

COMMUNITY SERVICES

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Date: 16/02/18



Mr Angus Walker
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Dear Mr Walker,

Application by Riveroak Strategic Partners for an Order Granting Development Consent for Manston Airport

Second Statutory Consultation on Proposed Project

Thank you for consulting Thanet District Council under the provisions of Section 42 of the Planning Act 2008.

We outline our specific comments on the information provided at this pre-application consultation stage of the process below. Regard should also be had to the Council's first response to the previous formal consultation earlier this year (dated 21st July 2017).

Principle and Basis of Project

As outlined with the Council's previous consultation response, the Council's empirical evidence demonstrates that airport operations at Manston over the Local Plan period are very unlikely to be financially viable. The updated work by Azimuth Associates still fails to adequately consider the importance of the significantly lower cost of belly-hold freight capacity and the peninsular location of Manston within the UK and the South-east, and it fails to show how the project would overcome these fundamental limitations.

The lack of any cogent business case for how the project will be funded and delivered has also not been addressed in the second consultation, nor have any reasoned or transparent financial projections been provided. All previous comments made by the Council regarding the business case are therefore still valid and significant uncertainty remains about the delivery of the project and the purported benefits.

Within your consultation documents the current capability of the airport in terms of flights is stated as zero. It is noted that this figure is contested by the owners of the airport site. This will form a key determination for the Planning Inspectorate when deciding whether the project constitutes a National Significant Infrastructure Project (NSIP). The Council would recommend that you clarify this matter as

a priority, to ensure that all stakeholders are assured of whether the NSIP will progress past the acceptance stage.

Policy Assessment

The Preliminary Environmental Information Report (PEIR) does not include the Proposed Revisions to the draft Local Plan (preferred options) from January 2017 in its analysis of local policy in various sections, however it includes the January 2015 consultation, which has equal weight in decision making at this stage in the production of the Council's Local Plan. The Environmental Statement (ES) should be updated to reflect the correct local policy framework.

Economic impacts

There continues to be a lack of clarity about the use of potential job growth as a result of your project. For example, the new PEIR states that the project would bring "4,000 direct and 30,000 indirect jobs to the local economy by 2038", whereas the previous PEIR stated that by year 20 of operation over 4,200 people would be directly employed at the airport site and a further 26,000 in the "wider regional economy". The economic area, be it the 'wider regional economy' or "local economy", is not defined in any of the consultation documentation and this should be added to the ES. These job numbers continue to be generated on the basis of a theoretical academic report with no acknowledgement or provision for optimism bias, rather than on a studied financial appraisal of the project and expected growth.

It is noted that the consultee comments of section 13 of the PEIR does not include the Council's previous comments, unlike the assessments made in other sections of the PEIR. There remains significant uncertainty about whether the socio-economic benefits from your project in terms of job creation attract significant weight in support of the project, with these benefits overstated in Section 13 of the PEIR. Due to the continued lack of explanation to address the above concerns, it is not considered that the effect on the economy of Thanet would be "major beneficial - significant" due to the limitations in the evidence produced.

Please refer to our previous consultation letter for how to address these concerns.

The proposed commercial development on the northern grass does not appear to be functionally required for operational purposes of the airport and should not form part of the projects viability assessment. This development could be situated on allocated employment land within the district, such as Manston Business Park.

Housing Requirements and Employment Implications

We note the "Review of Future Housing and Employment Growth and Capacity for Development" document which you are consulting upon (also referred to as 'Employment and Housing Land Technical Report' within the PEIR). The main thrust of this document, compiled by your planning consultants RPS, is that there are adequate alternative sites to deliver housing to meet the district's objectively assessed need (OAN) without designating the Manston Airport site for housing and that the Council have under-estimated the likely job growth within the new plan period.

The report produced makes basic and fundamental errors in its analysis of additional sites, including using out-of-date SHLAA information, identifying some sites already recommended for inclusion, double-counting of sites, assuming that all sites submitted are acceptable (ignoring obvious environmental constraints and the Council's sustainability appraisal), whilst the analysis of the potential economic growth in the plan period includes inaccuracies and a lack of understanding of the relationship between housing numbers and expected job growth.

However more importantly, this report fails to address the matters raised in our previous consultation response, that the implications of the job creation purported from this project would significantly affect the OAN for housing within the East Kent region. The impact is a likely significant increase in housing land requirements in Thanet. This may result in indirect effects, such as additional loss of countryside through housing development and significant new infrastructure demands, which has not been assessed in the PEIR. As previously outlined:

An assessment must be carried out within the full submission reviewing job creation in your project and the relevant plan documents in Thanet, Dover and Canterbury (phased over respective plan periods), reviewing the labour supply with existing studies available in all three areas, assessing where the projected workforce will be drawn from to the airport, modelling migration adjustment from this information therefore deriving implications on housing need in the district and the region.

This has not been provided, neither have the ramifications for this on Thanet's countryside been adequately assessed within your submission (including within the socio-economic and landscape visual impact sections of the Environment Statement (ES)).

Other socio-economic impacts

The following comments made in our previous consultation response remain valid:

Additional burdens on local services are considered to be major adverse impact during operation in the PEIR, which would result from the increase in residence of operational workers in the district. This effect should be linked to the work to be carried out around the increase housing requirement in the district and neighbouring authorities (above in Housing Requirement section), to quantify the impact on local services as accurately as possible.

Specific surveys of the location and character of vulnerable groups and community facilities to be undertaken do not appear to be provided in the PEIR, with more details to be provided in the ES. We will await this information, and request that the potential for local employment and training during construction and operational phase be outlined in full in the ES and subsequently secured via appropriate obligations, as per our previous comments.

Previous comments raised regarding the use of out-of-date data are relevant, as the tourism profile of the district provided within the PEIR has not been updated to reflect available data on visitors from the 2015 Cambridge Economic Impact Model, further information can be found via: <https://www.visitthanetbusiness.co.uk/>. The Council has adopted its Economic Growth Strategy, which is referenced at PEIR section 13.4.27, however the Experian report from 2012 was not adopted and is not considered up-to-date.

Information on how the likely effects on local amenity, businesses, the destination and the experience of visitors will be mitigated by environmental measures has not been outlined in PEIR, with the significance level of effect not yet assessed on key areas such as disruption to local communities and amenity effect on tourism during operation of the airport. As previously outlined, all indicative flight paths would travel over Ramsgate, and night flight mitigation (see Noise and impact on living conditions section) would not impact on the multiple flights during the day that could adversely affect local business, inward investment, the expanding filming industry and a successful tourism sector. We await the further assessments to inform necessary mitigation before commenting on whether these impacts are significantly harmful to local communities, business and tourism in the district.

Noise and Vibration, Land and Air Quality

The project has the potential to result in significant impacts as a result of noise and vibration and on land and air quality. Our response assesses each section in order of the PEIR Chapters.

Noise and Vibration

Scope of Assessment

Based on the PEIR 2018 and associated documents and appendices, the scope of the aircraft and ground noise assessments are generally considered appropriate and consistent with policy and current guidance at this stage.

The scope identifies that noise from operational static sources is not possible at this stage as detailed design has not been undertaken and therefore necessary information is not available. The PEIR states that without mitigation, impacts can arise from these sources and presents a commitment that within the embedded mitigation no significant impacts arise. It is considered that this approach is reasonable at this stage. The methodology and approach to assessing and controlling noise from sources of this nature is detailed in Appendix 12.5 and is considered to offer a reasonable approach at this stage. The PEIR states that noise from these sources shall be controlled such that the “rating level at the worst noise affected property minus the background level is not more than -5 when assessed in accordance with BS4142”. This is considered a reasonable approach and should become a Development Consent Order (DCO) Requirement.

The PEIR commits in a number of locations in the document to a specific course of action or outcome these should become conditions or requirements for DCO. It would be helpful if there was a table to track these commitments through the ES and the planning stages.

The scope of the construction noise, construction vibration and construction traffic noise assessments are generally considered appropriate and follow relevant guidance.

