

## APPLICANT'S RESPONSE TO CHESHIRE WEST AND CHESTER COUNCIL'S WRITTEN REPRESENTATION ADDENDUM (BIODIVERSITY)

HyNet North West Carbon Dioxide Pipeline

**Planning Act 2008**

**The Infrastructure Planning (Examination Procedure) Rules 2010 Rule 8(1)(c)**

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# 1. INTRODUCTION

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## 1.1. PURPOSE OF THIS DOCUMENT

- 1.1.1. This document has been prepared on behalf of Liverpool Bay CCS Limited ('the Applicant') and relates to an application ('the Application') for a Development Consent Order (DCO) that has been submitted to the Secretary of State (SoS) for Energy Security & Net Zero (ESNZ) under Section 37 of the Planning Act 2008 ('the PA 2008'). The Application relates to the carbon dioxide (CO<sub>2</sub>) pipeline which constitutes the DCO Proposed Development.
- 1.1.2. The Applicant deferred the submission of the addendum to the Written Representation submitted by CWCC at Deadline 1A **[REP1A-004]**, given its commitment to respond to the Written Representations received at Deadline 1.
- 1.1.3. This document provides the Applicant's responses to CWCC's Addendum (Biodiversity) to their Deadline 1 Written Representation.

## 1.2. THE DCO PROPOSED DEVELOPMENT

- 1.2.1. HyNet (the Project) is an innovative low carbon hydrogen and carbon capture, transport and storage project that will unlock a low carbon economy for the North West of England and North Wales and put the region at the forefront of the UK's drive to Net-Zero. The details of the project can be found in the main DCO documentation.
- 1.2.2. A full description of the DCO Proposed Development is detailed in Chapter 3 of the 2022 Environmental Statement (ES) (as submitted with the DCO application) **[APP-055]**. The previously submitted ES is hereafter referred to as the '2022 ES'.
- 1.2.3. Following the Preliminary Meeting on 20 March 2023 and the Applicant's submission of its Notification of Intention to Submit a Change Request **[AS-060]** on 21 March 2023, the Applicant submitted a Change Request on 27 March 2023. The Applicant's Change Request 1 was accepted by the ExA on 24 April 2023 and includes '2023 ES Addendum Change Request 1' **[CR1-124 to CR1-126]** and ES Addendum Chapter 3 provides an update to the description of the DCO Proposed Development **[APP-055]** resulting from the proposed design changes and clarifications to assessments.
- 1.2.4. The Applicant submitted its Notification of Intention to Submit a Change Request (2) on 09 May 2023 **[PD-018]**.

## **2. APPLICANT'S RESPONSE**

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- 2.1.1. This chapter provides the Applicant's responses to CWCC's Addendum (Biodiversity) to their Deadline 1 Written Representation, submitted at Deadline 1A [REP1A-004].

**Table 2.1 – Comments on the Addendum to Written Representations (Biodiversity) submitted at Deadline 1A by Cheshire West and Chester Council (CWCC) [REP1A-004]**

