likely to have significant impact on local business and residents in Stanford-le-hope and Corringham, including access to ports of international significance.

Analysis of traffic impact data - The applicant has indicated that the main traffic impact of the development will be during the evening peak period. This is difficult to understand as it is clear that it is likely that many users will be looking to access the facility at the opening times thus in regards the impact on Thurrock, taking account that the users will need to park and travel across on a ferry, it may be likely that this development will also significantly impact on the Thurrock Network in the morning peak period.

It would appear that the applicant has not fully considered journey times worked back from the opening time of the development to assess the likely arrival times of users of the proposed car park at the Port of Tilbury. This is necessary in order to understand the potential impact of the development on the Thurrock Network. Looking at the assessment work regarding the likely impact periods of traffic on the network within the Transport Assessment it seems the concentration has been on access to the development locally to the facility and not that in regards its impact in Thurrock.

Thus it will be necessary for the applicant to review this current assessment looking at how journey times and arrival and departure times may differ in respect of access to the car park facility in Thurrock. It is suggested that a wider peak period is considered. As already stated, it appears that only access from the A1089 has been made and there seems to be no acknowledgement of potential access from local routes and how users will access this facility to fully understand its impact and the potential impact on the local network to access the facility.

ASDA Roundabout mitigation - A mitigation scheme for Asda roundabout has been developed and a layout drawing referred to in the documentation that did not seem to be included in the appendices stated. It is known that this incorporates traffic signals on the northern and southern approaches. This does not appear to be based on a clear evidence approach and does not appear to have been designed by DMRB

standards and safety audit. Whilst this is not necessarily something that can be directly challenged by the Authority, there will be impact on the local network by these proposals.

This is also the same mitigation suggested by Tilbury 2 as part of their DCO process and this was not supported by Highways England at that time. Furthermore, as part of the LTC proposals, discussions about the ASDA roundabout requiring significant capacity improvements by 2026 as part of HE's own modelling exercise for the area will likely result in this junction becoming overcapacity sooner than expected with these proposals.(note – interestingly, the HE sponsor team for TLR have suggested the A1089 signalisation scheme could be reconsidered).

This was raised with applicant and they were asked if they had discussed the proposal with Highways England and no firm answer has been made to date. The Authority has suggested as part of the Tilbury DCO and the LTC DCO processes that a more robust solution (possibly grade separation) will be required to ensure that the capacity and ultimately safety issues at this strategic junction are not prejudiced and access from the local road network is not negatively affected. Again, this is not something that the Authority can directly request as it is not its asset; it is identified that lack of meaningful assessment and mitigation measures will prejudice the Local Highway network.

The TA does not reference the potential for a Tilbury Link Road scheme. Although this is in initial stages of discussion, HE are progressing steps towards a business case for TLR and it is clear that a TLR scheme would provide significant benefit for the site, reducing pressure on the local network, SRN, J30, and A1089 roundabout.

Car Park facility - It is evident that the proposal to include a new car park facility with a ferry service from Tilbury is to relieve the potential impact of the development on the Dartford Crossing and junctions around the A2. It is not clear that the applicant has evidenced the north to south routing to provide an idea of the potential impact on the Thurrock Network and SRN north of Dartford Crossing. In addition it is not clear if the applicant has clarified whether they consider there will be any reversal of potential traffic movements with the potential for traffic from the south to the north to access the proposed facilities in Thurrock.

It is also not clear that the applicant has looked at the potential impact on a local level to provide a greater understanding of the potential access to the local network from the car park facility. It would appear that the proposal is to utilise the current area used by the Port of Tilbury for parking for the Cruise Terminal uses. There does not seem to be an indication as to what is proposed in regards the relocation of the existing car park and how this may impact on the road network or whether the car park will still provide cruise terminal parking and Gravesend Ferry parking. This is particularly critical in helping to safeguard the existing ferry arrangements, where parking currently

takes place on the landing stage, and it is envisioned this would no longer become possible under the proposals of the development, and therefore this displacement must be addressed.

If provision is to be provided for those existing uses, then it is clear that a larger multi-storey style building will be needed. This was intimated at earlier meetings, but no clarification was provided at those meetings, nor in subsequent submissions as to how this facility will be managed, by whom and what mechanism are in place to prevent over burden of parking by one operator over the other.

Thurrock Core Strategy policy PMD9 - Road Network Hierarchy

In the initial discussions with the applicant, it was clear that a traffic impact assessment needed to be undertaken on the A13, A1089 and the ASDA roundabout. However, it was considered that potentially rat-running routes such as Fort Road, A126, A1306 and the A1013 should also be reviewed including the links from the Thurrock road network to the ASDA roundabout. It was also considered that the new junctions on the extended St. Andrews Road to the new Port of Tilbury access are also assessed as the road layout has significantly changed at this location and have been designed for the Tilbury 2 traffic generation and local conditions only.

It is noted that an assessment has been undertaken at the ASDA roundabout and the Fort Road junction but not at further locations as set out in initial discussions.

Port Access road - The applicant has looked at the new road layout resulting from Tilbury 2 works and has indicated that there will be minimal impact. However, in review of the TA and the details provided by the applicant's agents, as well as the identification of the type of vehicles using the new link road, this is not evidenced to support this conclusion and therefore not totally agreed that a status quo in regards the junction layout. There are concerns that access to Tilbury 2 may be affected by traffic turning in/out of the London Resort and may give rise to unacceptable harm to the highway in terms of safety and link and node capacities.