The scope of the phasing of the development and associated phasing overlaps are unclear. Paragraph 12.4.15 states that Year 2 is 2021 and year 20 is 2039, whilst paragraph 12.9.3 states 2020 as being Year 0 and 2026 as Year 15. These statements are inconsistent, the latter being incorrect and whilst this may simply be a typographic error, uncertainty is created by these statements. It is understood that Phase 1 is anticipated to last around 12 months and the other phases will be undertaken at an unknown date, as the airport expands. Further clarity is required to

be provided on the assessment years and phasing of the development. Consistency of assessment years and phasing details should be provided throughout the ES.

Cumulative and combined impacts from the various sources have not been assessed at this time. This will be required as part of the ES.

Assessment Methodology

The methodology and data gathering for assessment of aircraft and ground noise are generally considered appropriate. Associated legislation, policy and guidance have been considered and applied in an appropriate manner. The following points are made, including areas where clarification and/or additional analysis is required to be addressed within the ES:

- The methodology in particular considers the most recent policy developments associated with Heathrow Expansion and their application to Manston (the draft Airports National Policy Statement – draft ANPS) as well as the broader development of airspace policy and guidance.
- The establishment of LOAEL and SOAEL values is considered to be appropriate and based on the latest UK Government (draft) policies relating to aircraft noise and WHO guidance. The methodology recognises that current policies are draft, and adopts a lower threshold for LOAEL daytime than proposed in the draft ANPS. SOAEL values align with those proposed by draft policy and WHO for night-time noise exposure.
- The assessment method determines that likely significant effects from operational aircraft noise are determined by reference to absolute noise levels (or absolute values related to aircraft noise) with specific criteria for residential receptors for significant effects being attributed to exposure greater than SOAEL or another similar metric. Paragraph 12.8.28 of PEIR 2018 indicates a range of other considerations for determining significant adverse effects when the exposure is between LOAEL and SOAEL. However, these do not appear to have been considered in the assessment criteria for operational aircraft noise. For example, significant effects can arise when there is an adverse noise change as a result of change in the acoustic character of an area (as recognised in Planning Guidance – Noise (PPG-N)). Consideration should be given at the earliest opportunity as to whether this approach has implications for the identification of significant effects. This has a bearing on the identification of likely significant effects in the PEIR.
- The study area appears to be appropriate although it is not clear how this area has been determined and further detail on this should be provided..
- There have been no aircraft operating at Manston since 2014. The population considered in the study area can therefore be considered to be newly exposed to aircraft noise - it is not clear how the implications arising from this being a newly exposed population are being considered or how they may modify the effects. For example, there is evidence that initial annoyance responses may be greater at opening than the standard exposure response suggests, but over time this can moderate. As noted later in the report, the number of dwellings exposed to LOAEL increases over the 20 year assessment period. Consideration

should be given to the changing response over this time. It is noted however that there is no current methodology for applying the implications of this apparent habituation.

- Table 12.14 identifies “impact criteria” for non-residential receptors. The table title appears to be incorrect referring to “non-sensitive” receptors rather than “non-residential”. The identified impact criteria are considered appropriate for the categories defined. However, the potential effects are considered to be understated for schools and hospitals. For schools, the effect of noise is a developmental delay (at least in Primary Schools) resulting from change in noise levels. For hospitals there is evidence that there are delays to recovery if noise levels are significant enough. In both cases the higher noise level and change the worse the effect. This should be noted and addressed.
- In DCO terms, the proposed scheme is the ground based development. The development consent for this ground development does not provide consent to fly aircraft onto or off the renewed runway. Consent for the new air traffic movements has to be secured separately, from the CAA, in line with the new UK airspace policy, guidance and procedures and therefore consent for the specific effects of aircraft noise falls to that process. That said assessment of effects from the airspace must still be reported within the DCO process. Concerns may arise associated with the lack of detailed definition of the airspace design and therefore lack of certainty over the effects from airborne aircraft noise. The airspace design process as presented in CAP1520 (and adopted for this project) requires assessment of effects from aircraft noise in the same terms relating to government aims of noise policy as per the Noise Policy Statement for England. Further stages of consultation are required through that process.
- The PEIR notes the issues surrounding airspace design. An assessment approach is proposed and described in Appendix 12.3 – the consideration of effects from airborne aircraft relating to evaluating airspace design options is detailed and well considered given the information available at this time from the airspace design process.
- The application of the aims of Government noise policy (ie avoid significant; mitigate and minimise adverse; and improve where possible) on sustainable development, as required at DCO and through the airspace change process represents a more stringent set of tests than would have previously been applied under the existing APF and previous airspace design guidance.
- In considering the effects of night flights, the methodology goes beyond the requirements of policy in its consideration of “objective awakenings”. However, there is a lack of clarity on how this is considered, assessed and derived. Further explanation of the concept of “objective awakenings” and how this considers events rather than just average noise levels should be provided in the ES, in particular explanation should be provided in non-technical language as, far as possible.
- Paragraph 12.6.8 appears to scope out “Quiet Areas” on the basis that it is “understood that there are no areas within the study area that would be referred to in the NPPF as being prized for their recreational and amenity value”. Clarity is sought on where this understanding comes from. Figure 11.38 indicates that there are many areas at the more tranquil end of the tranquillity spectrum (as defined by the Campaign to Protect Rural England). Whilst it is

recognised that “Quiet” is not the only determinant of tranquillity, clarity should be sought on how these areas are being considered in the assessment and where the understanding that there are no quiet areas is derived from.

- Appendix 12.3 describes the methodology in more detail. In the “options appraisal approach” the use of WebTAG for monetisation is identified but this does not feature in the main body noise and vibration section (ie Chapter 12). In Appendix 12.3 it is indicated that one of the dose-response relationships used in webTAG has been replaced stating that “dose response cover replaced by RIVM 2014 as it was identified as being the best fit for the Proposed Development”. Clarity should be sought on what this means and on the rationale for adopting the RIVM 2014 approach which is not referenced nor described anywhere else in the documentation and the implications of this are not clear or explained for the analysis.
- Policy requires that WebTAG be the primary tool for assessing effects, other methods can be applied but these should be as a secondary, sensitivity analysis. Clarity is required on how the RIVM 2014 dose response relationship has been applied, the evidence base for applying this and the precedent in this context (there is no alignment with policy) and whether the results presented in the options appraisal are based on that or WebTAG and whether any sensitivity analysis is available. At the ES, all the options appraisal should primarily present WebTAG results, anything else must be treated as a sensitivity analysis.
- The WebTAG spreadsheets for aircraft noise were updated towards the end of 2017 to enable analysis to 1dB resolution (previously 3dB bands) and to consider population rather than dwellings. Scheme appraisal for the ES should be undertaken with the latest version.

Whilst the assessment methodology for construction noise and vibration is generally considered as appropriate the following points need further consideration:

- The BS5228:2009+A1:2014 “ABC Method” has been used and Category C thresholds are identified in Chapter 12 to correlate with SOAEL and Category B and Category A thresholds as LOAEL. This is not a precise interpretation with the notes to Table E.1 in BS5228. Note 1 to Table E.1 (in BS5228) states “A potential significant effect is indicated if the LAeq,T noise level arising from the site exceeds the threshold level for the category appropriate to the ambient noise level”. Therefore a potential significant effect could occur at thresholds lower than interpreted in the Chapter 12 assessment. It is noted that there are a number of “static caravan” type homes at locations around the airport and given the lower level of sound reduction from the building envelop a potential significant effect may occur at these lower levels, in particular at night. These static caravans are detailed in the landscape assessment but do not appear to be mentioned in the noise and vibration assessment.
- The earthworks activities may require consideration of Section E.5 of BS5228:2009+A1:2014. This section gives guidance on the application of criteria to long term earthworks more akin to mineral extraction than conventional construction activity. BS5228 suggests that the limit of 55 dB LAeq,1h is adopted for daytime construction noise for these types of activities but only where the works are likely to occur for a period in excess of six months. Precedent for this approach has been set within a number of landmark appeal decisions associated with the construction of ports. Whilst it is noted this criteria is not commonly applied it could be considered applicable given the scale and duration of the earthworks at the airport.

