

Gatwick Airport Northern Runway Project

Appendix B – Response on Landscape and Ecology

Book 10

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- 1 The Applicant's Response to Deadline 7 Submissions on the Draft DCO
- 1.1 Purpose of this Document
- 1.1.1 This document has been prepared to set out the Applicant's response to landscape and ecology related comments received at Deadline 7, namely:
 - Joint Local Authorities Response to the Applicant's Deadline 6 Submissions [REP7-103];
 - Joint Surrey Councils Comments on any further information / submissions received by Deadline 6 [REP7-105]
 - Legal Partnership Authorities Responses to ExQ2 [REP7-110]
 - West Sussex Joint Local Authorities Comments on any further information / submissions received by Deadline 6 [REP7-120]
- 1.2 Joint Local Authorities Response to the Applicant's Deadline 6 Submissions [REP7-103]

Ref	Joint Local Authorities Response	The Applicant's Response
	REP6-018 - Deadline 6 Submission - 5.3 Environmental Statement Appendix 5.3.2 CoCP Annex 6 - Document Index Outline Arboricultural and Vegetation Method Statement (oAVMS) - Parts 1-6 (Clean) / (Tracked) [REP6-018 –REP6-029]	
1.1	It should be noted that all six documents which form the parts of the AIA, and all six documents which form the parts of the oAVMS, are incredibly slow at loading (mainly the rendering of plans within) makingreview of the documents extremely difficult. They frequently fail to loadand crash when viewed electronically. This	The Applicant has submitted all application and examination files in accordance with the file size limit set out in PINS Advice Note Six. Notwithstanding this, file sizes of the oAVMS have been reviewed and reduced for Deadline 8 submissions to help improve online loading.



1.2

was highlighted to the ExA and acknowledged by the Applicant's consultants during a joint meetingheld on the 14th June 2024 (in discussion of changes to landscape proposals) and the problems persist with the documents provided at Deadline 6. It is requested that any future revisions are improved to ensure that this does not hinder the further review of documents and that printed hard copies (at the scale stated on plans) are made availableto the Authorities for all future revisions submitted.

The oAVMS is intended as a control document for the removal of arboricultural features as well as other vegetation features. The vegetation removal and protection plans provided within appendices C and D of the oAVMS provide no context as to the vegetation types proposed for removal and retention. It would be helpful if the vegetation could be identified on the plans by habitat type, such as neutral grassland, reedbed, watercourse and scrub.

In addition, it is of concern that the plans do not identify any vegetation proposed for retention (as suggested within paragraph 1.2.3 of the oAVMS) and therefore do not demonstrate that appropriate

Additional information layers which show the types of vegetation have been provided within **Appendices C and D** of the **Outline Arboricultural and Vegetation Method Statement** (oAVMS) (Doc Ref. 5.3) to provide context on the vegetation types proposed for removal (based on the worst case assessment) as suggested would be helpful.

In relation to identifying vegetation proposed for retention and the appropriate protection measures for the retained vegetation, this CAD layer was erroneously omitted from the versions of the plans that were submitted at Deadline 6. This has been corrected for Deadline 8.

The plans submitted at Deadline 8 provide the detail which has been identified as missing by the JLAs and therefore the



	protection measures are proposed for retained vegetation. Requirement 28 provides for a subsequent AVMS to be provided in substantial accordance with the oAVMS however, due to the Authorities concerns with the current level of detail within this document as set out above, it is not considered to provide the appropriate level of detail to ensure protection of arboricultural and vegetation features.	Applicant is content that the appropriate level of detail to ensure the protection of retained arboriculture and vegetation is included.
1.3	Due to the numerous occasions where individual tree entries within the tree schedules contain high quantities of trees that are collectively referenced, provision should be made within the oAVMS to ensure that detailed AVMS are made abundantly clear as to which trees are proposed for removal and which are retained should this occur within the same referenced tree entry (i.e. using further references such as T35.1 (remove), T35.2 (retain) for example, identified as such on both Tree Work Schedules and Detailed Vegetation Removal and Protection Plans).	It is standard practice and was always the Applicant's intention to provide this level of identification at the detailed design stage. However, to provide additional comfort to the JLAs now, paragraph 4.1.4 of the oAVMS (Doc Ref. 5.3) has been inserted at Deadline 8 to confirm that the detailed AVMS (to be provided under DCO Requirement 28) will identify individual trees for removal in the Tree Work Schedules, using decimal places to differentiate between the individual trees.
1.4	The retained section of tree group G27 (shown within Appendix A, drawing nos. 812 and 813) no longer has tree protection measures identified and it is not clear	The CAD layer identifying vegetation proposed for retention and the appropriate protection measures for the retained vegetation was erroneously omitted from the versions of the plans that were submitted at Deadline 6. This has been



	if the entire groups is intended for removal which would be of concern.	corrected in the oAVMS (Doc Ref. 5.3) submitted at Deadline 8. The revised versions of Drawing Nos. 812 and 813 (contained in Appendix A) submitted at Deadline 8 identify the tree protection measures to be provided for Tree Group G27. These drawings also show the extent of Tree Group G27 to be retained, as was shown on the previous versions.
1.5	The proposals within Project Change 4 (on airport wastewater treatment works) as identified within [AS-146] have not been accounted for. Appendix B, drawing no. 753 still shows many trees within G62 as retained despite not being possible to retain as per the project description.	When the Deadline 6 version of the oAVMS was submitted, Project Change 4 (relating to the On-airport WWTW) had not been accepted into the examination by the ExA and hence was not taken into account. The Proposed Change has since been accepted by the ExA (on 10 th July 2024) and therefore the updated version of the oAVMS (Doc Ref. 5.3) and appendices submitted at Deadline 8 take this into account.
1.6	G16 is now recognised within plans to require partial clearance to approximately 12m to facilitate a haul road, though not reflected by the key (as shown within Appendix A, drawing no. 750). A 12m clearance for a construction haul road is inappropriately excessive as most haul roads for construction projects can facilitate a 4m clearance with a sensible construction	The Applicant's assessment of tree removal is carried out on a "worst-case-scenario". As the detailed design of the construction haul road has not been developed; the Applicant's construction team confirmed that 12 metre clearance is the worst case and which has therefore been relied upon in the oAVMS and incorporated into the EIA assessment and the tree and habitat calculations.



management plan. This comment also relates to W4 shown within the same drawing.	The detailed AVMS, to be provided under DCO Requirement 28, will specify the actual clearance that is required for the delivery of the Project as part of the detailed design stage.
1.7 Tree groups G12 and G16, and hedgerows H1 and H2, situated within the airport plans are shown for partial removal though they have not been included within tree removal schedules and other assessments within the AIA.	At specified on Drawing 751 of the oAVMS Appendix X, a section of Tree Group G12 will require removal to allow construction of a new footpath bridge. Drawing 751 also specifies that a section of Tree Group G16 will need to be removed to enable access to the haul road. In both instances, the location and extent of vegetation removal is not yet confirmed and, as part of the detailed design stage, the designs would look to exploit existing gaps in the tree groups to avoid loss of existing trees. As such and therefore at this stage, no trees within these groups are listed on the Tree Removal Schedules as to be removed or taken into account in the AIA. For Hedgerows H1 and H2, small sections will require removal to allow construction of a new footpath bridge. Similarly to the above and as part of the detailed design stage, the design would look to exploit existing gaps in the vegetation to avoid loss of existing trees. As such and therefore at this stage, no trees within these hedgerows are listed on the Tree Removal Schedules or taken into account in the AIA.



1.9

In drawing number 782 of the Airport Preliminary
Vegetation Removal and Protection Plans (Appendix
D)[REP6-024], a hedgerow within a vegetated area
proposed for removal exists between the A23
(London Road) and Perimeter Road East. This
hedgerow has not been considered within the AIA nor
the Tree Removal and Retention Plans; however, the
Illustrative Landscape Overview and Key Plan (figure
1.1.1) of the OLEMP [REP6-032] has identified it's
replacement.