Ref	CWCC Comment	Applicant's Response
<b>Addendum to Written Representations (Biodiversity Comments)</b>		
<b>2</b>	<b>Written Representation – Biodiversity</b>	
	<i>Surveys</i>	
2.1	As is highlighted the Council's Relevant Representation [RR-012] significant concern is raised by the Council in respect the supporting biodiversity surveys including their strategy / extent (absence of surveys beyond the DCO limits for barn owls and badgers), incomplete / missing survey data, as well as discrepancies in the provided survey data.	The Applicant has sought to answer questions received from Cheshire West and Chester Council (CWCC) to date and will continue to engage with the council over any further questions. The Applicant additionally proposes to engage further with CWCC through the Statement of Common Ground (SoCG) process [REP2-027] during the examination to address any further comments or concerns held.
2.2	An updated ES Chapter 9 [AS-025] and additional survey data in respect bats and riparian mammals has been provided [AS-029-042 and AS-057-59] was accepted by the ExA as additional information on the 20 March 2023. On review of the scope of all the reported surveys, including the additional submission, the Council note that there remain incomplete surveys in respect Bats and Riparian mammals in addition to the need for further clarifications on the survey strategy for other receptors including barn owls, fish and badgers, these are further detailed below	The Applicant refers CWCC to its response to row 2.2.49 of the Applicant's Response to Local Impact Reports (LIR's) [REP2-040] submitted at Deadline 2. CWCC was made aware of the potential need to apply a precautionary approach to assessment and surveys due to issues and restrictions to land access as well as considering a reasonable worst-case scenario on the basis of maintaining flexibility in the absence of a fixed pipeline route (see Table 2-1 – Record of Engagement in relation to the DCO Proposed Development and item CWCC 3.6.2 of Table 3-6 of the SoCG with CWCC [REP1-021]). The Applicant has made every effort to obtain survey data through surveys and assessment (as detailed within paragraph 9.5.29 of Chapter 9 Biodiversity of the Environmental Statement (ES) [AS-025]). The Applicant believes that the survey approach and use of precautionary assessment, where required, is proportionate and appropriate to have informed the impact assessment and development of mitigation measures and mitigation principles. The use of the precautionary approach is consistent with CIEEM guidance. The Applicant has broadly followed an approach of 'assumed presence' in the absence of survey data; deviations from this approach have been otherwise assessed and justified within Chapter 9 and its associated appendices.
2.3	With incomplete surveys the Council retains its concerns that the assessments of importance levels and value/sensitivity of receptors is not based on a complete data set and is therefore not robust.	The Applicant refers to the response to point 2.2 above. In addition, the impact assessment presented with Chapter 9 Biodiversity of the ES [AS-025] has been developed on the basis of a reasonable worst-case scenario for the DCO Proposed Development, in the absence of a fixed pipeline route/design. As such, taking into account the embedded mitigation detailed within Table 9.10 and mitigation measures and mitigation principles detailed within Table 9.12 of Chapter 9 Biodiversity of the ES [AS-025], the impact significance, during the construction stage, as detailed within Table 9.11, and residual effect significance, detailed within Table 9.13 of Chapter 9 Biodiversity of the ES [AS-025], are considered by the Applicant to be robust and appropriate for the predominantly short term, temporary, and localised effects of the DCO Proposed Development.
2.4	It is explained in paragraph 9.5.29 of the Assumptions and Limitations section of ES Chapter 9 [AS-025] that surveys post DCO submission will be undertaken but only to corroborate the baseline data presented. With	The paragraph that CWCC is referring to is presented within the original 2022 ES Chapter 9 Biodiversity [APP-061], which was submitted before the completion and submission of supplementary information. The need of such, was discussed with CWCC as captured within Table 2-1 of the SoCG

	<p>incomplete surveys it is considered unreasonable to be able to assume this to be the case. The Council also note that there is no indication of the percentage of surveys completed and yet to be completed, nor the area of the project covered by the surveys to date. The Council highlight that the quantity of survey for each species or habitat still to be completed and at which stage, should be provided.</p>	<p><b>[REP2-027]</b>, row dated 14/07/2022. Following the results of further surveys, the below revised documents were submitted, and accepted by the Examining Authority (ExA) on the 14 March 2023:</p> <ul style="list-style-type: none"> <li>• Chapter 9 – Biodiversity <b>[AS-025]</b></li> <li>• Riparian Mammal Survey Report <b>[AS-039]</b></li> <li>• Bat Activity Survey Report <b>[AS-027 and 029]</b></li> <li>• Bats and Hedgerows Assessments <b>[AS-031 to AS-038]</b></li> </ul> <p>The paragraph present within <b>[APP-061]</b> was removed accordingly owing to the updated results and revisions made to Chapter 9 subsequently presented within the updated Chapter 9 Biodiversity of the ES <b>[AS-025]</b>.</p> <p>Chapter 9 and its supporting appendices detail limitations to survey effort and completion of surveys across the Order Limits and how, where assessed appropriate, a precautionary approach (generally of ‘assumed presence’) to assessment has been implemented. A precautionary approach has therefore also been applied to the subsequent development of mitigation measures and mitigation principles accordingly.</p>
2.5	<p>The Council note that land outside of the DCO limit has not been surveyed including, for example, Barn owl (who can be impacted by disturbance 100m from their nest site) and Badger surveys have not taken place as standard 30m from the NIB, as is the most basic level of survey.]</p>	<p>Survey data has been recorded beyond the Order Limits for some receptors, this is presented where available within Chapter 9 Biodiversity of the ES <b>[AS-025]</b> and its associated appendices.</p> <p>The information presented within the DCO application describes those receptors that could be subject to direct impacts and effects as a result of the DCO Proposed Development, in the absence of a detailed design. Impacts and effects beyond the Order Limits will be limited to indirect effects (for example, light, noise, vibration). The Applicant has developed a series of mitigation measures and mitigation principles on the premise of ‘assumed presence’ of features beyond the Order Limits as well as a reasonable worst-case scenario (see for example (but not limited to) items D-BD-015, D-BD-021, D-BD-024, D-BD-025, D-BD-028, D-BD-040) to be utilised during construction and subject to monitoring and oversight by an ECoW (or team of ECoWs) as well as a third party ‘auditing ECoW’ (as captured by D-BD-001 and D-BD-003 of the OCEMP <b>[REP2-021]</b>).</p> <p>The Applicant has provided for the completion of pre-commencement/ construction surveys (see items D-BD-005 and D-BD-006 of the OCEMP <b>[REP2-021]</b>), as secured by Requirement 5 of the dDCO <b>[REP1-004]</b>, that will ensure mitigation prescriptions and principles can be appropriately applied in response to the detailed design. The Applicant believes this to be a proportionate approach given the predominantly short term, temporary and localised impacts of the DCO Proposed Development.</p> <p>The Applicant additionally refers CWCC to its response in row 2.12.7 within the Applicant’s Response to Relevant Representations <b>[REP1-042]</b>. Direct impacts associated with the DCO Proposed Development will be restricted to within the Order Limits and confined within a prescribed working corridor upon development of a detailed design and pipeline route, with further opportunities explored during the design development (and construction stage) to avoid and safeguard recorded receptors/features. However, the mitigation principles and measures prescribed within the DCO Application are sufficient to safeguard or otherwise mitigate identified receptors within the Order Limits and beyond.</p>