- The construction noise assessment does not give both typical and worse-case noise levels. Appendix 12.3.1 details they are construction levels when the activity is at the closest work area to a receptor and therefore can be considered as worse-case noise levels. It is noted that the core construction hours are stated as 0800 to 1800 yet a LAeq,12hr is given. Similarly the night time noise assessment uses a LAeq,8hr noise level whereas BS5228 uses LAeq,1hr for the assessment of night time noise.
- The construction noise levels are described in Appendix 12.3 as being a LpAeq,T as a free-field level relating to a position 3.5m from any building. Free-field noise levels have been used in the baseline survey. It is noted if a facade correction is applied to consideration of a point of interest 1m from the façade of a sensitive receptor then predicted construction noise levels will be higher. Appendix 12.3 states that assessment considers conservative daily noise levels calculated from the worst case location in the working area. It is noted if a facade correction is added to some of the predicted noise levels the apparent threshold may be exceeded e.g. Table 12.17 Receptor 1, Receptor 8 and Receptor 9.
- The methodology adopted for the calculation of vibration levels from construction activities is that advocated within Transport and Road Research Laboratory Research Project 429 – Groundborne vibration caused by mechanised construction works and BS5228-2:2009+A1:2014 'Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration'. The assessment is limited to 100m and is consistent with the aforementioned guidance. This approach is consistent with guidance and contemporary assessments.
- The assessment adopts a VDV of 0.2 as the criteria for the onset of a significant effect. The assessment predicts PPV of 3.6 mms-1 external to sensitive receptors but no significant effect is identified as the VDV does not meet the criteria for a human response significant effect. Though the VDV response, is not met other contemporary assessments use PPV criteria for human response and a PPV of 3.6 mms-1 can be considered a significant effect, depending on the duration. The duration of the anticipated PPV of 3.6 mms-1 and the number of receptors affected is not described and so the significance is not clear. It is also not clear if vibrations during start up and shut down of vibratory compaction equipment have been considered. Clarification is required as to the duration of the potential effect from vibratory compaction and whether the start-up and shut-down of compaction equipment has been considered. The ES should clarify whether or not this results in a significant effect, that is currently not identified.

Baseline

The baseline noise levels for the periods used to establish the BS5228 ABC category are detailed in Appendix 12.4. The expanse of the survey is considered generally suitable although it is noted that the reporting does not include night time LAeq,1hr baseline noise level used in the Environmental Statements for recent high profile schemes where construction working at night is required, such as for HS2 and Tideway. The PEIR suggests that night time construction may be required in Phases 2-4 and as such regard should be given to night time LAeq,1hr baseline noise levels.

The baseline surveys for the Chapter 12 assessment, reported in Appendix 12.4 indicate a LAeq,8hr has been used and when the variation in LAeq,1hr levels over the quietest part of the night have been considered there is potential for lower baseline noise levels at a particular site and thus a potential increase in effect. It is noted that the application of LAeq,1hr to the assessment of night time construction noise is by no means universally accepted however it is the Council's preferred reference period for the assessment of the construction works against a LAeq,1hr baseline for night-time working.

No baseline assessment of vibration has been conducted and is deemed not to be required given the absence of sources of baseline vibration. This approach is considered appropriate.

Assessment of effects

The assessment of effects from aircraft and ground noise is considered to have been generally undertaken using an appropriate methodology. The review has identified a number of areas where clarification and/or additional analysis is required to be addressed within the ES. There are also comments about the adequacy of the mitigation plan which should be addressed within the ES. These are presented below:

- The assessment does not make clear the direct and indirect effects of the development. This should be made clear at ES.
- The combined effects of construction (for those construction phases after opening), road and operational aircraft do not appear to be considered. Particularly of concern would be those combined night-time effects after opening arising from night-time construction activities. This should be addressed in the ES.
- There does not appear to be reference to cumulative effects with other major projects in the area. Clarity is sought and this assessment should be included within the ES. The assessment of effects does not clearly demonstrate how the aims of Government noise policy have been met. This should be included in ES.
- Night flights:
 - Sleep disturbance caused by night flights is perhaps the most sensitive aspect of any airport operations at Manston, particularly where cargo operations are central to the case. The results presented at Table 12.25 indicate that at night that the number of dwellings exposed to noise levels >night-time SOAEL is 225 in year 20, an increase from zero in Year 2.
 - The mitigation identified for this residual "significant effect" appears to be in the form of the "sound insulation grant scheme". It is standard practice when addressing aim 1 (avoiding significant effects) to apply a noise insulation and compensation scheme. This scheme as proposed in the mitigation plan however is only a £4000 contribution towards the costs of insulation and ventilation. There is a question as to whether a "contribution" is adequate for "avoiding" significant effects as per aim 1 of the Government's noise policy. Further, paragraph 12.9.45 indicates that the mitigation "will avoid or reduce significant effects at many receptors". Noise insulation schemes

of this nature only “avoid” significant effects where the noise insulation is actually installed at the property. It is considered unlikely that the cost of noise insulation and ventilation would be less than £4,000 and so this will then generally require a contribution from the homeowner. Consequently, take-up is generally low when a grant type scheme with a contribution to the costs only are provided - to drive take-up of the scheme full costs need to be provided alongside provision of acoustic glazing options. It is considered that this scheme would not provide adequate coverage to enable a claim that the significant effects from aircraft noise are avoided.

- The aviation policy at Heathrow has more generous compensation package and restriction on night flights (11pm-7am). The Air Navigation Guidance 2017 sets LOAEL of 51dB LAeq16hr for daytime noise and 45dB LAeq8hr – so the proposed contours (50/40) are significantly ‘tighter’ but mitigation doesn’t apply until 63dB day and 55dB night to properties within the contours, which is significantly worse than proposed by Heathrow extension.
- The proposed night flying restrictions presented in the Noise Mitigation Plan indicate that only the QC8 and 16 aircraft cannot operate between 11pm and 7am. As the PEIR points out, aircraft technology is improving and aircraft are getting quieter. Clarity should be sought on the extent to which this would make a difference to minimising the effects of night flights. Consideration should be given to ways to incentivise the use of quieter aircraft types at night and/or how the noise limits and fines can be used in combination to act as an incentive.
- The assessment identifies that there are no dwellings where there would be at least one additional awakening either at Year 2 or Year 20. It is not possible to verify this as there are no contours presented, however this seems unlikely given there are over 200 dwellings inside the night-time SOAEL in Year 20. The method for the calculation of awakenings is not apparent through the documentation – key considerations need to be understood to enable understanding of this result. This should be included within the ES.
- The assessment considers there is likely to be an even temporal distribution of flights across the night – ie 1 per hour. Clarity should be sought on the likelihood and reality of this happening in practice given the nature of the night-time operation being cargo only. This assumption may partially explain why there are no additional awakenings forecast - additional awakenings is a function of the magnitude of internal noise events, the number of the events and the time/frequency between events. It is therefore essential that clarification is provided on the proposed night flights schedule and this should be detailed and assessed within the ES.
- The analysis indicates that the most effective means for reducing sleep disturbance is the preferential runway use proposal which reduces flights over Ramsgate. Clarity should be provided on the feasibility of this, if it is to be presented as a mitigation option (though it is recognised that this is a matter for airspace design so may not be relevant for the DCO).