In addition, the oAVMS also shows H31 and H32 (adjacent Pentagon Field) as retained in full; however, given the vehicular activity required, it is suspected that the existing entrance will require partial loss of one or both hedgerows to ensure suitable visibility splays. Both of which are of concern and may also have some minor effect on the finding within the BNG Statement [REP6-050] which refer to hedgerows identified within the Tree Survey Report and Arboricultural Impact Assessment.

A tree group identified for removal has not been referenced on any plans provided (including the Tree Survey Plans). The group is shown within drawing no. 819 of Appendix A, located south of the South Terminal Shuttle Station. In addition, a single tree

The H34 hedgerow (identified between the A23 (London Road) and Perimeter Road East) will be removed as shown on Drawing No. 782 of Appendix D: Airport Preliminary Vegetation Removal and Protection Plans contained in the **oAVMS** (Doc Ref. 5.3). This low quality landscape feature will be replaced with a native, species rich hedgerow to provide ecological benefits and improve the visual quality and character of the road corridor.

As noted, its replacement is shown on the Illustrative Landscape Overview and Key Plan (Figure 1.1.1) of the **oLEMP** (Doc Ref. 5.3) because it will be removed.

As explained in the Applicant's **Note on Pentagon Field** [REP5-078], suitable vehicular access to Pentagon Field can be obtained via the existing surfaced track to the north and then through the existing airport road network. The construction routing and point of access to the site will be detailed in Construction Traffic Management Plan approved under DCO Requirement 12.

The unnumbered trees previously shown on Drawing No. 819 (oAVMS Appendix A) and Drawing No. 809 (AIA Appendix H) will not be removed as a result of the Project, given they lie outside of and some distance from any works areas. As a



south of the group has not been identified on any plan provided.

result, these trees were not surveyed as part of the Tree Survey Report.

Drawing No. 819 of the **oAVMS Appendix A** (Doc Ref. 5.3) and Drawing No. 809 of the **AIA Appendix H** (Doc Ref. 5.3) have been revised as Deadline 8 to remove the previous yellow label which indicated their removal.

- 3. REP6-032- 5.3 Environmental Statement Appendix 8.8.1 Outline Landscape and Ecology Management Plan Part 1 Version 5 (Clean) / REP6-033 (Tracked)
- 3.1 It is of concern that Section 6.5.8 has not been amended to reflect comments made by the Authorities regarding the need to secure the continued long-term management of the entirety of the North West Zone (NWZ) and Land East of the Railway Line (LERL) Biodiversity Areas, both within and outside the DCO Limits.

As key components of the ecological network, these areas are critical to the viability of the overall mitigation package.

The long-term management of both biodiversity areas outwith the Project site is a key element of the Gatwick Biodiversity Action Plan and part of GALs' overall approach to biodiversity within its Second Decade of Change commitments. As such, the management of these areas will happen with or without the NRP proceeding.

However, these areas do not form part of the Project and are not considered critical to the viability of mitigation. The ongoing enhancement and management of habitats by GAL deliberately do not form part of the ecology assessment completed for the Project, including the BNG assessment (section 4.1.3 of ES Appendix 9.9.2 **BNG Statement** [REP6-050]) to avoid the Project claiming benefit for management that would happen with or without the NRP. As such, it follows that



	At Deadline 5, the Authorities commented as follows: 'the Authorities request confirmation that the entirety of these two Biodiversity Areas will be incorporated within the relevant LEMPs, including the parts which lie outside the Project site boundary. We would be grateful if this could be made absolutely clear in a future revision of the oLEMP.' We therefore request an amendment to the next version of the oLEMP.	the conclusion with respect to the significance of effects does not rely on such management and nor, therefore, does any of the mitigation set out in ES Chapter 9 Ecology and Nature Conservation [APP-034]. The existing areas have, however, been considered in the overall Ecology Strategy in the oLEMP (Doc Ref. 5.3) to demonstrate the cohesive approach which will be taken.
3.2	Figure 1.1.1 (Illustrative Landscape Overview and Key Plan) dated July 2023 needs to be updated to incorporate changes, including the proposed reedbed filtration system and wastewater treatment works.	A revised oLEMP (Doc Ref. 5.3) including revisions to Figure 1.1.1 with Project Changes 1 to 4 is submitted at Deadline 8. When the Deadline 6 version of the oLEMP was submitted, Project Change 4 (On-airport WWTW) had not been accepted into the examination by the ExA. The Project Change has since been accepted by the ExA (10 th July) and therefore the updated version of the oLEMP (incl. its appendices) submitted at Deadline 8 reflects the now-accepted Project Change 4.
3.3	During a meeting with the Applicant held on the 14th June 2024, it was eluded to that there would be additional tree planting proposed within the area known as Museum Field, predominantly to meet replacement planting requirements of CBC Policy	Figure 1.2.1 (Museum Field Sketch Landscape Concept) of the oLEMP (Deadline 4 version) [REP4-012] shaded green and labelled "Proposed woodland and trees" in the key and had an accompanying note on the figure describing that the existing hedgerows would be supplemented with "belts of scrub and trees". Any trees that may have been planted in that area were



CH6. This is also suggested within the cover letter for DL6 submissions on page 4 of [REP6-001].

However, whilst illustratively Figure 1.2.1 (Museum Field Sketch Landscape Concept) dated July 2023 presented within [REP6-033] has changed, it is more or less exactly the same as that presented within [REP4-012] in relation to proposed woodland and tree planting (with only an increase of scrub planting identified). The date also suggests there are no changes from July 2023.

Therefore, the Authorities believe the suggested increased tree planting at Museum Field which has been stated within the Cover Letter [REP6-033], oAVMS [REP6-039] and BNG Statement [REP6- 050] is misleading and requires further demonstration as to how an increase has been achieved.

not considered in the AIA figures because it was anticipated that these areas would be predominantly scrubland. This approach is explained in Appendix J of the AIA, which sets out the tree loss and replanting methodology against CBC Policy CH6. The tables at paragraphs 4.1.4 and 4.1.5 of Appendix J demonstrate that only trees within woodland areas and individual trees have been considered as part of the replanting requirements.

In the revised version of Figure 1.2.1 of the oLEMP (Deadline 6 version) [REP6-033], the Applicant committed to planting trees (i.e. not scrub) in these areas. The tree planting areas are shown shaded bright green on Figure 1.2.1 and labelled "proposed woodland and trees" in the key. The related note on Figure 1.2.1 also confirms this change by stating that this area would comprise "belts of woodland".

The area shown bright green on the Figure 1.2.1 of the oLEMP is where the Applicant is now committing to new planting trees where it was not shown in the Deadline 4 version of the oLEMP Figure 1.2.1 [REP4-012].

It is therefore incorrect to say that the representations about committing to increased planting was misleading.



3.4	To ensure that the CBC Policy CH6 is secured through to detailed design submissions, the Authorities have suggested amendments to the oLEMP within the review of Tree Survey Report and	revised version from the Deadline 4 version and to remove reference to "scrub" from the key, i.e. to make clear this is an area identified for new woodland tree planting. Alongside this, the Applicant has put forward a new DCO Requirement at Deadline 8 to secure tree replanting provisions in line with CBC Policy CH6, with accompanying updates made to the olemp and oavms in reference to this and to explain how compliance will be demonstrated. The Applicant has put forward a new DCO Requirement at Deadline 8 to secure tree replanting provisions in line with CBC Policy CH6. Accompanying updates have been made to the olemp and oavms in reference to this new requirement
4. Part 2	Arboricultural Impact Assessment stated in section 6 within this document. REP6-034 - 5.3 Environmental Statement Appendix 2 Version 5 (Clean) / REP6-035 (Tracked)	and to explain how compliance will be demonstrated. 8.8.1 Outline Landscape and Ecology Management Plan -
4.1	There is confusion as to whether Pentagon Field is to be regarded as an 'Environmental Mitigation Area'. Surprisingly it does not feature as such in Figure 3.3.1 (Indicative Ecology Strategy) dated July 2023 within	The planting of the woodland strip along the eastern side of Pentagon Field is shown on the Indicative Ecology Strategy (Figure 3.3.1 of the oLEMP) because it has been relied upon in the Landscape and ecology assessments of the Environmental



the oLEMP Part 2 [REP6-034] yet sections 1.2.2 and 6.5.7 of the oLEMP Part 1 [REP6-032] state that Pentagon Field will deliver ecological mitigation or enhancement.