Thurrock Core Strategy policy PMD 8 Parking Standards

EV parking - It is noted that the Transport Assessment makes reference to some parking spaces will also be electric vehicle parking and charging facilities within the car park facility. However, future proofing the parking facility will be key in driving the agenda for EV rollout and the Government's ban on ICE vehicles by 2035.

Whilst putting the facilities in now may not be advantageous and a limited number initially will be appropriate; there is a need to ensure that future proofing the entire parking structure for easy placement of additional facilities should be included. This includes suitable cabling infrastructure and supply from the grid.

It is also noted that there are opportunities to provide electricity generation to offset the costs of charging and this does not appear to have been explored. Whilst not a Highways Issue, it does seem a missed opportunity in this respect.

Proposed parking level – As already stated, the London Resort car park will be located on the existing car park for the Cruise Terminal and ferry services. There is no reference to where the existing parking be relocated or if it remains in this area. However, there needs to be clarification at how the 2,500 vehicles was reached in regards its impact strategically and locally. Some concern also remain that the proposed 2,500 parking spaces could grow over time; particularly if the cruise terminal parking is provided within the site and no protective provisions made to safe guard those spaces. Therefore potentially the final number for parking and therefore movements may not be fully known; particularly if Sustainable Travel initiatives are not robust and future proofed to reduce car borne trips. Anecdotal experience of officers visiting Theme parks in the UK does give the view that a very high proportion of car borne trips to those sites. The lack of evidence to support this proposed parking provision is concerning and request for further clarification is being sought.

Impact on surrounding area – The ferry link is a positive improvement for Tilbury that will enhance sustainable travel modes within this area. However, this is a double-edged sword as it will likely attract significant displaced parking into the Tilbury Town area. This is particularly as a result of the placement of parking facilities for the London Report and may result in visitors displacing parking onto local roads to access the non-car modes of transport. This is critical for employees that live north of the river as it is assumed that the 2,500 car parking spaces are only for visitors and expectation that London Report employees will have to either travel by Public Transport or park elsewhere. In total, only 500 spaces have been allocated for employees, and it was not made clear if any provision is north of the river, though the assessment states that there would be an increase to 11% of mode share by staff to work in Kent from Thurrock, as oppose to 1% as current. Therefore, confirmation of staff parking provision in Thurrock should be provided as well as location.

It is noted that the applicant has not been able to carry out a stress test for parking in Tilbury and the surrounding roads to the new car park facility. Clarification is sought on whether this non-car facility and the car parking provision is purely for visitors or will also be for use by staff?

Parking Management, Tilbury - Statements about managing parking in Tilbury were made but were light on detail and mainly were around parking management (yellow lines). A more robust assessment and mitigation package would be required to reduce the likelihood of local parking problems occurring and it is noted that the applicant is suggesting a potential phased approach to resolving potential parking issues. This is not wholeheartedly agreed and it is suggested some initial restrictions are investigated

to prevent parking in close proximity to the proposed car park. A stress test of the existing issues is therefore crucial to ensure a base line is identified for future measures.

Of course any changes made are subject to public consultation and may not be supported by residents. A protective provision and the securing of a contribution to investigate and redress issues as they arise will be required.

Whilst not raised in recent discussions, there was a statement made about pushing visitors to sustainable travel choices, rather than by car. This should be commended but will be a difficult challenge in the short term. A method of perhaps controlling this by the applicant may be to consider car parking charges for their car parks. However, this will likely increase the chance of parking on local routes and is a double edged sword as charges will likely increase the chance of local parking issues.

Nevertheless, if this is being looked at, it is suggested that a portion of the parking charge be provided to the Local Authority, to be used to enhance parking control and enhance sustainable travel choices. This would be potentially a good opportunity to collaborate to ensure that any demand changes can be addressed over the life of the development, rather than initial fixes and no further input from the development team. Such a measure is implemented at Stanstead airport, with the funds utilised to provide supporting sustainable transport options.

NPPF - Maximising Sustainable Travel Modes

Walking and Accessibility – Enhanced walking routes are critical to enable access from key transport hubs and the local community to the ferry point. While the route from the station to the ferry terminal have been considered, has there been consideration for a more direct route from the main Tilbury community to the ferry via a new access point which is more direct and attractive.

Wayfinding is also an important consideration – The Council has been working alongside the Port of Tilbury to provide enhanced wayfinding within Tilbury, with linkages to the ferry. As part of this, some additional support to upgrade these finger posts and totems with the necessary updates to London Resort would be welcome, especially where infrastructure is improved.

More details on the walking route from the car park to the Ferry Terminal are required. With up to 25% of car visitors to the site arriving via Tilbury, pedestrian flows will increase significantly on the area and expected improvements to the current conditions are accordingly required. This includes details on the walking route from access point A 11.1 to Tilbury Ferry Terminal, specifying extensions/upgrades to the pavement and/or new crossing facilities up to the highest standard where needed.

The Council also seeks more clarity on the point 10.6.32 of the Appendix 9.1 – Transport Assessment, specifically regarding the mentioned “a new access point which will be installed and will connect to the northbound shared use path which extends between the Port of Tilbury and Tilbury Town Centre”.

Cycle Parking and accessibility - The cycle strategy used seems to be out of date and does not reflect recent changes to Council policy and guidance. This links to the Tilbury 2 road layout and the cycle route/crossing provision on Dock Road, Calcutta Road and Thurrock Park Way etc. This is particularly with regard to the link from the train station to the new implemented Toucan Crossing on St Andrews Road being quite tired and not to current cycle route standards.