- Notwithstanding the issues outlined, the number of movements within the night-time period should be limited to 8 in accordance with all environmental information produced, otherwise all work in the Environmental Statement would not adequately assess the impact of the development. Therefore there should be no objection for this restriction to be stated as a DCO requirement.
- Schools:
 - Seven schools have been identified as having a significant effect arising from the development (Paragraph 12.9.58 and Table 12.10). Table 12.26 presents the predicted aircraft noise levels for non-residential receptors including schools (as identified meeting the impact criteria). Paragraph 12.9.61 indicates that “noise sensitive schools... have been identified which are exposed to noise levels in excess of 60 dB LAeq,16hr”, however the noise levels in Table 12.26 do not support this statement, presenting no schools having noise levels greater than 58 dB LAeq,16hr, unless the magnitude of the change has resulted in this identification. Clarity should be provided on which criteria has identified significant effects for these schools.
 - In respect of the mitigation applied to schools where a significant effect has been identified. In Appendix 1, Section 3 of the noise mitigation plan the proposals for the Noise insulation scheme are set out. This section states that “The airport will provide reasonable levels of noise insulation and ventilation for schools and community buildings within the 60 dB LAeq (16 hour) day time contour.” The data presented in Table 12.26 would suggest that there are no schools that meet the eligibility criteria for the scheme – so whilst seven schools are identified with significant effects these would not qualify for the noise insulation scheme. The proposed noise insulation scheme for schools is considered insufficient to mitigate the significant effects that have been identified.
 - Further details and revision of the noise insulation scheme for schools should be provided as part of the ES that demonstrate adequacy to address the identified effects. The scheme currently defines that the project “will provide reasonable levels of noise insulation and ventilation”. There needs to be greater clarity on the approach to define reasonable and what criteria would be applied. A good starting point would be the application of noise insulation and ventilation to enable the requirements of BB93 to be met. A revised mitigation plan should be provided with greater detail on this scheme.
 - The noise contour plans show additional contours i.e. the extent of 57dB(LAeq16hr-daytime) contour as this is the threshold where the Aviation Policy Framework suggest there is the onset of significant community annoyance, as well as the 60dB contour (which had to be requested additionally by the Council for the consultation).
- The analysis indicates (para 12.9.53 and Table 12.25) that the number of dwellings exposed to daytime SOAEL increases from 48 to 115 between year 2 and 20. As with the night-time SOAEL point raised above, there is a question of adequacy of the proposed noise insulation scheme if this to be the primary means to “avoid” significant effects.

- The analysis indicates that the number of dwellings exposed to noise levels greater than LOAEL both daytime and night-time is likely to increase. Whilst it is understood that the number of movements is forecast to grow and hence the noise exposure footprint gets larger, and that this is largely a matter of airspace design, some clarity of how the mitigation measures presented might address this to reduce the effects commensurate with the growth forecast is required to be provided. It is not clear how the mitigation measures reduce the effects over time. For example, as with night flights, there appear to be few incentives for operators to consider operating least noisy aircraft available and appropriate to the service.
- Paragraph 12.9.45 refers to “embedded” mitigation from the mitigation plan as outlined in section 12.7. However, it is not clear which of those items in the mitigation plan would be considered embedded and which of them contribute to reducing noise levels – not all of them do, eg the noise and track monitoring system is a management tool, whilst this is an important tool for reporting it would not necessarily reduce noise. Further it is not clear which ones have been considered in the development of the dwelling counts exposed to SOAEL and LOAEL values.
- The evaluation of airport mitigation options presented in Appendix 12.3 is considered appropriate.
- Mitigation Plan:

In addition to the specific effects comments raised above with respect to night flights and schools the following points are made, that should be addressed within the ES:

- It is considered that the mitigation plan as currently presented does not provide sufficient information as to how the items enable the aims of noise policy to be achieved and which of the aims of noise policy each addresses. There should also be an evaluation of the mitigation elements to demonstrate how they each meet the aims of noise policy to avoid significant effects; mitigate and minimise adverse effects; and improve the effects on health and quality of life. The evaluation should demonstrate why they are considered appropriate.
- Further, the NMP indicates that the requirements of the ICAO Balanced Approach have been considered in the development of the mitigation but it is not clear how each item relates to the aspects of the ICAO Balanced Approach.
- The assessment of effects clearly shows that the effects worsen over time as movements grow and so there is no mechanism built in to the mitigation to apply some measure of control over the growth of adverse effects as the airport grows, ie there is an implication that worsening effects is a consequence of growth. This is a limited view and the mitigation plan should present mechanisms to incentivise the airport and or its operators to improve performance and reduce these effects over time, in particular where there are significant effects identified eg from night flights and to schools.
- The mitigation plan presents some night flight restrictions with annual quota limits applied to the core night quota period (2300 to 06:00 in this case) of 4000, with an additional quota of 2000 for flights in the shoulder period (defined as 06:00 to 07:00 for

this airport) – that is a total of 6,000. The analysis indicates a maximum of 8 flights per night and so an overall average quota count per movement of 2. However, there is no restriction on the number of movements in this period, so there could be many more movements by aircraft at the lower quota count range, or fewer at the higher end. This Quota Count approach can be an effective mechanism for managing the effects of night flights, especially when considered in conjunction with the noise insulation scheme. However, given the current limitations on the information provided, it is unclear how effective this mechanism will be until all matters raised have been addressed.

- It is not clear what the securing mechanisms are for these mitigation items, clarity should be presented at ES on how these items will be secured.
- Paragraph 1.4 includes planes “scheduled to land” within the night-time period, but omits those aircraft that land during the night-time period when the scheduled landing time has been altered.
- Appendix 12.3 presents an appraisal of the airport mitigation options for displaced thresholds and alternative glideslopes. This analysis indicates that these potentially offer relatively small benefits over the standard positioning and slopes and so they have not been adopted. Limitations in the way in which these have been assessed mask the benefits for those that would benefit (in particular people in Ramsgate). This may be acceptable for the early years of operation where the impacts have been demonstrated to be much smaller it is, in later years the impacts have been shown to worsen, with no mitigation present to reduce noise levels as the airport grows other than assumptions that technology will deliver. It is therefore considered that in the ES further analysis should be presented to demonstrate that without these (and potentially other) mitigation elements that all the aims of noise policy can be met; how these options could be deployed over time to offset some of the worsening of effects that accompanies the growth of the airport; and to demonstrate how significant effects have been avoided as far as possible before the application of a noise insulation scheme.
- The adoption of continuous descent approach does not appear in the list of mitigation elements. Evaluation of this should be provided within the ES.
- Measures should be developed, considered, assessed and analysed that could be implemented over time as the airport grows to offset the increased effects (increased glideslope may well be one of these).
- An analysis and evaluation of the noise limits and fine proposals should be undertaken to support the mitigation plan so that some understanding can be provided of how much of a deterrent the proposals may be. This should be detailed within the ES.
- It is important to emphasise that residents will not have recourse to complaint to the Council Environmental Health team to investigate complaints of aircraft noise because Statutory Nuisance does not apply to aviation which is specifically exempted hence why it is vital all residents affected are made aware in plain English of the implications of the potential noise..

- There are a number of different noise metrics units used within the noise mitigation plan including EPNdB and LAMax that are used to describe noise levels from individual aircraft. These could be considered complex for the layperson to understand and it is recommended that a non-technical version of the mitigation plan is prepared to accompany the ES.
- The description of the proposals for night flight restrictions is long and complex – the tables of aircraft types are very lengthy – consideration should be given to providing a simplified explanation (perhaps with a more technical supporting note). This should be simplified to enable better understanding. A time period of application and review should also be applied.
- The justification for the number and location of noise monitors is not provided. The proposals for the noise monitoring terminals indicate a position of 6.5km from start of roll. The reason for this positioning should be made clear. It is assumed that this is because this is the same approach as that taken at other airports where noise limits are in place as it relates to the measurement position used for determining take off noise in the ICAO aircraft noise certification process. The potential locations should be highlighted on a map for ease of understanding. Whilst this approach is appropriate as a minimum, there are other options for citing noise monitoring terminals. For example, noise monitors could additionally be cited in communities where significant effects have been identified – this would be especially helpful to track noise levels over time, especially when this has been identified as worsening. This would provide transparency. Greater justification should be provided in the ES on the noise monitoring arrangements including reasons for rejection of alternative/supplementary community based approaches and who will monitor the data and how will this be reported.
- World Health Organisation (WHO) and the former PPG24 indicate that exceeding an LAMax of 45dB can cause sleep disturbance inside bedrooms at night or 60dBLAMax outside an open bedroom windows. This is a significant concern and the NMP takes no account of this maximum noise level at night other than to penalise aircraft who breach this at a considerable distance from the runway; 82dB at the reference point 6.5km away is going to be significantly louder over Ramsgate and the intervening land under the flight path. The WHO nighttime noise thresholds recommend an even lower LAMax of 45 dB given that it is reasonable for people to have their windows open. By year 20 approx 10,139 dwellings will be exposed to noise levels in excess of 80dB LASMax. Greater justification should be provided in the ES to clarify what “in excess of” means, and how the NMP would mitigate this impact.
- There are no time-based incentives, performance targets, or review periods identified so it is not clear how the mitigation plan will be reviewed over time for adequacy and effectiveness (including the financial penalties to be imposed) and to incentivise the development and implementation of further mitigation (eg new technology) to be introduced to reduce effects over time.