Also, section 2.3.3 of Note on Project-Wide Habitat Loss and Replacement, June 2024 [REP6-071] refers to the creation of enhanced neutral grassland in Pentagon Field post development. If indeed Pentagon Field is to be reinstated as enhanced neutral grassland, it would be helpful if this could be made clear in all documents, including Figure 1.2.18 (Pentagon Field Sketch Landscape Concept) of the oLEMP Part 2.

Statement, namely in **ES Chapter 8: Landscape, Townscape** and Visual Resources [APP-033] and **ES Chapter 9: Ecology and Nature Conservation** [APP-034]. In this context, it is only this strip which is regarded as a "formal environmental mitigation area".

The grassland within Pentagon Field has not been relied upon in the assessments in **ES Chapter 8: Landscape**, **Townscape and Visual Resources** [APP-033] and **ES Chapter 9: Ecology and Nature Conservation** [APP-034] and therefore is not considered part of a "formal environmental mitigation area".

Paragraphs 1.2.2 and 6.5.7 of the **oLEMP** (Doc Ref. 5.3) make clear that the planting areas which have been included specifically as mitigation or enhancement for the Project include the native woodland strip along the eastern side of Pentagon Field (adjacent to Balcombe Road).

In relation to the grassland to be reinstated as enhanced neutral grassland, the Applicant has updated Figure 1.2.18 of the oLEMP at Deadline 8 to support the JLA's in their understanding as requested.



5. REP6-036 - 5.3 Environmental Statement Appendix 8.8.1 Outline Landscape and Ecology Management Plan - Part 3 Version 5 (Clean) / REP6-037 (Tracked)

No significant changes have been identified within this document. However, only the partial removal and replacement of an existing hedgerow between the A23 London Road and Perimeter Road East is shown on the Illustrative Landscape Overview and Key Plan (figure 1.1.1) of the OLEMP [REP6-032] and drawing number 782 of the Airport Preliminary Vegetation Removal and Protection Plans (Appendix D)[REP6-024]. This has not been considered nor identified within the Supporting Ecology Technical Notes [REP5-069] which regards hedgerows, nor the Tree Survey Report and Arboricultural Impact Assessment [REP6-038].

It is not clear why only partial removal and replacement has been shown, with 250m to its northern extremities not removed and replaced.

Further, section 5.4 of the OLEMP states that hedgerows adjacent to the highway will be maintained at 600mm in height; maintaining the hedge at such a

As set out in response to 1.8 above, for consistency, specific reference to this hedgerow (H34) has been added to the AIA submitted at Deadline 8.

Additionally for consistency, the Supporting Ecology Technical Notes (Doc Ref. 10.33) have also been updated to refer to hedgerow H34 and it is submitted at Deadline 8.

The intention is to completely remove H34; however the red line on the Airport Preliminary Vegetation Removal and Protection Plans partially covered part of the hedgerow. The Airport Preliminary Vegetation Removal and Protection Plans have been updated so that removal of the complete hedgerow can be seen more clearly.

Hedgerows will generally be managed to a height of 2m as stated in paragraph 5.4.2 of the oLEMP. However, where there are hedgerows adjacent to the highway or a car parking areas, the hedgerows will be maintained at a height of 600mm to avoid conflict with visibility, as confirmed in paragraph 5.4.1 of the oLEMP.



6. Asse	low height in this location provides limited ecological benefit and limited screening from the A23. REP6-038 - 5.3 Environmental Statement Appendix ssment - Parts 1-6 Version 3 (Clean) / (Tracked) [REF	8.10.1 Tree Survey Report and Arboricultural Impact P6-038 – REP6- 049]
6.1	In general, the changes to the AIA area are welcomed. This includes, though not limited to the revised assessment of tree loss, the identification and definition of veteran trees, and further information regarding proposed tree planting. Residual concerns remain as to the suitability of the AIA alongside the schedules and plans within, as well as misleading statements contained within. The Authorities provide the following comments for consideration:	As expressed below, the Applicant has provided robust documentation beyond what is required for the Application and refutes that any comments it has made are misleading.
6.2	Veteran trees Section 3.6 now states that two veteran trees were identified from the tree survey, T35 and T213. It's worth noting that there are two trees referenced T35 within the tree survey. T35 (Quercus robur) identified within Appendix C Airport Tree Survey Schedule has been recorded as a veteran and is shown for retention. Whereas T35 (2x	As explained within section 4 of the AIA, the Project was surveyed in two sections. The M23/A23 road corridor and the Airport. Each of these two surveys begin at T1 and have their own drawings and schedules that are clearly labelled. Appendices B, D, F and H of the AIA include M23/A23 information namely the Tree Survey Schedule, Tree Removal Schedule, Tree Survey Plans and Preliminary Tree Removal Plans respectively.



	Fraxinus angustifolia), identified within Appendix B M23 & A23 Tree Survey Schedule, are shown for removal within Appendix D M23 & A23 Tree Removal Schedule.	Appendices C, E, G and I of the AIA include Airport information namely the Tree Survey Schedule, Tree Removal Schedule, Tree Survey Plans and Preliminary Tree Removal Plans respectively. As the Authorities have identified, T35 of the Airport information relates to a veteran tree (Common Oak tree) to be retained and T35 of the M23/A23 information relate to a tree (Narrow leaved Ash tree) to be removed.
6.3	Survey Findings The survey findings presented in section 4 of the AIA has identified the total number of entries for features surveyed and has included the total quantity of individual trees recorded (748 trees). It has not provided a breakdown of the total quantity of trees, or alternatively the total area, for each Group or Woodland per category. This is usually provided within most arboricultural surveys of this scale to enable a suitable assessment of impact of loss per category. Whilst not specifically stated as a requirement, BS5837:2012 recommends that arboricultural impacts assessments should include an "evaluation of impact of proposed tree losses" (para 5.4.3 (f)); stating only the losses which will occur in	The AIA identifies tree numbers as individuals, groups and woodland areas sufficient to establish the baseline situation and therefore to evaluate the arboricultural impact. In order to further assist the Authorities, further detail has been added to the Tree Survey Schedules contained in AIA Appendices B and C to include the number of trees or area of tree groups; the area of woodland; or the length of hedgerow (whichever is applicable). The updated version is submitted at Deadline 8.