The Transport Assessment highlights the creation of cycling infrastructure and routes within the local vicinity, however there are a number of issues which require addressing. A route that links Tilbury Town railway station to the ferry departure point is included, however, there are no routes linking to other communities. One such route is the enhanced link to Grays. The TA utilises the Propensity to Cycle Tool and Cycle Infrastructure Prioritisation Toolkit, to identify enhancements, however their limitations means the actual links are not identified. There is the option of completing a link to central Grays at Manor Road via Thurrock Parkway with a short bridging/culvert structure across the watercourse, which would overcome severance issues create a shorter and more attractive/less remote walking and cycling link for staff to Tilbury.

Significant improvements are also required to the existing route from the station to the ferry, along the A1089, with a need for an off road cycle route which complies with LTN 1/20 design principals. This routes needs to be attractive, safe and accessible to all. Enhancements are also required to prevent illegal parking and blocking of the routes, with enhanced infrastructure with dropped kerbs and reduced need to criss-cross the road to remain on the cycle route. The HGV nature of this route means it has reduced attractiveness, and the creation of a usable cycle route would help increase the use of staff to travel sustainably to the landing stage, as well as support the wider community. Segregation of the route is critical, as shared paths are now discouraged. It is important that the overall public realm of this link is considered.

In line with LTN 1/20 recommendation, cycle parking should be provided at interchanges with other modes of transport, and it will be essential for cycle parking facilities to be provided on the north side of the river for those who decide not to take their cycles on the Park and Glide ferry. Due to space limitation it would be preferable for the location of the cycle parking to be within the car park for Phase 1 and the multi-storey car park for Phase 2, although proposals for cycle parking within Tilbury Ferry Terminal would be welcome for consideration. Cycle parking facilities should be covered, secure, have surveillance and be of high quality.

Within the Tilbury community, the TA identifies provision of cycle infrastructure along Dock Road, Calcutta Road and Montreal Road, with the proposal of speed reductions to 20mph with the removal of speed cushions as part of route 5. The provision of these on-carriageway facilities will require these to be mandatory with light segregation from general traffic to provide a protected space for cyclists with good quality surfaces. Additionally, the support work to the local authority to ensure the appropriateness of the reduction of speeds and the impact on traffic flows, and the ability to traffic speeds to be restricted to these levels.

Bus provision - It is noted that it is proposing to extend current services 73 and 66 to the Tilbury Ferry Terminal and run a dedicated shuttle to and from the Tilbury Ferry Terminal and Tilbury Ferry. Can the applicant therefore set out how this may impact on the current 99 service linking the existing Tilbury Ferry to Tilbury Station? Currently, route 99 timetable is set to correspond with Ferry arrivals and departures while the user doesn't have to pay for the bus service if they have a valid train ticket (or refunded if and when purchasing a train ticket). It is crucial to ensure that the new shuttle ticketing would make it attractive to use and avoid as much as possible overlapping services of the different routes with longer waiting times.

The extension of services into this area is key to promoting that sustainable travel agenda; but it is questioned why this is not expanded further to capture services that travel outside the borough, such as Brentwood Basildon and Castle Point Authorities. Detail around how the routes of the 66 and 73 being extended are also important, and if both will be diverted, and would this result in the end of the 99 service.

From a staffing perspective, it is good news that bus services linking to Tilbury Ferry will be extended, however there is no link from the east – such as Stanford le Hope. Additionally, in order to promote sustainable travel via bus use, consideration needs to be provided where low cost or free access of the buses is provided to staff alighting and boarding at Tilbury ferry, to encourage non-car use. This should be offered on those services which are being subsidised to travel to the ferry.

Clarification of the proposed new shuttle service on a 20 minute frequency is also sought as to how the applicant intends to make the service coexist with the 99, while making journeys friendlier, simpler and easier to understand for users.

In regards the proposed improvement of transport facilities it is important that the applicant will need to highlight to visitors that it may be more sustainable to use alternative modes of transport thus it may be appropriate for the applicant to consider improvements to the bus facilities to enable access from Tilbury Station to their proposed ferry services including terminus points. It is likely that a bus hub would be required either at the Tilbury station area or at the ferry terminus so that services can be more integrated.

There will also be a need to provide enhanced bus infrastructure across this vicinity to make bus user more attractive and enable more people to use bus services, as both staff and visitors. Features such as new and enhanced bus shelters, real time passenger information, seating and other operation features for bus and coach drivers is sought.

This application also provides an opportunity to work with the bus operator and local authority to implement low carbon and cleaner fuel technologies, with access to electric and/or hydrogen fuel opportunities at the end destination for the ferry. The Local Authority would welcome discussion and commitment to explore the implementation of these, given the air quality issues within this vicinity.

Tilbury Ferry Service - It is noted that the Transport Assessment makes reference to the current Tilbury Ferry and that it is unlikely that the new proposals will impact on the existing ferry service. However further clarification will be required in this respect.

It is also well known that on certain occasions the Tilbury Ferry is unable to run due to fog, exceptionally low tides, and adverse weather conditions etcetera. Thus the applicant will need to consider and clarify what contingencies will be necessary in this respect and in addition what contingencies will be in place for breakdowns or servicing of vehicles etcetera for the new ferry services. Issues of fog can affect running on the Thames at all times of the day, especially during the mornings and as late as lunch time.

Within the TA, there is reference that the existing ferry service will not be impacted by the proposed ride and glide service, however there remains real concern that such a proposal will significantly impact and potentially make the ferry service defunct. Therefore, consideration and engagement is sought to ensure the ferry is not put out of business by free use of the ride and glide for non-park guests using it to cross the river, unless at a time when the ferry is non-operational – due to a breakdown. The park and glide should not provide an opportunity to starve the existing service of funds and operating potential. This is a measure to safeguard the link.