From a construction perspective the following comments are made:

- The overlap of activities within a phase may not have been presented as only the construction activity noise levels are given and not the overlap of activities that may occur temporally as such further significant construction noise effects may emerge. The effect of overlapping activities may be greater than the effect for the individual activities. Consideration of cumulative impacts needs to be included within the assessment contained within the ES.
- The construction vibration concludes that at Spitfire Way will exceed the SOAEL for construction vibration for works lasting more than one month and states that the potential significant adverse effect from construction vibration will be managed by managing the amplitude at which the compactor operates. It is confirmed that potential significant adverse vibration effects can be avoided through the CEMP specifying requirements around the use of the of vibratory compaction equipment.
- Paragraph 12.9.25 sets out the noise mitigation plan associated with construction activities. The approach set out is considered reasonable and follows standard practice with other major construction projects. The s61 application process will ensure further opportunity for TDC to ensure that effects of noise and vibration are mitigated appropriately to enable significant effects to be avoided as indicated in Paragraph 12.9.26.

Conclusion of preliminary significance

For aircraft and ground noise the PEIR identifies areas where there are likely significant effects for residential receptors and schools. In particular night time effects are identified and these worsen over time. These results are considered to be sufficiently robust given the stage of the process. However, the implications of noise level change for identifying significant effects have not been assessed for residential receptors and this could lead to effects being missed.

It is not clear how effective the mitigation proposed will be and how this manages the worsening of exposure over time. Specific points have been raised in section 4.5 of this review. It is expected that greater clarity should be provided in the ES and that the airspace design will have evolved further (though not yet finalised) to provide greater certainty.

From a construction assessment perspective:

- The summary of significant effect details for construction noise there is a minor/moderate temporary effect on the community of Minster with minor/moderate/sleep disturbance at 14 dwellings at Bell Davies Drive and Spitfire Way.
- With consideration of the overlap of construction activities and the other points raised above there may (or may not) be further significant effects or an extension of the duration of significant effects.

Combined effects are not presented.

Non-technical summary (NTS)

The NTS presents an overview of the significant effects from aircraft and ground noise and where they may arise for residential receptors. Whilst indicating that the effects on schools have been considered, it does not present the number of schools where a significant effect has been identified and how these are to be addressed. Whilst the NTS presents the number of dwellings with significant effects in Year 20, it does not indicate that the effects worsen from Year 2 through to Year 20, nor how the mitigation plan will address this.

The NTS does not discuss the implications of the noise mitigation plan, other than the noise insulation scheme for residential dwellings. The NTS goes on to say that properties exposed to significant noise levels (ie greater than SOAEL) that they “qualify for noise insulation under the proposed noise insulation scheme. The noise insulation scheme will reduce noise inside all dwellings such that it does not reach a level where it will significantly affect residents” – this is a statement that is not used elsewhere and if part of the scheme should form part of the description of the scheme. There is, as previously mentioned, a question to be asked as to whether a scheme that only provides a financial contribution, not the products, not the suppliers, nor an assessment of improvement can be deemed adequate to meeting the “avoid” significant adverse effects noise policy aim and whether it supports this statement in the NTS.

The NTS provides the summary below with regards to construction noise and this is considered an adequate and accurate summary of the Chapter 12 assessment.

Air Quality

Scope of the assessment

An assessment of odour has been carried out in accordance with the Institute of Air Quality Management Guidance and is presented in an Appendix 6.4. It identifies the fuel farm as a highly significant source of odour and recommends that mitigation measures, such as vapour recovery or floating roof design, should be applied. These measures should be demonstrated that there are sufficient to mitigate the impacts. Furthermore, the results of the odour assessment should be referenced within Chapter 6 including conclusions within Table 6.40.

The assessment found that the significance of odours arising from aircraft operations were uncertain. It is appreciated that there are inherent difficulties in estimating odours from airports before they start operating, however, the project should seek to quantify the impacts further and propose mitigation if necessary.

Summary Comments

We consider the scope of the assessment to be appropriate. It addresses the key impacts at relevant locations and assesses these for appropriate years.

The air quality chapter provides adequate responses to comments raised during consultation with one exception. This being our previous comment that an emissions mitigation assessment must be provided in accordance with Thanet District Council Air Quality Technical Planning guidance 2016.

Section 6.13 of PEIR only sets out a monetisation of air quality effects and the only mitigation assessed is the upgrading of construction plant to meet Stage IV emission standards. It is therefore

considered that the PEIR does not fulfil the requirements of Thanet District Council's Air Quality Technical Planning Guidance (2016).

Assessment methodology

We consider the data gathering and assessment methodology to be appropriate and that the assessment has generally been carried out in accordance with good practice, and the results were supported by the evidence.

The assessment used appropriate legislation, policy and guidance. The methods for determining significance were clearly identified and are considered appropriate.

The exceptions to this are set out below:

- Fugitive dust emissions were not explicitly assessed. It is proposed that these will be addressed via the proposed Dust Management Plan (DMP). However, this PEIR should have included an evaluation using the relevant guidance, to identify potentially significant impacts and appropriate mitigation. Such assessment should be included within the ES.
- The use of ADMS to assess aircraft sources does not account for aircraft specific plume characteristics. The use of an aircraft specific model such as ADMS-airport would have been preferable. However, the use of ADMS is likely to have overestimated rather than underestimated the impacts.
- The use of transects of receptors for the roads modelling is unclear and not a standard approach. This has led to the exclusion of the road traffic contributions from the contour plots.

Baseline

We consider the baseline data and its sources to be appropriate and adequate to enable the identification of likely significant effects.

The future baseline has been assumed to be the same as the current baseline. This is considered a conservative assumption.

Assessment of effects

The assessment identified the likely significant environmental effects for all relevant operational phases. However, demolition and construction impacts have not been evaluated at this stage. Such assessment should be sought to be included in the ES.

The environmental effects have generally been assessed using an appropriate assessment methodology. However, the use of transects of receptors for the roads modelling is unclear and not a standard approach. This has led to the exclusion of the road traffic contributions from the contour plots.

It is considered that the assessment addresses the relevant types of effect associated the development.

The assessment has considered the cumulative effects with other existing and/or approved projects. It identified residential developments and included the additional road traffic they are expected to generate in the traffic model. However, no details of how this was done are given and further details on this approach are required to assess the robustness of the conclusions.

Conclusions of preliminary significance

The conclusions of the assessment are generally considered appropriate and robust, and the significance of the effects have been identified.

The assessment found that the impact of the proposed development on annual mean NO₂ concentrations was slight in St Lawrence where the background is very high due to existing road traffic. It proposed mitigation measures (construction plant to meet Stage IV emission standards) for year 2. For years 6 and 20 it again found a slight impact in St Lawrence, but proposed no mitigation. For year 20 the assessment it was expected that measures to reduce road vehicle emissions over the next twenty years would lead to the airport impact being classed as negligible, but these reductions have not fed through to the assumed background concentrations, so it is not possible to verify this conclusion.

St Lawrence currently fails air quality objectives and the Council's draft policy will not permit worsening of air quality where levels already exceed legally binding limits. Therefore, the project needs to either demonstrate that the impact in St Lawrence is negligible, or propose alternative mitigation to offset the impact in St Lawrence (e.g. possible junction improvements to reduce existing traffic related NO₂).

The monetisation of air quality effects (provided in section 6.13 of PEIR) could be used as a basis to calculate a contribution for Emissions mitigation payments to be agreed between the applicant and the Council.