	each category without and understanding of the baseline is not considered an evaluation of the impact.	
6.4	Individual tree survey entries also represent groups of trees which do not form a cohesive group but have similar characteristic as stated within para. 4.2.4. Whilst this approach is not disapproved in its entirety, tree survey schedules need to clearly identify the quantity of trees within each tree entry (as many are not displayed). Due to the numerous occasions where individual tree entries contain high quantities of trees that are collectively referenced, provision should be made within the oAVMS to ensure that detailed AVMS are made abundantly clear as to which trees are proposed for removal and which are retained should this occur within the same referenced tree entry (i.e. using further references such as T35.1 (remove), T35.2 (retain) for example, identified as such on both Tree Work Schedules and Detailed Vegetation Removal and Protection Plans).	As stated by the JLAs at 6.3 (as above), the identification of the numbers of trees within groups or woodlands is not a requirement of BS5837:2012. However, and as explained above, the Applicant has updated the AIA Tree Survey Schedules to provide either numbers, area or length (whichever is applicable to the tree feature being described). In relation to the removal of trees identified in the oAVMS, please see the Applicant's response to point 1.3 above.
6.5	Arboricultural Impact Assessment The West Sussex Joint Local Authorities raised concerns regarding the extent of tree removal across	The Applicant has undertaken an arboricultural assessment based on a realistic worst-case scenario. The Applicant's design and construction team has been involved in developing the current assumptions based on construction norms and



the entire project within [REP3-117] (p.55- 56). Whilst it is noted that the Applicant has carried out a review of proposed removals, this has not reflected a vast quantity of the features stated within the Authorities representation. The Applicant has not responded to each identified feature of concern, though they have generalised within [REP4-028] that "The current worst-case scenario includes all trees along the M23 corridor that fall within the limits of construction and which are adjacent to the proposed highway works".

standard practices to provide a reasonable worst case, but also acknowledging that the detailed design process will seek to retain existing arboricultural features wherever possible in line with the **Design Principles** (Doc Ref. 7.3) secured under the **Draft DCO** (Doc Ref. 2.1). The assessment of a realistic worst-case scenario together with the controls in the oAVMS and the application of the Design Principles and oLEMPs as part of the detailed design stage demonstrate that, within a worst case scenario, the impacts are acceptable but that the mechanisms within the draft DCO ensure that detailed design will be developed and approved to minimise impact on existing arboricultural features wherever possible.

6.6

The extensive tree loss proposed surrounding the Car Park H works area and the New Hotel (north of MSCP3) is very concerning given the quality of trees/tree groups lost, the loss of a maturing treescape, and the loss of structural landscaping provided by the trees. Whilst provision has been made for new tree planting in landscaping zone 7 within the oLEMP [REP6-032], there is a lack of clarity as to how this would interact with retained features or mitigate for the loss of features. When considering the Applicants future baseline proposal of the Hilton Hotel multistorey car park which requires the remove G89 (A category) and potentially further

G89 is not identified for removal on the **Preliminary Removal** and **Protection Plans** (oAVMS Appendix B Drawing 756). Instead, it is shown as retained on Drawing 756 and with accompanying tree protection fencing.

The Applicant assumes that the comment was meant to refer to G98, which is shown as being partially removed, but mostly retained on the **Airport Preliminary Removal and Protection Plans** (oAVMS Appendix B Drawing 756).

ES Chapter 8: Landscape Townscape and Visual [APP-033] includes an assessment of the effects of development of the proposed at car park H in section 8. The assessment



	trees to its south, the impact on the treescape within this area is a significant amenity loss.	states that the majority of existing trees and shrub planting in this location would be retained and supplemented with new tree and shrub planting. Effects on the Gatwick Urban Character Area are considered to be Minor adverse, which is not significant.
6.7	Whilst the proposed Requirement 28 and Design Principle L1 limit tree loss throughout the project to what has been presented within the oAVMS, the Authorities remain of the view that the Applicant has not provided enough detail of the project proposals to demonstrate that a realistic worst-case scenario has been designed for. Rather, it appears that the Applicant seeks to maximise the space within 'construction areas' to allow maximum flexibility with little consideration of arboricultural features. If this flexibility of extensive tree loss is to be accepted, the Design Principles need to be strengthened to better avoid and mitigate tree loss at specific areas within the project throughout detailed design.	Provisions are secured within the Draft DCO (Doc Ref. 2.1) to require the submission and approval of the detailed designs of the development and construction logistics. Detailed AVMSs are not required for an application for development consent. However, at this stage, the Applicant has assessed a realistic worst-case scenario of arboricultural impacts, presented in the AIA. The Applicant's construction team has been involved in developing the current assumptions based on construction norms and standard practices to provide a reasonable worst case and acknowledging that delivery in practice is intended to reduce the requirement to remove existing arboricultural features in line with the Design Principles (Doc Ref. 7.3). The assessment of a realistic worst-case scenario together with the controls in the oAVMS and the application of the Design Principles (Doc Ref. 7.3) demonstrate that, even within a worst case scenario, the impacts are acceptable. The Applicant considers the wording of the Project-wide Landscaping Design Principles (L1 to L11) is clear in directing



that any existing vegetation is retained where shown to be possible during the detailed design process. The Landscaping Design Principles also describe particular instances where existing vegetation should be retained, such as:

- where they are of ecological value (L1);
- to minimise or avoid adverse impacts on important features and locally distinctive patterns of development at Gatwick Airport (L4);
- to minimise adverse impacts on the character of surrounding landscapes and townscapes (L4);
- to restore a green barrier along A23 and M23 Spur Road (L4);
- to protect important urban green spaces (L4);
- to retain visually significant vegetation to minimise adverse effects on visual receptors, heritage assets, important views and protect the AONBs and National Park (L4).

At Deadline 7, the Applicant amended the wording in Design Principles L4 and L6 in response to the Legal Partnership Authorities' comments in **Appendix A – Appendix 3** of its **Response to Actions Arising at ISH8** [REP6-111]. The Authorities did not provide any comments on Design Principle L1 and notably did not comment that the Design Principles needed to be strengthened to better avoid or mitigate tree loss.



		The Applicant therefore wishes to repeat its request that the JLAs provide any remaining comments on the Design Principles, in order that the Applicant can comprehensively consider and address their comments.
6.8	Aspects of the conclusions made within revised AIA are fundamentally disagreed with, or are considered to be misleading, as outlined below: 1. Para. 8.1.1 suggests that principles of good design have been adopted wherever possible for the reasoning provided. However, the Applicants internal review of tree loss, as prompted by comments from the JLA's, has only marginally addressed unnecessary tree loss within a small section of the Surface Access Works. This approach should be continued for arboricultural features within the entirety of the Project limits to ensure not only good design, but also that the flexibility given to the Applicant is not being abused. 2. Para. 8.1.6 now recognises that most arboricultural features proposed for removal along the A23/M23 road corridor have been assigned as category A & B (high and moderate quality) for their collective value. It is then suggested that the loss of these features is negated by the 'lower individual	 Please see the Applicant's response to paragraph 6.7 above. The vast majority of trees along the A23/M23 road corridor are individually of low quality. These trees have been given a higher quality Category based on their collective value. This is in line with recommendations within BS5837:2012 which states: "Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals" The Applicant does therefore not consider it to be misleading to state that some higher rated groups are comprised of trees that would be of a lower category individually. The loss of trees of lower value within tree groups has been fully assessed within the AIA. DMRB GS 701 refers to maintenance obligations and vegetation clearance and cross refers to DMRB LD 117 which includes dimensioned offsets. The two documents are linked and should be considered



value' of these trees. These statements are misleading and contradictive as the collective value of the trees should form the category assigned to the group/woodland; such groups/woodlands will always naturally have some trees within which are smaller, narrower, or not of a form typically found with opengrown individual trees. Where such trees occur in high numbers/frequency, the categorisation of the group/woodland should reflect such finding. BS5837:2012 allows individuals which do not reflect the collective value of the surrounding trees within a group/woodland to be plotted and categorised as individuals. The Authorities agree with the categorisation of the tree groups as submitted by the Applicant. To summarise, the presence of trees with lower individual value does not negate the impact of loss of these tree groups.

3. Para. 8.1.7 (and para. 6.3.8) suggests that the Design Manual for Roads and Bridges (DMRB) requires the removal of 3.6ha of roadside trees within a 9m buffer of the highway regardless of the project occurring. This is incorrect and misleading as the DMRB (LD 117, para. 3.4.1) only states that planting design should not include climax trees within 9m from the carriageway edge. There is no legal obligation or requirement for a Highway Authority to remove any

together.