2.6	Species populations depend on their ability to move around habitat features, through the landscape. This has not been assessed specifically, and the missing data means that this cannot be robustly assessed at this stage.	<p>As detailed within Table 9.11 Likely Significant Effects, during the Construction Stage of Chapter 9 Biodiversity of the ES <b>[AS-025]</b>, severance, whether temporary or permanent, has been considered for each applicable ecological receptor and significance of effects upon receptors (in the absence of mitigation) derived accordingly. The DCO Proposed Development will broadly result in short term, temporary, and localised impacts arising from installation of the pipeline. Measures have been included within the OCEMP <b>[REP2-021]</b> to ensure permeability of the landscape to species during construction, particularly whilst open cut trench sections are excavated to facilitate installation of the pipe, as well as any other excavations (see items D-BD-022, D-BD-023 specifically).</p> <p>Additionally, following correspondence with NE and NRW, it was requested that consideration of severance effects upon foraging and commuting bats be considered during preparation of the DCO Application. As such the Applicant, through consultation with relevant stakeholders, created a novel methodology for assessing potential impacts arising from severance of hedgerows across the Order Limits during construction. Full details of the methodology and results are provided within Appendix 9.4 Bats and Hedgerows Assessment <b>[CR1-064 to 066]</b>. This has allowed the development of mitigation prescriptions and mitigation principles to be employed during and post construction (see items D-BD-031, D-BD-032 and D-BD-033 within the OCEMP <b>[REP2-021]</b>) to maintain linear commuting routes for bats (where necessary).</p>
2.7	The Council also note that habitat connections have not been considered in the survey strategy, including in terms of the Cheshire West and Chester Ecological Network	<p>The Applicant can confirm that habitat connections have been assessed, particularly recognising the potential severance effects posed by vegetation removal, for example from hedgerows to facilitate construction. Given the broadly short term, temporary and localised nature of construction, extensive severance impacts are not envisaged, primarily being associated with the open-cut trench required for the majority of pipeline installation. In particular, the effects of severance of hedgerows on bat species has been extensively assessed to determine the potential impacts and develop appropriate mitigation (see response to 2.6 above).</p> <p>The DCO Proposed Development predominantly impacts arable and grazing fields, with avoidance of dense woodland blocks (wherever possible) factored into the early design considerations. The Applicant has committed to reinstatement of habitats post construction with additional mitigation planting and landscaping proposed for habitats unable to be readily reinstated (e.g. woodland and trees). The Applicant has identified 13 mitigation areas (as detailed within Figure 3.4 Landscape and Ecological Mitigation Plan <b>[CR1-103]</b>) for provision of woodland/tree planting to mitigate for the loss of trees during construction (as captured within D-BD-063 of the OCEMP <b>[REP2-021]</b>). As captured within paragraph 9.10.10 of Chapter 9 Biodiversity of the ES <b>[AS-025]</b>, areas have been selected where they will enhance and improve existing green infrastructure within the landscape therefore benefitting the Cheshire West and Chester Ecological Network. Mitigation areas 57B to 57G all fall within the core area of the ecological network, with area 57A located within a 'restoration area'.</p>
2.8	The Council note that there are several discrepancies between ES Chapter 9[AS-025] and the various species-specific surveys reports, for example with bat roost potential trees, where the numbers do not match.	In relation to bat roost potential trees, Table 9.8 of Chapter 9 Biodiversity of the ES <b>[AS-025]</b> refers to survey results reported within Section 3.2 and Section 3.2 within Appendix 9.3 Bat Activity Report Rev B <b>[AS-027]</b> . A total of 90 structures and 417 trees were identified with bat roosting potential, with 86 trees subjected to aerial tree climb inspections, which resulted in updated suitability for Low, Moderate and High potential trees. Following the submission of Change Request 1, Table 9.4 within the