Moderate impacts at a small number of properties close to the airport are identified, although it is recognised that currently NO₂ concentrations are sufficiently below legal limits.

The small, but not insignificant, impact on the annual mean NO_x objective at the major ecological sites means that it cannot be screened from further assessment. The Biodiversity chapter includes further assessment of the ecological sites. It is noted that an appropriate Habitats Regulations Assessment (HRA) will be needed for the proposed development. This will need to consider the impacts on European habitat sites of the proposed development itself, and in-combination with other plans and projects.

Land Quality

Scope of the assessment

The proposal within the PEIR is that an outline Construction Environment Management Plan (CEMP) will be provided with the DCO application, based on currently available information, and that a full CEMP, informed by intrusive site investigation and risk assessment, will be produced at a later stage.

All consultees make comment on the requirement for an intrusive site investigation, and the importance of the CEMP as a tool for managing risks due to land quality.

The Land Quality Assessment undertaken and reported in the PEIR 2018 comprised: a desk study, including review of existing desk study reports and two intrusive investigation reports (each for a small area of the site); a site walkover; identification of information gaps; and a geotechnical assessment. The intrusive investigations that exist cover a very small portion of the site, and there is no intrusive site investigation data for most of the site.

Assessment methodology

There is no allowance in the scheme of definitions for ‘harm’ such as allergic reaction, dermatitis, skin irritation, headache or nausea that might arise from exposure to contaminated soils, but which does not result in significant harm.

An assessment of effects is carried out on each receptor, and a summary of significance of effects is provided in Table 10.14. The assessment would benefit from a table showing the sensitivity of each receptor, which is currently buried in the text.

Table 10.13 provides the significance criteria, which include a site sensitivity of very high. This has not been defined – receptor sensitivities as set out in Table 10.11 are defined for high, medium and low. A definition of ‘very high’ sensitivity should be included in the assessment. The matrix allows for two categories of significance, these being ‘significant’ and ‘not significant’. Only three of the matrix squares results in a significant effect, which is not consistent with other Chapters (e.g. Chapter 12, Noise). Further justification for the significance criteria is required.

The sequencing of the assessment methodology is confusing and potentially misleading for the reader. Potential environmental effects (on groups of receptors) and Mitigation Measures are discussed in Table 10.8, before receptors have been defined. Receptors are then introduced in Table 10.10. Environmental effects on receptors are then assessed in Section 10.8, variably assuming that Environmental (Mitigation) Measures are already in place. It is difficult for the reader to map back to Table 10.8 from section 10.8, as the receptor groupings are not consistent.

In consequence, it is difficult to judge whether the proposed Environmental (Mitigation) Measures are appropriate, as they are described prior to a discussion of effects. The assessment would be improved by removing Table 10.8 and including a preliminary assessment of environmental effects, pre-mitigation, identification of Environmental (Mitigation) Measures, followed by a revised assessment of the residual environmental effects and environmental significance in Table 10.14.

Baseline

A Phase 1 Geoenvironmental Desk Study is presented in Appendix 10.1, from which much of the baseline section of the assessment is derived. Reports are cited on two phases of site investigation a tank farm (the Jentex Tank Farm), located directly southeast of the airfield on Canterbury Road. A site investigation report also exists for the area of the radar mast in the north western area of the site. There are no intrusive site investigation data for the majority of the development site. Baseline soil and groundwater quality is therefore unknown. The conclusions of the Phase 1 geoenvironmental assessment (10.4.49) do not include radiological sources, although these are identified in the

preceding text. Historic and recent aircraft breaking activities have not been included in the baseline assessment, although these have been raised by the Council as requiring consideration.

The site is underlain by the Principal Chalk aquifer, overlain in places by quaternary head deposits. The baseline describes the site being underlain by quaternary deposits comprising clay and silt, whereas mapping shows these to be absent over much of the site. Clarification of the extent of superficial cover overlying the Chalk is required.

The site lies entirely within the catchment of the Source Protection Zone (SPZ) for the Lord of the Manor groundwater abstraction. This abstraction, which is a significant groundwater resource, relies substantially on an adit in the Chalk which runs below the existing runway, approximately 50m below the site. The runway and part of the site are in SPZ Zone 1, and the south-central and south-east part of the site is in SPZ Zone 2. The Chalk aquifer derives its permeability from secondary permeability (fracture flow) and is therefore highly susceptible to pollution due to rapid transport of dissolved and particulate contaminants through fracture networks. The geoenvironmental report (Appendix 10.1) is considered to understate the sensitivity of coastal water (moderate to high) which should be high due to international designations, and the ecological sensitivity, which does not include the ecological importance of Pegwell Bay.

The baseline description of groundwater is not consistent with the Hydrogeological Impact Assessment (HIA) presented in Appendix 8.1, and would be improved by using this document as a source. Groundwater flow directions are inconsistent between the two documents. Baseline groundwater quality is not described in Chapter 10, however Appendix 8.1 states that the local groundwater quality is impacted by nitrates, and organic compounds including TCE and carbon tetrachloride, both chlorinated solvents that are thought to have been in use at the airfield (see 3.3.4.1 in HIA, App 8.1). Baseline groundwater quality should be included in the baseline, and flow and quality descriptions should be consistent between Chapters 8 and 10.

The baseline does not describe the likely distribution of soil or groundwater contamination at the site, as there has been little site investigation undertaken across the site. It is considered that the identification of significant effects is hampered by a lack of intrusive site investigation data, as baseline soil and groundwater quality is not known.

The assessment proposes that the current baseline be used as a future baseline, as 'in the absence of the Proposed Development, there are no known factors that are expected to affect the current baseline conditions'. Climate change is anticipated to affect rainfall infiltration rates and groundwater levels, both of which are likely to have a measurable effect on contaminant mobility and migration. The ES should consider the effects of climate change on the estimate of the significance of effects, and on the likely Environmental Measures that might be required to mitigate environmental effects.

Assessment of effects

The Lord of the Manor Public Water Supply (PWS) is not identified as a separate receptor. This is an omission and should be included, due to the presence of an adit which feeds the PWS directly below the runway. Specific measures may be needed to protect this receptor that would not apply to the wider aquifer.

The effects are considered in three phases; the construction phase, operational phase, and the decommissioning phase. It is not recognised that part of the airport will be operational whilst further phases of construction are undertaken, which has particular implications for protection of human health.

Combined effects are considered, but none are identified with regard to any of the receptors. The combined effects of flooding and land quality should be considered, as should the combined effects of potentially contaminated groundwater baseflow and surface run-off to drains and Pegwell Bay via the site discharge. Chapter 8 and Chapter 10 have many areas of overlap, and the combined effects should be stated explicitly. Any combined effects with Chapter 15 (Public Health) should also be identified.

Cumulative effects are not discussed; Chapter 18 states that cumulative effects will be assessed in the ES but not as part of the PEIR. Environmental effects are not described explicitly in terms of direct, indirect, secondary, transboundary, short-term, medium-term, long-term, permanent or temporary, positive or negative effects.

The following sections describe uncertainties and omissions in the assessment.

- Effects on humans:
 - The potential presence of radiological material is not acknowledged. Solvents may include chlorinated solvents, which are not mentioned specifically. The potential for asbestos to be present in soils (possibly in deliberate disposal pits of significant volume) has not been recognised.
 - Nowhere does it explicitly state that there is a potential risk to future site users arising from in-situ soil and groundwater contamination, and that these will be mitigated through site investigation, risk assessment, remediation and verification to ensure that the site is suitable for use with respect to protection of human health.
 - The assessment of effects assumes that mitigating measures can be found and implemented via a CEMP, however there is insufficient baseline data to outline what those mitigating measures might be, how long they might take, or where they may be required. Potential impacts of the measures on the phasing and design of the scheme are therefore unknown.
 - The assessment of the operational phase does not include protection of site users due to ongoing construction i.e. managing those phases of construction that occur when the airport is open to the public. Environmental measures may be required to protect site users of the operational part of the airport from construction effects.
 - Crucially, for this proposed development which has the potential to impact a significant public water supply, the human health effects of pollution of the water supply have not been assessed.
 - The assessment of the effect on human health of the permeation of drinking water supply pipes with contaminants has not been assessed.