The Applicant is not the highway authority for this area and therefore requires approval from the relevant highway authority (in this case National Highways) for any departure from DMRB. As National Highways is unable to give such approval until detailed designs and Road Safety Audits have been carried out, the Applicant is unable to assume that it will be granted approval for any departures from National Highways and therefore must assume compliance with DMRB will be required.

The Applicant's position is also supported by National Highways in that NH's Deadline 5 Submission containing its Updated PADSS [REP5-103] refers to landscape designs in the oLEMP and information in the oAVMS and states that this 'is considered a fair approach to the future detail design of the scheme. The future engagements are also welcomed'.



tree in respect of the DMRB guidance, however, it is recognised that some vegetation works are routinely carried out to ensure the safe passage of the highway network and to prevent obstruction to features within in accordance with the Highways Act 1980 (though expected to be far less than 3.6ha).

6.9 Tree Planting Proposals

The detailed information and conclusions presented on tree planting are relevant and required to demonstrate compliance with local planning policy CH6. However, this approach relates purely to this policy, and it should be noted that whilst quantifying tree and woodland planting numbers is one way of assessing proposed reinstatement/enhancements, this should not be mistaken to demonstrate a direct ratio of net increase of trees/woodland area at their maturity (nor their replacement /enhancement of quality or biodiversity).

The methodology under CBC Policy CH6 recognises the potential for tree loss during growth through the requirement to provide replacement trees at a high ratio than trees to be lost. For example, a tree of 80+cm diameter should be replaced by 8 trees whereas anything small than 19.9cm diameter can be replaced with 1 tree.

Appendix J of the **AIA** (Doc Ref. 5.3) sets out the methodology used in applying CBC Policy CH6 against the Project proposals. Section 5 of Appendix J explains that the Project-wide tree loss is estimated at 12,000 trees. Section 6 then sets out that the Project will result in the planting of 42,951 trees, almost six times as many as those lost. As such, it is designed to ensure that the replacement trees planted balance those lost at maturity.

In addition, the Applicant has considered the ecological function of the tree loss as well as tree numbers through the impact assessment process, as described in section 9 of **ES**



		Chapter 9 Ecology and Nature Conservation [APP-034], including woodland as a receptor in its own right and as a supporting habitat for fauna such as bats and nesting birds. Appropriate mitigation for the loss of trees has been included within the Project in the form of replacement planting, in particular along the highway works corridor, but also the Museum Field Environmental Mitigation Area, to ensure that the ecological function of the trees within the Order Limits is maintained post development.
6.10	Defra's Biodiversity Net Gain (BNG) Metric 4.0 does consider such elements (area/target condition) and has been assessed by the Applicant for the project areas impacted. Annex 3 of the BNG Statement [REP6- 050] shows that for the area assessed, there will be an on-site change of -0.38 ha (-6.35 unit change) for individual trees and -3.12 ha (-51.31 unit change) for woodland and forest (a significant overall net loss for each). This is concerning and must be taken into consideration when reviewing the tree planting proposals as presented within the AIA (which are considered to reflect a more pleasing outcome).	The calculation presented in ES Appendix 9.9.2: BNG Statement (Doc Ref. 5.3) is based on the worst-case scenario with respect to vegetation loss and aligns with the assumptions that have informed the AIA. Despite this worst-case scenario, the Project shows an overall net gain in habitats of circa 20%; there is no requirement within either policy or BNG guidance for each habitat within that assessment to be positive, only that the overall balance is. There are no current detailed planting plans for much of the Project site, including around the car parks and terminal areas. As such, the loss of individual trees is considered the maximum if none were planted to replace those lost. However, the oLEMP provides for the planting of individual trees and tree belts (for example, section 3.8 of the oLEMP regarding Zone 7 South Terminal Campus). Once such planting has



been designed and incorporated into the BNG assessment it is anticipated that the impacts with respect to individual trees would be positive.

The effect of the net loss of woodland was considered within Section 9 of ES Chapter 9 Ecology and Nature Conservation as a moderate adverse (significant) effect for the duration of the construction phase until the replacement planting was established. As such, the loss of the woodland and its ecological effect were fully considered within the assessment and appropriately mitigated through enhanced woodland planting along the A23, and additional woodland at Longbridge Roundabout, car park B, the Museum Field Environmental Mitigation Area and Pentagon Field. In addition, upon review of the planting proposals for the Museum Field Environmental Mitigation Area, the Applicant, at Deadline 7, provided details of additional woodland planting within Brook Farm (please refer to the Applicant's response at 3.3 above). As such, the impact of the loss of woodland is considered to be appropriately mitigated.

The relationship between the various metrics used to define vegetation change (area of habitat, BNG value of habitat and tree numbers) is set out in Sections 3 and 4 of **Note on**



		Project wide Habitat Loss and Replacement (Doc Ref. 10.45).
6.11	Crawley Borough Council (CBC) Local Plan Policy CH6	Noted. No response required.
	Further details have been supplied by the Applicant included as amendments within section 7 of the AIA to address this policy the inclusion of which are welcomed. Annexes 1 and 2 of Appendix J, of the Tree Survey Report and Arboricultural Impact Assessment (Part 6, Version 3 [REP6-047 & REP6-048]) are not included within the documents found within the examination library. The Applicant has subsequently supplied the Authorities with these missing documents for review although a full review of this information has not been possible in time for Deadline 7. The Authorities will comment further on this additional information at Deadline 8.	
6.12	Based on the information within the document the Applicant maintains it has demonstrated that tree planting proposals have the potential to satisfy CBC Policy CH6 (suggesting that within Crawley, tree planting will exceed circa. 8,190 trees over that required by the policy). Compliance with the policy is	The Applicant considers that the methodology set out in Appendix J of the AIA (Doc Ref. 5.3) is correct and provides a robust assessment of the tree number balance, as required by CBC Policy CH6. The number of trees identified in Annex 1 of Appendix J provide an accurate description of the tree resource within the Order Limits and, as such, provide the



	supported by the Authorities but it should be noted however, that the issues raised in Section 1 of this response in relation to the means by which tree numbers are calculated does bring into question whether the methodology has been correctly applied.	necessary baseline against which to assess the change in tree numbers due to the Project. None of the responses to issues raised in Section 1 of this document would change the assessment within the AIA, and as stated in response to point 6.14 below, the JLAs understand the assumptions used to calculate replacement tree planting figures. Therefore, there is no question as regards whether the methodology has been correctly applied.
6.13	It is worth noting that the statement within paragraph 7.1.6 which references increased tree planting proposals at Museum Field is refuted given the findings by the Authorities made within review of the revised oLEMP [REP6-033] (detailed within this document see section 3.3).	The Applicant has committed to additional woodland planting of approximately 1.9ha in the Museum Field Environmental Mitigation Area. Please see the Applicant's response at point 3.3 above.
6.14	Paragraph 7.2.7 suggests that "Landscape replanting figures show that new Woodland/ Individual trees amount to 37, 256 trees currently proposed, within the Crawley Borough.". Whilst the Authorities understand the assumptions made to calculate replacement tree planting figures stated within paragraph 7.2.6, these figures can only be indicative given the high level nature of the current AIA, are not are shown within the oLEMP, nor do illustrative plans provide sufficient	This planting is shown on the Figures in the oLEMP with which LEMPs approved under DCO Requirement 8 must be substantially in accordance. The number of trees proposed to be planted in CBC exceeds the CH6 policy by 8,014, as demonstrated by AIA Appendix J, and therefore provides a significant buffer (even on a worst case basis) for any recalculations at detailed design stage.