	<p>It is also noted that CAWOS (Cheshire and Wirral Ornithological Society) were not consulted as part of the project.</p>	<p>Environmental Statement Addendum Change Request 1 <b>[CR1-124]</b> reports the updated baseline assessment following amendments to the Order Limits. This is also reflected within the updated results presented within Appendix 9.3 Bat Activity Report Rev C <b>[CR1-062]</b>, Section 3.2 and Section 3.3 which detail an increase in the number of trees with bat roost potential from 417 to 427.</p> <p>The Applicant can confirm that CAWOS was not consulted as part of the DCO Proposed Development, however, third-party data within 2km of the Newbuild Infrastructure Boundary was requested from RECORD and Wetland Bird Survey (WeBS) count data was requested from the British Trust for Ornithology (BTO).</p>
	<p><i>Policy / Green Infrastructure</i></p>	
<p>2.9</p>	<p>The policy considerations of the Planning Statement [APP-048] includes the policy text for CWCC Local Plan Part 2 DM44 including the relevant Ecological Network section of the policy, however, the Council note that there is no response to this in the Policy Assessment section of the table.</p>	<p>The Applicant would refer CWCC to row 2.2.2 to 2.2.5 of its Response to the Local Impact Report <b>[REP2-040]</b>. The Applicant has updated the assessment of Local Planning Policy within the Planning Statement Section 3 and Appendix B <b>[REP2-015]</b>.</p> <p>The Applicant would also refer CWCC to the Applicant's Comments on Submissions received at Deadline 2 (document reference <b>D.7.21</b>) which is being submitted for Deadline 3. This sets out the Applicant's response to row 2.12.2 of CWCC's Responses to Comments on Relevant Representations <b>[REP2-046]</b> which specifically concerns DM 44.</p>
<p>2.10</p>	<p>For any infrastructure project, and as discussed with the wider 'HyNet Northwest' project (for the creation of infrastructure to produce, transport and store low carbon hydrogen across the North West and Wales), which this Project forms one element of, the Ecological Network is an important consideration, due to the large-scale severance impacts such projects are likely to have, whether it be on a temporary or permanent basis. The significance of habitats lost in the Ecological Network is higher than those outside it. In addition, any compensatory habitats should be targeted to be located within the Ecological Network, to strengthen the network.</p>	<p>The Applicant acknowledges CWCC Local Plan (part 2) Policy DM44 and the role of ecological networks, as well as the importance of contributing positively towards these to ensure adherence to this policy. It is acknowledged that a large percentage of the order limits covers areas within the ecological network, predominantly due to the 'core areas' occurring over a relatively widespread footprint, together with several instances of 'corridors and stepping stones' (comprising existing Local Wildlife Sites and/or priority habitat).</p> <p>The DCO Proposed Development has undergone several revisions of the Order Limits and re-evaluated construction impacts to attempt to reduce impacts to priority habitat wherever possible, to ensure adherence to the mitigation hierarchy. This will be further explored during development of the detailed design of the DCO Proposed Development. This in turn ensures that any severance impacts are kept to a minimum, particularly in cognisance that the DCO Proposed Development will predominantly result in short term, temporary, and localised impacts. An example of this is through commitments to remove a maximum of 15m of hedgerow (per hedgerow crossing) to facilitate construction of the pipeline and replace this within 1 year of impacts occurring (as captured by mitigation item D-BD-032 of the OCEMP <b>[REP2-021]</b> secured by Requirement 5 of the dDCO <b>[REP1-004]</b>).</p> <p>Where impacts do persist on priority habitats, a BNG offsetting strategy is proposed, and this will target areas within the ecological network wherever possible. To this end, the Applicant is working with CWCC to identify suitable sites to provide this priority habitat. If these areas are successfully identified as falling within the ecological network (as led by CWCC), then the DCO Proposed Development will provide a significant positive contribution towards this policy, specifically point 11 which aims to "increase the size, quality or quantity of priority habitat within core areas, corridors or stepping stones".</p>