- Effects on groundwater (Chalk Aquifer):
 - The effects of construction (including site investigations) on turbidity in the Lord of the Manor PWS have not been considered, nor have Environmental Methods been proposed to mitigate against this risk. The effects of the day to day operation of the airport and the potential for landing large aircraft on the runway to cause turbidity or instability in the adit have not been considered.
 - Foundation construction, particularly piling, has the potential to directly impact the Lord of the Manor PWS by creating pathways for contaminant transport. Foundation design should be informed by geotechnical and land quality investigations, and should be agreed with the Environment Agency. Approval of these designs by the Environment Agency should be a pre-commencement requirement of the DCO.
 - Soil and groundwater investigation and remediation activities have the potential to adversely impact the aquifer and the PWS, and these have not been considered.
 - The operational phase assessment does not include the effects of general spillages of hazardous materials across the estate, fire-fighting activities, the use of pesticides, or de-icing activities on the aquifer or PWS.
 - The report states that 'A combination of good practice and site-specific measures for the protection of the Chalk aquifer, in combination with further consultation with the EA and with Southern Water, will result in a negligible magnitude of effect'.
 - It is possible that standard approaches to groundwater protection will not be sufficient to protect the PWS, due to its location only 50m below the runway (bearing in mind that the Chalk is recharged via fractures and fissures that allow rapid transport of contaminants and suspended solids) on a site that is likely to be impacted by fuels and chlorinated solvents, and potentially by radiological material. Site investigations are required to establish the nature and spatial extent of contamination at the site. It is equally considered possible that the results of site investigations and risk assessment will result in changes to the phasing and/or design of the scheme, in order to accommodate remediation activities or to provide mitigating features through redesign. For these reasons, it is proposed that some exploratory intrusive site investigation is undertaken prior to the DCO submission, to provide further information on sources of contamination. The significance of effects can then be judged with greater certainty, and mitigating measures identified with greater confidence.
 - The effects of a plane crash on the Chalk principal aquifer and PWS are not considered and should be included in the assessment.

- Effects on Coastal Waters:
 - There is the potential to affect coastal waters as it is understood that discharge from the site will be via an existing pipe that discharges to Pegwell Bay. There is ambiguity regarding the sensitivity of the receptor. Coastal waters are stated to have high

sensitivity (10.10.2), but Pegwell Bay is stated to have moderate sensitivity (10.10.3). The national ecological designations at Pegwell Bay indicate that it is a high sensitivity receptor and should be considered as such.

- Paragraph 10.10.10 describes how water treatment will take place on site in attenuation ponds, and water will only be pumped to the discharge pipe from these ponds once appropriate water quality standards are reached. The potential for leakage from these ponds and impact on groundwater quality has not been assessed.
- Effects on Soils:
 - The effects of a plane crash on soil quality have not been considered and should be included in the assessment. The effects of de-icing activities should also be included in the assessment.
- Effects on building and services:
 - It is accepted that the proposed measures if appropriately implemented can result in a not significant effect on buildings and services.

Conclusions of preliminary significance

The conclusions of preliminary significance are presented in Table 10.14. The conclusions are that none of the Environmental Effects identified in the assessment are significant, if the identified Environmental Measures are implemented.

It is not easy to link the information contained in Tables 10.8 and 10.9, which contains the Environmental Measures, and Table 10.14, nor to link these tables to the discussions in Sections 10.8 – 10.12. It is suggested that the sequencing of the report is altered in the DCO submission to allow the reader to be led from receptors to effects to environmental measures to preliminary significance. As it stands, the report does not allow the reader to readily assess whether all the issues that have been raised through the chapter are adequately addressed.

A weakness of the conclusions is that many of the Environmental Measures are yet undefined. It is proposed to develop a CEMP which will detail these measures, with a draft plan to be submitted with the DCO application, and a full version to be developed 'if necessary prior to commencement of works'.

The design of mitigation measures and hence the detail of the CEMP must be informed by a thorough intrusive site investigation and risk assessment. It is proposed that 'the need to complete an intrusive investigation will be secured through the DCO'.

It is considered that the former land use is likely to have resulted in potentially significant land quality impacts, particularly in the runway area where FIDO was carried out and runway foams were used. The use of chlorinated solvents and radiological materials are also potentially significant issues that may be complex to deal with. The adit under the runway which feeds the Lord of the Manor PWS is a highly sensitive receptor; protecting this receptor may require rephrasing or redesign of the scheme once the distribution of contamination is better understood. It is considered that the CEMP that will be

submitted to with the DCO application should be supported by some intrusive site investigation and assessment, even if the level of investigation is exploratory. It is considered that further information is required in order to support the conclusions of preliminary significance.

The potential for receptors to be impacted currently by land quality, and for investigation and remediation measures to be required to prevent ongoing pollution has not been assessed.

The potential for site investigation and remediation measures in themselves to pose a risk to receptors has not been assessed.

The effects of a plane crash on land quality and the Environmental Measures to be taken to mitigate risks to the identified receptors has not been assessed.

Non Technical Summary

The NTS section on Land Quality does not mention the Lord of the Manor groundwater abstraction, or the adit that lies under the runway that feeds this PWS.

The NTS does not mention the likely use of chlorinated solvents at the site, and known impact of the Lord of the Manor PWS with chlorinated solvents, nor does it mention the historic FIDO practices which may mean that there is potentially significant impact to land and groundwater quality with hydrocarbons. The NTS also fails to state how the land may be impacted by a wide range of contaminants, including radiological materials, associated with historic site activities.

'It states that the 'highest risk of contamination is associated with the risk to groundwater from the Jentex Fuel Farm site.', although in the absence of intrusive site investigation data, this assertion is not supported.

The NTS states that a finalised CEMP will be submitted with the DCO application, to include measures to manage any land quality effects. This contradicts Table 10.8 of Chapter 10 which states that 'a CEMP will be prepared and agreed following consultation with the EA and other relevant stakeholders if necessary prior to commencement of works. A draft outline CEMP will be submitted as part of the DCO application'.

The NTS states that 'An aerodrome manual will be produced for the operational phase of the proposed development and will include measures to manage effects on land quality' An aerodrome manual is however not included in Tables 10.8 or 10.14 of Chapter 10 which describe Environmental Measures and conclusions of preliminary significance respectively.

Landscape and Visual Impact

The inclusion of additional viewpoints in line with our previous comments is welcomed. The viewpoint plan submitted broadly accords with the comments in the Council's response to the PEIR, however viewpoint 5 is sited on Canterbury Road West, rather than on the A256 adjacent to the eastern extent of the site to the south of the Manston green site. The response to the Council's request in Table 11.7 of the PEIR is noted, however a viewpoint should still be provided situated to the east of the eastern extent of the site on the Haine Road, given the visibility of the airport from this area from the road and the committed residential development at Manston Green and visual receptor that will be present in this community.

The PEIR provides wireframes at all 22 locations at Appendix 11.1. These show the highly urbanising effect of the proposed development on the landscape of the district, with a significant effect deemed at multiple viewpoints at Appendix 11.3 and the particular effect of the “aircraft breakdown hangers” shown in the wireframe drawings on residential receptors at Manston, amongst other. It would assist the Council if the methodology for the production of the wireframe analysis could be provided, as this is not outlined in any of the documentation, to ensure transparency and accuracy of the display of visual effects of the development. This will also help with explaining to the community how they were produced.

As no detailed mitigation has been produced, nor has this been integrated into the Masterplan, we are not in a position to assess whether the impact on visual receptors and the landscape of the district will be acceptable or not. For example, from viewing the masterplan, no buffer or screening is proposed to be provided along the eastern extent of the site to the south of Manston Road and Manston Village, which will contribute to a significant impact on close views of the site from the village.