Enhancements of the ferry landing stage also need consideration, and ensuring there remains a landing and departure point for the existing ferry, and that this is safeguarded for the future. Thurrock Council currently fund the business rates for this landing stage, and the service which is part funded by the Council must be able to continue using this, with its access safeguarded for many years into the future.

In terms of access for staff to travel from Thurrock/north of the river to the resort, details around when the park and glide would commence, and how these early starters will be able to access the park are also important. Will there be a reliance on the existing ferry service. Also, into the future, will journeys potentially commence via Gravesend to the resort.

Discussion regarding amalgamation of the journeys from London, and the desires of Thurrock Council to utilise the River for journeys in the morning and evening peak for commuters is also welcomed.

Ongoing Management of Sustainable Transport Measures – It is requested that the applicant provide details as to how these sustainable transport measures which are to be funded will be maintained into the future, and how sustainable measures will be managed and minored. This will likely include a review process by interested local authority parties. Thurrock Council will require monitoring of measures that are within the boundary of Thurrock, including sustainable transport measures involving staff, as well as traffic flow measures. It is suggested a stakeholder group is created, formed of Thurrock and Kent County Council, Highways England, with invitation to the borough Councils of Gravesham and Dartford, with representation from the developer and Management Company. A supporting travel plan is also required. Thurrock Council has a monitoring charge for all travel plans. This travel plan will focus particularly on staff north of the river, as well as monitoring and measures to promote sustainable travel by guests accessing from north of the Thames as well, or via the existing and proposed Thames road crossings, as these impact on the lives and wellbeing of Thurrock's communities and residents.

In addition in discussions it was raised that in terms of accessibility regarding crossing times and least impact on river traffic that it would be appropriate to consider a crossing service to Grays as this also would seem to be a potential route. In terms of accessibility to train services and public transport hubs it is better served than Tilbury. Thus can the applicant clarify if this was considered as this furthers in terms of access to the new facility? Thurrock Council see an ambition of developing a pier/landing stage in central Grays which will also provide a very short access point to the report.

Has the applicant also fully dismissed any opportunity to integrate the proposed tram service linking Thurrock and North Kent, which may also provide additional resilience for travel journeys for all users across the Thames.

It is not clear if this has been set out in the Transport Assessment but it would be appropriate for the applicant to look at the potential for intelligent traffic monitoring measures both on the Kent and the Thurrock side of the river to better control traffic using the Dartford Crossing. To give advance warning and alternatives options for road users in the vicinity of the crossing. This will need further liaison with Highways England, Kent County Council, Essex County Council and Thurrock.

Construction impacts

Finally it is clear that the new development will impact in terms of the construction of the facility. Though this is temporary, this will inevitably impact on the local network.

It is noted within the Transport Assessment that it is proposed to try and bring most construction materials in via river and that some facilities for housing construction workers and storage of materials will be at the Port of Tilbury, however it is clear that this will have some impact on the Thurrock Network and construction machinery etcetera is more than likely need to be brought in via road. A Construction Management Plan has been submitted in this respect.

Construction worker trip rate and access - However there are some queries in regards estimations on occupancy of car borne trips and this will need further clarification. This also goes for the assumption that the impact will be minimal as it is outside peak traffic periods. This is not wholly agreed as employees, such as Amazon, which is accessed close to the ADSA roundabout have arrival times to conflict with arrival times of the construction workers and thus this may require further review.

It is noted that a 350 space car park is to be provided. Can further details on its location and routes of access be provided please? It is noted that temporary construction worker accommodation will also be provided for construction workers during the construction of the Resort, to try and reduce construction traffic but details of where this is to be provided are not clear. If provision is to be made north of the river, clarification on how those workers will access London resort should be provided, i.e. river borne trips or car borne trips.

Construction plant and materials trip rate and access - An assessment is also required as to how river borne materials will get to the resort; i.e. temporary landing stages provided, or is it via Tilbury Port and then delivered by road? It is likely that a significant level of materials and plant will be required and maximising the use of the river will be key in reducing HGV movements on the SRN and Local Networks.

Impact on existing ferry services during construction - Can the applicant please clarify if as part of the assessment, consideration has been given to the need for mitigation in the form of aids to mitigation whether during construction or operation? This is to ensure the proposals will not affect the operation of the existing Tilbury to Gravesend Ferry such that neither the physical infrastructure or vessel movements for the London Resort will infringe on the route of the ferry.

Miscellaneous considerations

In recent discussions with the London Resort Team further suggestions are put forward for consideration into integration with Thurrock Borough Council Regeneration officers at future meetings to discuss potential links with Tilbury/Grays TIP as these include significant changes to transport hub, ferry landing stages etc.

Thurrock Council – Environmental Health Officer (Noise):

Summary

The London Resort ES Chapters relating to Noise and Vibration and the associated Appendices have been reviewed in terms of the impacts in Thurrock. There are no matters where I fundamentally disagree with the assessment or the conclusions.