		Due to the negative multipliers inherent within the biodiversity metric (which are more heavily weighted for priority habitats), considerably larger areas of this habitat will be created to offset the extent of habitat lost, in order to achieve at least 1% BNG. A full assessment of the DCO Proposed Development against the policy DM44 will be made at Deadline 5 following completion of the updated BNG assessment with confirmation of the BNG offsetting strategy.
	<i>Consultation</i>	
2.11	The Council note that no meetings occurred involving both CWCC and NE.	The Applicant acknowledges CWCC's response and has no further comments at this time.
	<i>Assessment of Likely Impacts and Effects (ES Section 9.9)</i>	
2.12	It is stated in Section 9.9 "A number of receptors have been scoped out of the assessment where impacts to the receptor is considered to be less than Moderate adverse." It is not certain how this has been assessed, with the survey data still missing for species such as Bats, Otters and Water voles.	Within Chapter 9 Biodiversity of the ES <b>[AS-025]</b> , Paragraph 9.9.2 references Section 9.4 and Table 9.2 (within the same document), which details receptors alongside justifications for each individual receptor scoped out. These do not include species such as bats, otters, water vole that have been carried through the impact assessment process accordingly.
2.13	It is stated in Table 9.11 that there is only loss of three outlier Badger setts, whereas the drawings show main setts adjacent and within the NIB, so it is not clear how this conclusion has been reached.	Figure 9-5: Badger Survey Results Sheets 1 to 19 of Appendix 9.5 Badger Survey Report <b>[CR1-070]</b> (confidential appendix) present the results of badger surveys completed to support the impact assessment. These present all instances of badger activity and evidence recorded during surveys regardless of the potential impacts of the DCO Proposed Development. As per mitigation item D-BD-020 of the OCEMP <b>[REP2-021]</b> , it is currently assumed that the detailed design of the DCO Proposed Development will maintain a 30m buffer from all sett entrances associated with identified main setts.
	<i>Mitigation, Compensation and Enhancement (ES Section 9.10)</i>	
2.14	It is stated that "it is not possible to reinstate trees above or within 12 m either side of the Newbuild Carbon Dioxide pipeline. Where practicable, trees will be planted as close as possible to those lost, however, these are likely to form a mixture of replacement hedgerows and trees." It is unclear if these areas have been classed as temporary loss or have been classed as permanent loss, if habitats cannot be replaced in the same location of at least 24m in width. This is especially important in LWS, woodlands and hedgerows. Again, there is no assessment of the impact of this at the landscape scale e.g. connecting up other woodlands around the area of impact.	It should be noted that wherever possible, the Applicant will seek to avoid tree losses during the development of the detailed design and through construction of the DCO Proposed Development, in line with items D-BD-007, D-BD-009, D-BD-010, D-BD-012, D-BD-014, D-LV-005, D-LV-026 as presented within the REAC <b>[REP2-017]</b> . As per paragraph 9.10.8 of Chapter 9 Biodiversity of the ES <b>[AS-025]</b> a reasonable worst-case scenario utilising those trees/woodlands considered 'at risk' of removal (i.e. lost) within Appendix 9.11 Arboricultural Impact Assessment Report <b>[CR1-058]</b> has been used. This scenario risk assessment has been used to identify the extent of mitigation planting required to compensate for tree loss across the Order Limits which has driven the identification of mitigation areas across the Order Limits for woodland/tree planting (this is not to be confused with Biodiversity Net Gain (BNG) offsets of priority habitat woodland which has been dealt with separately). As such, trees have been considered permanently lost within the reasonable worst-case scenario and mitigation area development.  Hedgerows will be temporarily lost and reinstated post construction and absent of any tree planting within 12m either side of the centre of pipeline and have as such been classed as temporarily lost. The replanting of hedgerows post construction will maintain connectivity through the landscape by