We note that you intend to provide only 6, 9 and 20 viewpoints as visualisations. We are still awaiting an example of the night-time visualisation example previously requested and we will use this to provide our view on which of the viewpoints require visualisation as well as night-time viewpoint assessments. As per our comments last year, no assessment of the effects of lighting from the proposed development has occurred according to the PEIR, which in turn means that night-time visualisations have not been produced for consultation. We await further information on the impact on visual receptors from this element of the development.

The PEIR states that the mitigation measures incorporated into the proposed development are stated at Table 11.11, whereas it appears these are contained within 11.13. As the submission outlines, these are generic principles which are to be incorporated into the “Manston Airport Design Principles” document which will accompany the DCO. This is at odds with Table 11.7’s response to previous TDC comment, which states that the Design and Access statement sets out the Manston Airport Design Principles. No Design and Access statement is being consulted upon and from the information provided the masterplan has not been informed by the outcomes of the landscape and visual impact assessment in the PEIR. The continued lack of information creates difficulty in commenting at this stage on how the negative visual impact of the development could be limited by the design of buildings and potential embedded mitigation.

The landscape and visual impact will be considered within the Council’s Local Impact Report upon receipt of the required information.

Historical Environment

No additional information regarding archaeological investigation appears to have occurred since the previous consultation. The response to the Council’s comments on required trial trenching is stated as:

“Due to limitations on access for intrusive surveys, specific information requirements will be addressed when access can be obtained. The scope of further intrusive survey will be discussed with KCC, TDC and HE. An Archaeological Written Scheme of Investigation will be provided with the ES

chapter. It is recognised that given the gap in understanding, alterations to some of the project design may be required to preserve significant assets in situ in the northern grass area.”

As previously outlined, given the extent of development on the Northern grass within your proposal, it is considered highly likely that you will be required to carry out your own trial trenching in this location to support your submission to the Planning Inspectorate.

Kent County Council (KCC) and Historic England have been consulted on the proposal, and these bodies are key consultees and their expertise should be relied upon.

In relation to indirect-effects from the operation of the airport, paragraph 9.6.16 identifies that the Conservation Areas of Ramsgate, Broadstairs, Minster and Acol are potential receptors of significant adverse indirect effects. The indirect effects of noise on designated heritage assets under the flightpath does not appear to have been considered within the assessment of indirect effects, rather focusing on the physical changes to the airport site, rather than changes resulting from its operation. For example, listed buildings in the flight path will be unable to change windows to provide additional alleviation from aircraft noise without potential harm to the significance of the asset. This should be addressed within the PEIR, as the report at reference 169 does not consider this type of indirect impact, rather focusing on the measure of noise impact.

Traffic and Transportation

KCC will comment on the impact from the development on the highway network, and their expertise should be relied upon.

As previously outlined, the scope of the transport assessment should include the expected housing requirement within the Proposed Revisions to draft Local Plan (preferred options) document from January 2017, including any additional housing requirement resulting from your development. We remain concerned about the potential impacts on the network surrounding the site from both construction and operational phase given the likely level of traffic generated by the proposed development, especially regarding Spitfire Way, Spitfire Junction and Manston Court Road.

The methodology for distributing trips on the network for the Transport Assessment should be based on either the KCC and TDC strategic model, or a similar strategic model compatible with the KCC and TDC built for the purpose of analysing the distribution of trips on the network . A spreadsheet model is considered inappropriate for the level of trip generation created by the project without further information on how compatible this model is with the strategic model. Please refer to KCC Highways and Transportation for further guidance.

Physical improvements to the network are alluded to within the updated PEIR, however they are only briefly outlined with no detailed plans produced. A crossroad junction proposed at the junction of Spitfire Way and Manston Road would be preferably a roundabout, however we await further information on how this revised junction would operate with the movement proposed. The project does not include the northern link from Manston Road to Westwood Cross within the site. This link forms part of the ‘inner circuit’ within the Thanet Transport Strategy (TTS). Given that the commercial development on the northern grass appears to serve no functional purpose to the operation of the airport to the south, this area can and should be re-designed to include this route. The project will

also be required to contribute a proportionate amount to the Manston Airport-Haine Road link in the TTS outside of the extent of the site.

Biodiversity

KCC, Natural England and Environment Agency will comment as key consultees on the impact from the proposal on biodiversity and their expertise should be relied upon.

Health and Wellbeing

The PEIR states that a number of factors contribute towards a greater potential sensitivity to health impacts in the district, with the magnitude of impact on public health dependent on the size of the change in noise or air pollution. Significant concerns are raised about the potential impact from the project at all stages on public health and wellbeing, especially regarding potential sleep disturbance from the operation of the airport.. This section of the PEIR is intrinsically linked to Sections 6 and 12 of the PEIR and the assessments made. However as the significance of this impact is yet to be quantified, with the Health Impact Assessment (HIA) yet to be carried out, we are unable to comment on the implications of the project on this matter.

The non-technical PEIR summary states that an HIA Scoping Statement has been produced, however this has not been provided for comment. It is also noted that a health forum is to be carried out in coordination with the Kent Director of Public Health. Thanet District Council should be invited to participate in this forum, given the potential significant effects suggest by the PEIR on the local population.

Given the current deficiency in information with a lack of an HIA at this stage of consultation, the Council will await further information in your submission before considering the impact of your project on health and wellbeing.

Other matters

Aircraft Teardown Hangers

The previous consultation stated the presence of an "Aircraft Teardown Facility" within your project, however provided little detail within the PEIR. This facility appears to be replaced in the new PEIR by three "Maintenance, Repair and Overhaul (MRO)" hangers to be provided over the four phases of construction, with all hangers stated as being capable of accommodating the largest aircraft (Class F). This facility is separately referred to in the PEIR as "a small maintenance repair and overhaul (MRO) facility with approximately 10 aircraft per year being dismantled and recycled". No other information is provided, and therefore our comments in our previous consultation response remain valid. These are found below:

"it is worth noting our concern with this proposal given the historic use of the site and enforcement action taken against similar operations previously due to potential contamination. It is imperative that more information is provided at the earliest stage to the local community about this facility and how it will operate. This should include but not be restricted to how fuels and other harmful or toxic materials will be removed from airplanes during breaking. We advise early discussions with the Environment Agency on this element of the project. On the basis of no information being provided about the

facility, we are concerned about the need, viability and operation of such a facility within a Groundwater Source Protection Zone.”

Climate Change

Environment Agency will comment as key consultees on the impact from the proposal on climate change and their expertise should be relied upon.

Major Accident and Disasters

The Council note that this section will continue to be developed for inclusion within the ES to be submitted. Initial comments are made with regard to the lack of details of the anticipated Public Safety Zones for the airport, whether the Civil Aviation Authority have been engaged at this stage on the matter, and how this impacts on the potential receptors affected by the proposed development, particular with regarding to the existing or future residential population (including committed development).

Cumulative Impact

The inclusion of the Manston Green and Eurokent sites into the cumulative effects assessment is welcomed. The assessment of cumulative impact may require additional sites for inclusion when the ES is finalised.

Conclusion

There are potentially significant detrimental environmental and amenity impacts on Thanet and its local community from the development and these have not been addressed in the PEIR. The Council remain significantly concerned about the potential impact from your proposed development on the living conditions of those residential occupiers within close proximity of the airport, those residents living under the (indicative) flight paths, especially in relation to night flights, as well as disruption to multiple schools within the district. Further survey and investigatory work is required before the full impacts of your project can be quantified.

The ramifications on the proposal on the countryside has still not been assessed adequately in terms of visual impact and potential housing need, and there is a deficiency in information relating to delivery of the project or viability over the short, medium and long term which undermines any perceived economic benefits to the district from the project.

If the DCO and compulsory acquisition is successful, you will be required to work with the Council as the host authority, when dealing with detailed matters for the project. We are extremely disappointed that you have been unwilling to enter into a Planning Performance Agreement (PPA) with Thanet District Council to allow us to ensure that adequate resources for handling the NSIP process are available and to encourage joint working between the applicant and statutory consultees.

The above comments are made without prejudice to the Council's written representation submission, adequacy of consultation and local impact report on the NSIP application.

Yours sincerely



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Thanet District Council