- There will be no significant noise impacts for Construction work
- There will be no significant vibration impacts for Construction work
- There will be no significant noise impacts for Construction traffic
- There will be a small impact from operational traffic noise on the A1089 Dock approach Road of 1.2 dB by 2034, compared with the baseline.
- There will be a small noise impact from the resort car park area of 1.2 dB by 2034, compared with the baseline, that will effect residential NSRs to the north in Tilbury
- “Screams” from the rides and attractions are not likely to be audible across the river in south Grays
- Noise from External Events and Outdoor Gatherings will have negligible impact across the river in south Grays
- Plant noise is not likely to be audible across the river in south Grays

Introduction

The noise assessment Chapter of the ES has been considered in conjunction with the associated Appendices and Figures with respect to the impact on receptors in Thurrock the “Essex Project Site”. The majority of the Impacts considered in the Chapter relate to construction and operation on the Kent side of the Thames. The introduction to the Chapter sets out the assessment topics at 15.5 as follows:

- Baseline conditions currently existing at the Project Site and surrounding area;
- the potential effect of noise and vibration caused by likely construction activities;
- the potential effect of noise and vibration caused by operation of the Proposed Development;
- mitigation measures to prevent, reduce / offset any significant adverse effects from noise; and
- the likely residual effects after measures have been adopted.

Methodology and data sources

The Assessment Approach has been undertaken in accordance with the “Relevant Law Policy and Guidance” Section Paragraphs 15.39 to 15.54. The guidance includes:

- National Policy Statements
- Other National Law and Policy
- Technical Guidance and Best Practice Documents

- Local Policies and Plans
- Guidance Criteria for Operational and Construction Noise Impact Assessment
- BS 5228-1:2009+A1:2014, Construction noise significance and target
- BS 4142:2014+A1:2019, Operational building services noise
- BS 8233:2014 and WHO indoor and outdoor noise level guidance criteria

There are no issues with the guidance employed, and these are accepted as appropriate for the assessment.

The Assessment Methodology is outlined in paragraphs 15.19 to 15.21. The methodology includes:

- Baseline noise and vibration climate study
- Construction noise environmental impacts
- Operational noise environmental impacts

Noise Modelling Methodology

The Noise Modelling Methodology is presented in paragraphs 15.22 to 15.27 and describes the use of the 3-dimensional CadnaA noise modelling software. The CadnaA software is in widespread use and is appropriate for the assessments of construction and operational noise undertaken.

The inputs to the model include plant and equipment sound power data, topography, buildings, and other noise sources. Assumptions are always necessary when modelling. The assumptions used are detailed in paragraph 15.24. The assumptions made are considered reasonable for the proposed development.

Model uncertainty is addressed in paragraphs 15.25 to 15.27. The inherent uncertainty of +/- 3dB has been reduced by calibrating the model with baseline “spot” monitoring data. The reduced model uncertainty estimate is not stated however.

Operational traffic noise is based on traffic data that also has uncertainties. This has been addressed using sensitivity analyses to determine the effect on the final assessment. It is stated the “Assumptions will be modified accordingly to ensure a robust assessment of the worst-case impacts are reported”.

Assessment of Effects

The Assessment of Effects are presented in paragraphs 15.28 to 15.29 and details the significance criteria employed for the assessment. Table 15.5 summarises the prediction methods employed.

The criteria for assessing receptor sensitivity is described in Table 15.6. The receptors are categorised as High, Moderate, Low or Negligible sensitivity. Only High sensitivity

receptors have been assessed to identify the worst-case impacts. The criteria employed are reasonable and accepted.

The magnitude of change / impact for NSRs is described in Table 15.7. The receptors are categorised as Large, Medium, Small or Negligible Impact magnitude.

The criteria for noise and vibration is also described in quantitative terms in Table 15.8. The noise thresholds are reasonable and accepted.

For the vibration thresholds it should be noted that vibration levels above the “Small magnitude” threshold for unreinforced or light framed structures/Residential or light commercial buildings, may result in architectural damage (fine cracking) with reference to: BS 7385-2:1993 “Evaluation and measurement for vibration in buildings. Guide to damage levels from groundborne vibration”. NB BS5228:2009+A1:2014 uses the same criteria as it was drawn from this document.

However, it is very unlikely that vibration levels of this magnitude will occur at NSR 8.

Significance evaluation

This relates the sensitivity of the receptor to the magnitude of the change, and is shown as a matrix in Table 15.9. This matrix format is widely used for the assessment of significance. Both moderate and major effects are considered Significant. Effects are further described in paragraph 15.37. Effects may be adverse or beneficial, short or long term etc.

Baseline Conditions

Noise and vibration surveys

The baseline noise and vibration surveys were carried out between 2014 and 2020. I accept the earlier noise results are valid, particularly due to the problem of obtaining representative survey data due to the effect of the pandemic on transportation noise sources.

The chosen noise monitoring locations in Thurrock are satisfactory and detailed in Appendix 15.1 and Diagram 15.1 and paragraphs 15.61 to 15.65.

Paragraph 15.68 describes the Essex Project Site baseline survey sources.

Vibration was not considered a significant issue for building construction on the basis of subjective tactile vibration experienced by the surveyor.

Modelling results are shown spatially as colour noise contour plots. The plots have been produced by the modelling software and calibrated with the baseline survey results. Road traffic noise data provided by consultants has also been included.

Diagram 15.2 shows the daytime noise as an LAeq,18h in 5 dB bins. The presented results are in line with expectations for the roads modelled.

Noise survey instrumentation

The noise analyser/calibrator type used, and the procedures employed for the calibration and collection of data are satisfactory, and were appropriate to the surveys undertaken.

Site Description

The Kent project site lies on the Swanscombe peninsula within the Dartford and Gravesham Borough Councils administrative area. The majority of the infrastructure and associated environmental impacts are there.