	information to measure the areas of proposed woodland/individual trees.	Notwithstanding the detailed calculations already provided by the Applicant in AIA Appendix J, the Applicant has committed to provide a Tree Balance Statement under a new DCO Requirement submitted at Deadline 8 to further confirm compliance with CBC Policy CH6 on or before the ninth anniversary of the commencement of dual runway operations, in order to take account of tree losses and tree replacements provided as part of the Project.
6.15	The outstanding matter of principle concern which remains, is how the proposed tree planting quantities will be secured upon review of detailed design and subsequent approval of detailed documents (LEMP and AVMS) by the discharging authority and how the Applicant makes up for any shortfall in tree numbers in the event the works do not meet the standard. There is currently no mechanism to ensure the Applicant demonstrates the policy compliance for the detailed works designs. Currently, the tree planting proposals only demonstrates that indicative landscaping plans could meet the minimum replacement planting quantities required by CBC Policy CH6 which has been based on findings within the AIA and the landscaping plans do not include	As explained above, the Applicant has committed to provide a Tree Balance Statement under a new DCO Requirement submitted at Deadline 8 to confirm compliance with CBC Policy CH6 on or before the ninth anniversary of the commencement of dual runway operations, in order to take account of tree losses and tree replacements provided as part of the Project.



	sufficient information to provide clarity that the findings are correct (i.e. demonstration of area for proposed planting).	
6.16	Further information is requested in the oAVMS and oLEMP to ensure that minimum replacement planting thresholds are met through detailed design and where this is not possible mitigation (payment) is provided in lieu. It is suggested this could be achieved by:	Please refer to the Applicant's response at 6.15 above regarding a new DCO Requirement to demonstrate compliance with CBC Policy CH6.
	1. Amending the oAVMS to ensure that where a detailed AVMS is submitted it will demonstrate the total quantity of trees to be planted for that Works area to meet the requirements of Policy CH6. This must be based on the approach set out in Appendix J of the Tree Survey Report & AIA. In addition, ensure that the AVMS for works areas stated within the DCO are be submitted for approval to the discharging authority in advance of the submission of any LEMP.	
	2. Amending the oLEMP to ensure that where a LEMP is required, it will accord with the tree planting quantities stated within the approved detailed AVMS. The LEMP shall include detailed landscaping plans and planting schedules which demonstrates the quantity of trees to be planted for all areas whereby	



		,
	tree planting is proposed. A totalled summary for	
	proposed tree planting quantities should also be	
	included within the wider LEMP.	
C 17	The Authorities are submitting a draft requirement for	Please refer to the Applicant's response at 6.15 above.
6.17	consideration which seeks to address the policy	
	requirements of CH6.	
	requirements of or to.	
7	RFP6-050 - 5.3 Environmental Statement Appendix	9.9.2 Biodiversity Net Gain Statement Version 4 (Clean) /
	6- 051 (Tracked)	old 2 Distance of the State of the Colonia (Cloud,)
IXEI O	, oor (ridoked)	
	The revised BNG Statement with new or revised	Noted.
7.1	sections on advance/delay in habitat creation,	Noted.
	strategic significance and the additional information in	
	Annex 3 are welcomed.	
44	IDEDC 0741 40 45 Note on Project wide Hebitet Lee	and Dayle covery
11	[REP6-071] - 10.45 Note on Project wide Habitat Los	ss and Replacement
11.1	This new document, including plans showing habitats	An updated Note on Project wide Habitat Loss and
	created, retained and lost, is helpful.	Replacement (Doc Ref. 10.45) correcting this errata has been
		submitted at Deadline 8.
	Errata: The caption for Figure 12 should be 'Retain of	
	Wetland – Reedbeds' (not Gain).	
	Comments made in review of the Tree Survey Report	An updated version of the Note on Project wide Habitat Loss
11.2	Comments made in review of the Tree Survey Report	7 in apacita voicion of the rect of the region master 2000



relates directly to many of the aspects noted by the	Deadline 8 with updates made reflecting updates within the
Applicant within this document.	AIA and oAVMS as described above.

1.3 Joint Surrey Councils Comments on any further information / submissions received by Deadline 6 [REP7-105]

Ref	Joint Surrey Councils' Comment	The Applicant's Response
GAL	Note on Habitat Wide Loss and Replacement [REP6-071]	
1	The figures showing locations of habitats are useful. The document still does not address the issue that woodland and pond loss is not being mitigated for adequately.	The effect of the net loss of woodland was considered within Section 9 of ES Chapter 9 Ecology and Nature Conservation [APP-034] as a moderate adverse (significant) effect for the duration of the construction phase until the replacement planting was established. As such, the loss of the woodland and its ecological effect were fully considered within the assessment and appropriately mitigated through enhanced woodland planting along the A23, and additional woodland at Longbridge Roundabout, car park B, the Museum Field Environmental Mitigation Area and Pentagon Field. In addition, upon review of the planting proposals for the Museum Field Environmental Mitigation Area, the Applicant, at Deadline 7, provided details of additional



		woodland planting within the Museum Field Environmental Mitigation Area. As such, the impact of the loss of woodland is considered to be appropriately mitigated. Ponds With respect to the loss of ponds, the two ponds being impacted are not designated as "priority habitats"; they are water bodies that are used for surface water management at the site. They are specifically managed to not be beneficial for wildlife due to their location in relation to the runway and the relevant airport safeguarding requirements. The loss of these ponds was considered a minor adverse effect, but not significant requiring mitigation in ES Chapter 9 – Ecology and
		Nature Conservation [APP-034]. The Applicant would also emphasis that it is providing wider wetland habitats — reed beds at the South Terminal roundabout area and as part of the water treatment works. The Applicant's view is that it is not necessary to replace those ponds and the Applicant is mitigating the loss in ecological functionality terms of the ponds with other measures.
2	We note from ExQ2 (LV.2.3) that the Applicant has been asked to consider providing more detailed	The Applicant provided a Note on Project Wide Habitat Loss and Replacement [REP6-071] at Deadline 6,



	visualisations/photomontages for certain sensitive viewpoints. We further note thatthe Applicant has provided rendered photomontages (showing the baseline view, Year 1 and Year 10) within REP6-071, focussed on viewpoints affected by vegetation loss along the A23/M23 corridor. We welcome these more detailed photomontages, although we note that some do not show existing/proposed airport buildings and infrastructure where these would be present within the view. Given the ExA's request and our previous requests for more detailed photomontages, we consider it would be reasonable and proportionate, for completeness and robustness in the assessment of the Project, for the applicant to supplement these rendered photomontages with additional equivalent ones covering key close/middle-range viewpoints where adverse effects have been identified. These should include Viewpoint 8 (PRoW 362a North of A23 & South Terminal), Viewpoint 18 (North Terminal Roundabout Sussex Border Path) and Viewpoint 22b (A23 footway looking North- West).	including visualisations showing the baseline view, Year 1 and Year 10 at Appendix 1. The visualisations were prepared to the specifications set out by RBBC following a meeting on 14th May 2024. It was agreed at that meeting that the detailed modelling and rendering of existing and proposed buildings was not required at this stage of the design. The visualisations in REP6-071 have been provided as a result of the Joint Surrey Councils' response LV13 to the Applicant's response to the LIR [REP5-072]. No additional request have been received by the Applicant.
3	The document acknowledges that if DMRB LD117 buffer requirements (no climax trees/woodland within 9m of the highway) are adhered to, replacement woodland planting	Please refer to the Applicant's response at 6.8(3) above.



along the A23 corridor would not attain equivalent visual screening value to the current vegetation. Ultimately, National Highways has discretion over adherence to these standards within its land, but the Project is currently adopting a worst-case scenario with regard to the buffer. The note further acknowledges that 'Due to the complexity of the surface access improvements works and the constrained footprint of this development adjacent to Riverside Garden Park and Gatwick Airport, the implementation of advance planting is not viable in this context' (Para 4.3.9). As such, this reinforces the views previously expressed by JSCs regardingthe long-term harm to visual and landscape receptors due to the time between removal of the existing A23 corridor vegetation and the maturation of replacement planting.