The Essex Project Site limits are generally described in 15.79 and shown pictorially in Figure 15.1 together with the NSRs. Note that NSRs are defined as areas rather than set positions and classed by type. The Tilbury residential NSR 8 is highlighted in green. The types of NSRs are:

- Residential
- Education and research facilities
- Healthcare and care-home facilities

Assessment of Likely Significant Effects

Construction Effects

The relevant aspects of the development construction noise and vibration effects are described in paragraphs 15.85 to 15.88. This outlines the short-term nature of the potential disturbances, and that impacts are likely to be greatest in the initial stages during groundworks etc.

The construction phases and groupings of NSRs used in construction noise assessments are shown in Figure 15.2. Only NSR 8 in Tilbury is potentially impacted by construction activity.

Appendix 15.3 shows the construction noise levels for NSR 8 are predicted to be negligible for both car park earthworks and general construction in Table 15.17.

A construction vibration assessment has been carried out as detailed in Appendix 15.3 for receptors within 30m of the construction site boundaries.

Ground borne vibration effects have been predicted at the nearest NSRs using BS 5228-2:2009. The reference peak particle velocity (PPV) in mm/s for each item of plant capable of producing significant ground-borne vibration is shown in Table 15.19 and the vibration level at 25 metres is estimated together with the magnitude of impact for buildings and humans at that distance.

In Table 15.20 the vibration exposure to humans is negligible for NSR 8 in Tilbury. Similarly in Table 15.21 the effect of vibration on buildings is also negligible.

Avoidance and mitigation measures for construction have been included in detail in Appendix 15.5. Examples of mitigation measures that can be used to control the Project's Earthworks, General Construction, Paving and Piling construction noise and vibration activities are provided in Appendix 15.5.

Construction Traffic Noise

Construction traffic noise has been assessed in Appendix 15.3 and this indicates there is predicted to be no change in the 2023 level, and negligible change in 2024. Construction traffic noise will not be significant, and this is in line with expectations.

Operational Noise Effects

Operational noise effects in Thurrock are likely to be limited to road traffic noise from visitors and to a lesser extent staff and deliveries to the Essex Project Site in Tilbury. Concerns about the noise from the rides and attractions, including the "screams" of the customers being audible across the river in south Grays NSRs were also assessed.

The road traffic noise assessment is detailed in Appendix 15.4 and relies on data supplied by the transport Consultants. A sensitivity test was made in case the predicted traffic flows were under-estimated. The predictions use the Calculation of Road Traffic Noise (CRTN) method implemented in the prediction software. The car park noise is modelled using full occupancy of the 2100 car park spaces using RLS-90 methodology within CandaA.

The predicted change in traffic noise on the A1089 Dock approach Road from the 2018 baseline to 2034 at peak resort occupancy is 1.2 dB which is a small magnitude of impact. This can be seen in Appendix 15.4 Table 15.4.3. This was also confirmed by sensitivity analysis, where the predicted resort traffic was increased by 50%. The result was a change of 2.0 dB, which remains a small magnitude of impact. This can be seen in Appendix 15.4 Table 15.4.6.

The predicted change in noise due to the Tilbury car park area is 1.2 dB in 2038 and 1.7 dB in 2038 with a 50% uplift in traffic to the site for the sensitivity analysis. The impact for the car park is therefore a small magnitude.

The two noise contour plots graphically showing the 2032 LA10,18h predicted levels and the 2032 change in noise compared to the 2018 baseline can be seen in Diagrams 15.4.4 and 15.4.5 respectively.

The Ride and Attraction Noise Impact Assessment criteria is described in paragraph 15.4.29 and is an acceptable method, considering the source character (screams). The assumption was made that if the LA,max,f noise (the “peak” noise) was below the background noise, LA90, by 5dB or more then it was unlikely to be audible. This is accepted.

The resulting noise contour plots demonstrate that the LA,max,f is unlikely to be audible in south Grays where the nearest NSRs are located in Thurrock. Diagram 15.4.10 represents worst-case operation and propagation conditions (southerly wind) and at most the LA,max,f is between 35 and 40 dB, which is well below the background. Further mitigation by designing in “scream zones” is proposed in paragraph 15.174.

Fixed plant noise from the site will be designed to have a rating level 10 dB below the existing background at the NSRs closest to the Kent Project site, and certainly be inaudible to Thurrock receptors.

Assessment of Noise from External Events and Outdoor Gatherings of Crowds is considered in paragraphs 15.134 to 15.140. The main impacts from live events occur on the Kent Project Site, and breakout to the North towards Grays NSRs is unlikely to be significant. The Noise contour plot is shown in Diagram 15.6 and, although the river edge in Grays is outside the frame, it is clear the noise level will be below background and so have a negligible impact. Further mitigation is proposed in paragraph 15.177 by:

- limiting the output of speaker systems so that it is below the ambient noise levels
- optimising line array loudspeaker directivities to control noise emissions within the London Resort entertainment locations, reducing noise spill out of the external areas;
- design external events spaces, so that loudspeakers are directed away from existing NSRs.

Residual Environmental Effects

Table 15.27 tabulates the summary of Residual Environmental Effects. The significance for NSR 8 in Tilbury is Negligible with no supplementary mitigation applied and so remains negligible.

Climate Change

Climate change will have no impact on the noise assessment.

Cumulative, In-combination and Transboundary Effects

The in-combination assessment has concluded that there are no additional significant effects arising that require consideration which is agreed.

Conclusions

The conclusions as they relate to Noise impacts in Thurrock are accepted.

Thurrock Council – Economic Development Team:

Comments in relation to Outline Employment and Skills Strategy (APP-086)

We welcome the approach set out in the Employment and Skills Strategy and focused on the four key objectives of:

- creating local employment opportunities
- providing career paths, not just jobs
- addressing skills gaps and promoting career choices through training and working with local schools, colleges and universities; and
- celebrating diversity and inclusion.