The long-term effect of the Project on visual and landscape receptors is fully assessed in Section 8 of ES Chapter 8 Landscape, Townscape and Visual Resources [APP-033].

With regard to the Interaction of the Habitat Area Balance Calculation and the AIA (Section 4 of the note), we note this includes discussion of tree number balance and planting density, but there is an absence of discussion around canopy cover balance and associated ecosystem services. Due to the significant net loss of woodland along the A23 corridor, there will be a consequent net loss of canopy cover which will detrimentally affect

As set out in the **Note on Project-wide Habitat Loss** and **Replacement** [REP6-071], there are already three different metrics used to consider the effect of tree loss/gain from the Project (namely tree numbers, BNG units and woodland area). Canopy cover would be broadly analogous with woodland area since this is defined by the edge canopies of trees along the edge of each woodland. As such, there would be no material difference between canopy cover and woodland area.



	attributes such as rainwater interception, solar shading and biodiversity value.	The Applicant does not consider, therefore, that introducing a fourth metric (canopy cover) is required.
5	Para 4.1.3 states that the AIA data has been updated following the more detailed planting plans for the Museum Field Environmental Mitigation Area and that this shows, for the DCOOrder Limits, the change in tree numbers is +5,631, ie an increase in tree numbers.	Noted.
6	It is quite difficult to understand whether the Applicant is actually truly balancing tree losses with replacements. As the note explains, numerical tree planting figures are not necessarily helpful when set against density of planting. Planting too dense will result in trees dying and others not establishing well.	The assumptions and methodology for the replanting calculations are included in ES Appendix 8.10.1 Tree Survey Report and Arboricultural Impact Assessment, section 7. Woodland and scrub mixes would be planted at 1 to 1.5 metre centres, as confirmed in Section 5.2 of the oLEMP (Doc Ref. 5.3). This represents a typical landscape industry approach to large scale native woodland planting.



The	Applicant's Response to Actions ISH 8 Ecology (REP6-08	Appropriate landscape management measures are set out in the oLEMP to ensure the establishment and long-term success of the landscape planting proposals and which would be detailed further in the future LEMPs. 8) and Biodiversity Net Gain Statement Version 4
	6-051]	
7	The Examining Authority has asked the Applicant to provide BNG calculation for all land within the order limits. At present the Applicant has responded with this statement: The order limit metric shows that the total baseline units of the order limits is circa 1,029 units with a post development score of 1,100 units – i.e. a gain of circa 70 units. This equates to a net gain around 7%.	N/A
8	We request that the supporting documents are provided for the BNG calculation for all land within the order limits. Supporting documents required for us to review include: BNG report (including habitat condition scoring);	The Applicant's position remains that the consideration of changes within the areas of the Project site impacted by development, as set out in ES Appendix 9.9.2 BNG Statement [REP6-050], is correct taking account of the specific characteristics of the Project within an active airport. Support for the Applicant's position was reiterated by Natural England in its response to ExQ2 EN.2.1 [REP7-116] at Deadline 7. Therefore, the Applicant does



	 UK Hab baseline figures and post development figures; BNG metric (excel) 	not consider it to be necessary to provide an assessment of the change in BNG across the Project site as a whole, much of which is unaffected by development.
9	Section 2.1.3 of REP6-088 states 'a BNG Metric for the order limits has been provided at Deadline 6 (ES Appendix 9.9.2 (Doc Ref 5.3)). This does not account for strategic significance nor any delays in planting due to the mechanism' This contradicts Section 2.6 of the update BNG report (REP6-051) which states 'The BNG metric includes a Strategic Significance multiplier for both the baseline and post development habitat creation/enhancement. The Metric submitted at Deadline 6 has therefore been updated to include this multiplier'. In addition, section 2.71 'In order to account for both advance planting (ie that occurring in advance of development impacts) and any delay in habitat creation between impacts occurring and planting taking place, the BNG metric submitted at Deadline 6 has also been updated to including the advance/delay multiplier' (our emphasis).	The updated BNG report submitted at Deadline 6 [REP6-050] incorporates both strategic significance and timing of vegetation loss/gain into the calculation of BNG for the Project. This is the calculation that the Applicant considers to be the formal assessment with respect to change in BNG for the Project, a position supported by Natural England in its response to ExQ2 EN.2.1 [REP7-116]. Such terms were not included within the calculation of the BNG for all the land within the Order Limits as the GIS system used to calculate the output did not include it. The data for all the habitats within the Project site are stored within a GIS system that allows the consideration of both before and after development vegetation change. The data for the strategic significance has only been incorporated into that model for the formal BNG calculation (i.e. that set out in ES Appendix 9.9.2: BNG
10	We also request clarification regarding the 'GIS system mechanism'. It is not understood what it meant by this.	Statement (Doc Ref. 5.3)), it has not been incorporated into that for the Project as a whole. However, this is not considered to be a limitation as a) the data for the Project



		site as a whole is only provided for information, it is not the Applicant's formal position, and b) when strategic significance and timing of planting/loss were incorporated into the calculation for the Project set out in ES Appendix 9.9.2, there was no material change in the total score with both factors balancing each other. On this basis, even if these factors were to be incorporated into the whole Project site calculation, it is considered very unlikely that it would change the total BNG significantly.
11	BNG Additionality- At present, it is unclear how the habitat enhancement / compensation proposed for protected species mitigation has been included in the BNG metric. Guidance states that habitat creation / enhancement for protected species can count towards no net loss (0%) in the BNG metric. To demonstrate BNG additionality, usually, two metrics would be submitted, one metric including all habitat proposals for protected species mitigation and a second metric with all other habitat proposals. Clear separation and clarity is required for the habitat creation / enhancement for protected species mitigation and the habitat proposals which are for BNG / enhancement.	The Applicant considers that the approach to the assessment of BNG set out in ES Appendix 9.9.2 (Doc Ref. 5.3) has accounted for all necessary aspects of the calculation and is therefore correct. Natural England have reiterated their support for this position in its response to ExQ2 EN.2.1 [REP7-116]. As such, no further assessment is required.



1.4 Legal Partnership Authorities Responses to ExQ2 [REP7-110]

ExQ2	Question to:	ExA's Question:	Legal Partnership Authorities Response	The Applicant's Response to the Legal Partnership Authorities' Response	
Ecology	Ecology and Nature Conservation				
EN.2.2	Applicant Local Authorities	Biodiversity Opportunity Areas At ISH8 the Applicant stated that it had not considered ecological enhancement within surrounding Biodiversity Opportunity Areas (BOAs) (other than Gatwick Woods and River Mole) because the surrounding BOAs were too far from the Order limits. The ExA notes that Ifield Brook BOA is shown very close to the Order limits on figure 9.6.2 of	Response to limb b The Authorities are firmly of the opinion that off-site woodland enhancement, as compensation for loss of woodland within the Order limits, should be considered within Ifield Brook BOA, Grattons Park BOA and the Glover's Wood and Edolph's Copse BOA, and also within the River Mole BOA and Gatwick Woods BOA (both of which lie partially within	Part (a) The Legal Partnership Authority has not provided justification for why it considers that compensation is required. The Applicant's position remains that the effect of the net loss of woodland was considered within Section 9 of ES Chapter 9 Ecology and Nature Conservation as a moderate adverse (significant) effect for the duration of the	



Grattons Park BOA and the Glover's Wood and Edolph's Copse BOA are within 2 kilometres of the Order limits.

a. The Applicant is asked to clarify the distances from the Order limits that opportunities for ecological enhancements were considered?

The Applicant and Local Authorities are asked to comment on whether opportunities for woodland enhancement to mitigate the loss of woodland within the Order limits should be considered within the Ifield Brook BOA, Grattons Park BOA and the Glover's Wood and Edolph's Copse BOA?