The outline strategy provides a welcome level of data on construction and end use opportunities, including detailed breakdowns of the number and type of job opportunities. The commitment to attitudinal hires for c72% of end use positions combined with training and career progression opportunities could make an important contribution to improving Thurrock's employment rate and skills levels.

However, there are a number of clear deficiencies as the strategy currently stands.

The applicant should put in place clear governance arrangements for the oversight of the strategy and progress against agreed targets to ensure that the Core Study Area job projections are met or exceeded.

The applicant should commit to regular publication of key agreed indicators that are broken down by borough and reported to regeneration and economic development oversight bodies at CSA borough and sub-regional level.

Each Core Study Area borough will have an expectation that the borough-level targets set out in the strategy are met. The achievement of global targets should not be a cause for inaction where an individual CSA borough's residents are not benefiting to the extent expected. This should be explicitly recognised.

The applicant should make clear how any issues or concerns raised in relation to the delivery of outcomes for CSA residents will be responded to at a senior level within the organisation, including through the direction of financial resources if required.

The outline strategy emphasises that the employment and skills initiatives outlined in mitigation are intended to minimise leakage, by maximising take up of jobs by local people. It states that: *"The purpose of this strategy is to ensure that local residents benefit from these opportunities, tackling key obstacles which they may currently face and providing pathways into work. ... **The aim of this strategy is to ensure that local employment and skills benefits are maximised.**"*

If the proposed support for a local jobs brokerage service is limited, as suggested (for the construction phase, to an online portal through which jobs are advertised) then this is a wholly inadequate response. There are currently and will be in the future local delivery arrangements in Thurrock that should be the conduits for these activities. It is in London Resort's interest to help local people find work at the resort during construction and operation of the site.

The commitment to *“seek to support a community-based programme for residents from disadvantaged backgrounds, aiming to reduce inequalities in access to employment and skills opportunities”* is welcome. That should not be a different vehicle from the jobs brokerage service and will also be different in each CSA borough area.

A scheme of this scale and impact is expected to make a significant financial contribution to local labour and business support activities. That funding should begin in advance of the start of the construction phase of the development and run at least until the first full year of operation of Gate Two. There is no real indication that this is envisaged.

This funding should be at a level that allows an effective programme of support in each CSA local authority. There should be a recognition that authorities will want to build on their own local arrangements and deliver things differently. It should be for each CSA authority area to indicate their preference and for any resources to be distributed to reflect this.

This approach will enable Thurrock and the other CSA boroughs to join up employment and skills activities with any similar programmes. Thurrock is looking for similar commitments through the Lower Thames Crossing, Thames Freeport and other significant developments. It makes no sense to have small, competing local job brokerage activities for each of these when resources are limited.

The local offer will provide added value to mainstream provision e.g. through Jobcentre Plus/DWP-commissioned provision. It is widely recognised that there is a significant role for local job brokerage services in filling gaps in provision and offering personalised services that meet the needs of disadvantage residents. Relevant and local examples of successful investment in employment and skills provision include the Millenium Dome investment in Greenwich Local Labour & Business, Westfield investment which supported Newham Workplace and the Barking Riverside Ltd investment in Barking & Dagenham Job Shops.

At a broad level Thurrock is committed to working with local providers of employment and business support and in taking the lead in developing the 'supply-side' – engaging with the residents and businesses in a co-ordinated fashion. Our expectation is that LRCH Employment & Skills Team should focus on the 'demand-side' - bringing

contractors, sub-contractors and LRCH recruitment practices. Clearly there will be overlaps.

Thurrock Council – Public Health:

Population and Health Chapter

- Overall, the Population and Health Chapter of the ES lacks the granularity of detail pertaining to the Essex site to enable us to understand and comment fully upon the potential health and wellbeing impacts on the local residents living in Tilbury and Thurrock. Whilst we recognise that a large proportion of the site is located within Kent, there are still important potential impacts for Thurrock and its residents that should be given full consideration .
- Use of abstract and arbitrary geographical areas to assess impacts against, only further made this a difficult process. It would be useful for us if the ES chapter clearly outlined what the impacts look like for the Essex Site; this is undertaken in places but is not consistent in helping us to form an opinion on the likely impacts on health for our local residents.
- We would like to be assured that the lit review, baseline data and policy documents with respect to health and communities were the latest available at the time of writing, as some of the data is quite old.

Active Travel

- LRCH state a commitment to promoting active travel during operation by contributing to improvements/redevelopment of pedestrian/cycle links, provision of a new ferry terminal on-site to improve connectivity across the Thames and looking to link to existing ferry services as well as establishing a transport interchange at Ebbsfleet International Railway Station to improve rail services and increase accessibility to wider local areas. It is unclear from the ES what this commitment will look like in Thurrock and we would seek further clarification about this with the view that improvements to active travel should be contributed and supported by LRCH in Thurrock in line with that which is proposed on and around the Kent site. Related to this we would also seek clarification about the percentage or number of the proposed secure cycle parking spaces (circa 250) that would be planned for the ferry terminal at the Port of Tilbury.
- This cycling and walking provision is noted as being provided when the resort is in operation, could the applicant advise why this would not be planned and implemented during the construction phase as this would also be advantageous to any local employees of the scheme.
- We would welcome LRCH engaging with Local Transport Hubs to explore the viability of a cycle hire scheme. At this stage it is unclear whether LCRH intend to engage with these hubs in Thurrock and further clarification on this point is required.
- There is concern about the connectivity to other areas of Thurrock's cycle and walking networks and how these will be connected to the Resort.
- There are also legacy benefits to both Thurrock and the LRCH from the Thurrock riverside links to the coastal path and heritage assets that need to be explored more fully.