Such enhancement could comprise measures to enhance the management of existing woodland and the creation of new woodland with particular emphasis on enhancing woodland connectivity. Emphasis should be placed on mitigating impacts on Bechstein's bats. Glover's Wood BOA, to the west of the Airport, supports key roost sites, and radiotracking carried out by the Applicant has highlighted that these bats commute to, and forage within, the Order limits. The Authorities suggest that appropriate measures to mitigate impacts on Bechstein's bats might include enhanced habitat connectivity within Glover's Wood and Edolph's Copse BOA, within the River Mole BOA, and

replacement planting was established. As such, the loss of the woodland and its ecological effect were fully considered within the assessment and appropriately mitigated through enhanced woodland planting along the A23, and additional woodland at Longbridge Roundabout, car park B, the Museum Field **Environmental Mitigation Area** and Pentagon Field. In addition, upon review of the planting proposals for the Museum Field Environmental Mitigation Area, the Applicant, at Deadline 7, provided details of additional woodland planting within Museum Field Environmental Mitigation Area. As such, the impact of the loss of woodland is considered to be appropriately mitigated.

Notwithstanding the above,



within the landscape between Glover's Wood and the River Mole. This could comprise new woodland creation, strengthening of existing woodland corridors and the planting of hedgerows to provide linkages between woodlands. Hedgerow planting in strategic locations could greatly enhance habitat connectivity whilst not creating airport safeguarding issues. It is thus suggested that it is considered together with offsite woodland enhancement.

the Applicant has committed to provide a Tree Balance Statement under a new DCO Requirement submitted at Deadline 8 to confirm compliance with CBC Policy CH6 on or before the ninth anniversary of the commencement of dual runway operations, in order to take account of tree losses and tree replacements provided as part of the Project.

Part (b)

In addition to the above, the Applicant has committed to an annual contribution to the Gatwick Greenspace Partnership in Schedule 6 of the **Draft DCO s106**Agreement [REP6-075].

Surrey County Council and West Sussex County Council



				are both partners within the Partnership and therefore can advocate for the Partnership to carry out such activities in the BOAs.
EN.2.4	West Sussex Joint Local Authorities	Realistic worst-case tree removal In response to comments from the West Sussex Joint Local Authorities, the Applicant has reduced the extent of tree removal along the surface access corridor in the outline Arboricultural and Vegetation Method Statement (oAVMS) submitted at D6 [REP6-018]. The West Sussex Joint Local Authorities are asked to comment on whether it is satisfied that the proposed tree removal represents a realistic worst- case? And, if not,	The West Sussex Joint Local Authorities raised concerns regarding the extent of tree removal across the entire project within [REP3-117] (p.55-56). This predominantly relates to the Surface Access Works. Whilst it is noted that the revised Preliminary Tree Removal & Protection Plans (drawing no. 812, appendix A) of the oAVMS [REP6 -018] now identifies G26, G76 and parts of G77 for retention, there are no other tree features identified for retention as a result of the internal review.	As set out in response to point 6.7 above, in a context where future detailed designs of the development and the construction logistics are required to be submitted and approved, detailed AVMSs are not required for an application for development consent, and the Applicant has assessed a realistic worst-case scenario. The Applicant's construction team has been involved in developing the current assumptions based on construction norms and standard practices to provide a realistic worst case, but acknowledging that the detailed design process will seek to maximise the



identify where requirement for removal has not been demonstrated.

The Applicant's response to concerns with the worst-case tree loss is contained within [REP4-028], stating "The current worst-case scenario includes all trees along the M23 corridor that fall within the limits of construction and which are adjacent to the proposed highway works."

Whilst the proposed Requirement 28 and Design Principle L1 limit tree loss throughout the Project to what has been presented within the oAVMS, the Authorities remain concerned that the Applicant has not provided enough detail as to the Project proposals to demonstrate that a realistic worst-case scenario has been designed for. The Authorities are concerned that the Applicant seeks to maximise the space within 'construction

arboricultural features to be retained, in accordance with the **Design Principles** (Doc Ref. 7.3) secured under the Draft DCO (Doc Ref. 2.1). The assessment of a realistic worst-case scenario together with the controls in the oAVMS, oLEMP and the Design Principles demonstrate that, even within a worst case scenario, the impacts are acceptable but will be reduced through the process of detailed design and implementation.

Please refer to the Applicant's response at point 1.8 regarding the hedgerow between the A23 (London Road) and Perimeter Road East).



	areas' to allow maximum	
	flexibility with little	
	consideration of arboricultural	
	features.	
	Further note: In addition to	
	those arboricultural features	
	identified by the Authorities	
	within [<u>REP3-117]</u> , a	
	hedgerow stated for removal	
	and replacement for	
	mitigation enhancement	
	exists between the A23	
	(London Road) and Perimeter	
	Road East which has not	
	been considered by the	
	oAVMS. In addition, the	
	oAVMS also shows H31 and	
	H32 (adjacent Pentagon	
	Field) as retained in full;	
	however given the vehicular	
	activity required, it is	
	suspected that the existing	
	entrance will require partial	
	loss of one or both hedgerows	
	1000 01 0110 01 000 010 010 010 010 010	



	to ensure suitable visibility	
	splays.	

1.5 West Sussex Joint Local Authorities Comments on any further information / submissions received by Deadline 6 [REP7-120]

Ref Joint West Sussex Councils' Comment	The Applicant's Response				
REP6-082 - 10.49.5 The Applicant's Written Summary of Oral Submissions - ISH8 – Ecology					
The Authorities maintain the position that a simple exercise could identify potential opportunities to chabitats to enhance wildlife corridors in the landsd surrounding the Order limits. The Authorities consist required for four reasons: 1. The need to maintain habitat connectivity a Project Site and wider landscape. 2. The potential for impacts on riparian habitat downstream of the Airport, including the spread of native aquatic species, such as Himalayan balsan signal crayfish.	an assessment has already been undertaken as part of the impact assessment process described within ES Chapter 9 Ecology and Nature Conservation and subsequent submissions, including at Issue Specific Hearing (ISH) 8. Taking each point in turn: 1. As set out in oral evidence at ISH8, the Applicant has worked very hard with the Project engineering team to ensure that connectivity across the site is maintained, in particular where the Gatwick				



- 3. Ecological impacts cannot be fully mitigated within the Project Site due to restrictions on tree planting, woodland and pond creation associated with 'airport safeguarding' constraints. Therefore, off-site compensation is required. Whilst the habitat creation at Brook Farm, Longbridge Roundabout and elsewhere within the DCO Limits is acknowledged, it provides insufficient compensation for the loss of some habitats. The loss of over 5 ha of mature broadleaved woodland and two ponds is of particular concern.
- 4. The need for off-site Biodiversity Net Gain (BNG). As ecological impacts on some habitats, including mature broadleaved woodland and ponds, cannot be fully mitigated within the DCO Limits, it follows that a BNG of at least 10% of all habitats is also unattainable without some off-site BNG.

- been fully considered within section 9 of Chapter 9 of the ES. The Code for Construction Practice [REP7-022] and associated annexes set out the measures that will be adopted to ensure that the watercourses around the Project are fully protected during construction. This includes with respect to Invasive Non-Native Species (INNS) contained at CoCP Annex 8.
- Although the loss of woodland area and ponds is acknowledged, the Applicant maintains the position that the ecological effect of such loss has been fully mitigated through the provision of both enhanced new planting and creation of new habitat areas providing similar ecological functioning.
- 4. The BNG assessment [REP6-050] demonstrates that the Project will deliver circa 20% net gain. It is not a requirement of the BNG system that all habitats achieve at least a 10% gain with the assessment designed to assess the Project as a whole. As such, there is no requirement for off-site BNG provision. This position is supported by Natural England in its response to ExQ2 EN.2.1 [REP7-116].



11.	3.	
	improved habitat connectivity, should extend be confines of the Project boundary to strengthen corridors, such as the River Mole and Gatwick	key wildlife
	,	