Construction Worker Housing and Health and Wellbeing

- We welcome the welfare of construction workers being addressed by providing mobile homes and potentially a cruise ship, to accommodate them during construction of the project. We have some concerns about the constant running of the cruise ship in the Port of Tilbury and the associated emissions arising from this, particularly given that Tilbury has some existing significant air quality issues and health inequalities which could be exacerbated through this. We need to understand if this has been considered and assessed as part of the ES and how this issue will be addressed. Assessment of the impacts of running the cruise ship throughout the duration of construction (a 6-7 year period) would be sought.
- In respect to the on-site health facilities these will be based in Kent so there could be an issue for the workers housed at Tilbury Docks of A&E facilities on the Tilbury side being provided outside of the borough, i.e. Basildon and Kent which could present a risk for both the health services and individuals being housed here. It should be noted that the new IMC for Tilbury will not provide an emergency service.
- We would need assurance that BTUH, NELFT and Thurrock CCG have been advised of this new housing concept and have been given the opportunity to respond.
- We need some assurance around the safety measures that will be taken to protect the workers on board the cruise ship in light of Covid and other potential communicable diseases.
- There is no economic gain noted for Tilbury from the housing of the workers within the area due to the proposed amenities on the cruise ship; we would expect an agreement to be reached for provisions to be sourced at a local level.

Cumulative impacts

- Concerns that present and future cumulative impacts of the project have not been adequately assessed or addressed. This is particularly notable in relation to the potential cumulative impacts of other developments within close proximity of the proposed LR project area, with special emphasis to the increase in traffic over time.
- These cumulative health impacts on Thurrock residents and specifically those living in Tilbury, where a number of developments have been proposed or are underway, can lead to a negative change in noise and air quality which can affect physical and mental wellbeing. We would seek a more thorough assessment of the cumulative impacts to be undertaken.

Further Points for Clarification

- We need some assurance that the development of the London resort will bring some positive impacts and outcomes for Tilbury and Thurrock residents alongside the potential employment opportunities.

- From our perspective as a local authority, the project seems to largely deliver negative impacts for Thurrock with the proposed provision of a large car parking facility which will have a negative impact in terms of levels of transport and increased air pollution, in an area which already suffers from health inequalities including poor air quality.
- The development of the project is only likely to further exacerbate these existing health issues and negatively impact on air pollution levels. Quite significant mitigation will be required. However, as outlined previously it is difficult to ascertain the full health impacts of the project in relation to the Essex site due to the structure and light touch approach to assessing these included in the ES Population and Health Chapter.
- We would seek mitigation and contributions from LRCH to deliver improvements to Tilbury and the surrounding areas, including provision of cycle and walking infrastructure and enhanced access to the riverfront that links heritage infrastructure, in line with what is proposed for the Kent Site.
- Further consideration should be paid to the community perception or actual barriers to the riverfront. It's not just about reducing the barriers to the riverfront but also about enhancing access, visual amenity and attractiveness of the area, to support people's mental and physical health.
- We require further clarification about the proposed car parking facilities which are set to be developed on the existing car parking land and the potential for displacement of the current car park. There does not appear to be any information provided about the relocation of this and what this might mean in terms of traffic coming into Tilbury.
- We require further clarification about whether the retail and other amenities being proposed at the ferry terminal will be accessible to local residents in Tilbury and beyond or whether these will be reserved for ferry ticket holders only. Access to these amenities would be a welcome offer, to give local residents new places to spend time in, to support social cohesion and mental health.
- We require clarification of the commitment from LRCH in relation to the Tilbury Town Funds projects and partnership working to deliver those relating to the resort area.
- As modelling of the impacts on retail has been completed for Kent retail amenities, including Bluewater, we would welcome modelling of these for Thurrock including Lakeside, particularly in terms of economic and employment impacts.
- We welcome the use of barges to transport up to 80% of construction materials to the Kent Site from the Port of Tilbury in terms of reducing traffic on the local network. However, we require further clarification about where these construction materials will originate from. The Air Quality Chapter of the ES (paragraph 16.135) states that "Whilst it is envisioned that at least 80% of construction materials will be transported by river, it is estimated that there will be approximately 67 outward HGV movements per day. The dust emission magnitude for trackout will therefore be large." If these materials originate from

wider parts of Essex and beyond and need to be transported to Tilbury in the first instance, then this will impact negatively on transport particularly on local road networks in Thurrock in terms of air pollution.

- Whilst the majority of vulnerable groups have been identified in the Population and Health chapter of the ES, some important groups are missing and should be included, namely: Homeless individuals, Asylum Seekers and Traveller Communities, especially given the proximity to, and role of the ports within this project. LGBT+ communities are also missing from this list. Appendix 8.3 Detailed Baselines includes Gypsy and Traveller Communities and LGBT+ communities but this does not translate into the Population and Human Health Chapter of the ES. Assessment of the health impacts for these groups are sought.
- We require clarification about the on-site health facility proposed during construction. Further information about what the access arrangements will be to this facility for employees residing on the cruise ship in Tilbury if the health facility is located on Kent side is required.
- The applicant (LRCH) state that due to the temporary nature of the construction work associated with the project it is unlikely that construction workers will register with a GP however, this is not supported by the evidence base and is based on assumption. Given that the construction phase is set to last up to seven years, it is likely that non-home based construction workers who employed for the duration of construction may need to register with a GP practice to support and maintain good health.