		reinstating these linear features. Where reinstatement of trees is not possible within woodland areas, this will be mitigated for through the planting of scrub (see items D-LV-026 and D-BD-062 of the OCEMP <b>[REP2-021]</b> ). This will provide connectivity between the retained woodland sections (in the case of severance), whilst additionally providing further benefits through the creation of habitat mosaic.
	<i>Biodiversity Net Gain</i>	
2.15	<p>It is noted that BNG is not currently a mandatory requirement but can be used as a general tool to demonstrate if a project is achieving adequate habitat mitigation and compensation. The BNG for this Project has been carried out on priority habitats only (rather than all habitats as a standard BNG calculation would), so just a small proportion of the habitats likely to be impacted by the project. Even considering just Priority habitats, the project results in a 57.25% habitat unit loss, a 7.63% hedgerow unit loss and a 0% river unit result. In terms of the off-site information entered into the metric, this is based on potential scenarios, therefore the project is not achieving a net gain currently. It is noted that the CWCC Ecological Network has not been taken into account in the Strategic Significance columns, so losses could be greater than calculated.</p>	<p>The Applicant acknowledges that at the time of writing, the DCO Proposed Development results in a net loss of priority habitats and provides a hypothetical compensation scenario within the most recent BNG assessment report. This is stated as such within the report submitted at Deadline 3 (document reference <b>D.6.5.12</b>) which supersedes <b>[APP-261 to APP-236]</b>.</p> <p>The hypothetical scenario provides an example of the type and scale of habitats which will be required to evidence the minimum 1% net gain target of priority habitats. This scenario has formed the basis for future discussions around identifying suitable sites in which to achieve the aims of BNG.</p> <p>The Applicant is continuing discussions with CWCC with a view to securing appropriate offset locations, full details of which will be provided within an updated and final BNG assessment report <b>[APP-231 to 236]</b> to be submitted at Deadline 5. However, the Applicant has provided a BNG Strategy Update document for progression of the BNG discussions at Deadline 2 <b>[REP2-042]</b> and updated at Deadline 3. Discussions between CWCC and the Applicant are ongoing with consideration of the Ecological Network and emerging Local Nature Recovery Strategy raised and included within those discussions.</p>
2.16	<p>In view of the general status of the legislation at this point in time the general approach to BNG is seen as reasonable, however, the Council do highlight that there is still no off-site solution presented to compensate for the losses as described above.</p>	<p>The Applicant acknowledges CWCC's response and can confirm that it continues to explore opportunities with the councils and other parties to secure offset sites. Progress has been made with CWCC's internal BNG team in respect of securing offset site locations covering all four habitat types requiring offsets. Details of discussions to date and future plans to secure these offsets are presented within the Draft BNG Strategy Update <b>[REP2-042]</b> and as submitted at Deadline 3 to capture further progress from discussions with the council.</p>
	<i>Landscape Environmental Management Plan (LEMP)</i>	
2.17	<p>The Council note that the Outline Landscape Environmental Management Plan (OLEMP) <b>[APP-]</b> on which the final LEMP is to be based is very general. For example, a 3 for 1 replacement of woodland is referred to, but it is not clear what this means (trees or area). It is not clear why only woodland is referred to for replacement ratios and no other habitats (marshland, grassland etc). It is also noted that it is stated that the OLEMP does not address any off-site requirements needed for BNG. 5 year maintenance of habitats, extended to 10 years for woodland is referred to, however, as within the BNG metric, at least 30 years is required for woodland.</p>	<p>Mitigation planting and BNG are separate and distinct concepts with different requirements, and it is inappropriate to conflate these. Habitat planting for mitigation will be maintained for the establishment period to ensure the function is met then land management will return to the landowner. It is inappropriate for the Applicant to seek to control and restrict a landowner's use of land for 30 years for this form of planting. Paragraph 6.1.2 of the Outline Landscape and Ecological Management Plan (OLEMP) <b>[APP-229]</b> notes that, where appropriate, a review will be undertaken of the needs for future maintenance and management of created habitats beyond the establishment/maintenance period.</p> <p>As outlined in the response to Flintshire County Council's answer to Q1.4.2 in the Applicant's Comments on Responses to ExA's First Written Questions <b>[REP2-038]</b>, the mitigation planting is not being used to evidence any gains associated with the BNG assessment. Mitigation planting is not proposed to count towards the requirement of Lowland mixed deciduous woodland compensation which is instead being delivered off-site where a minimum 30-year management can be ensured and</p>

		<p>delivered by a suitably experienced body. The same applies to ponds (priority habitat), Coastal Floodplain Grazing Marsh and hedgerows (beyond like for like reinstatement associated with temporary 15m losses during construction).</p> <p>Given the broadly short term, temporary, and localised impacts of the DCO Proposed Development and the habitats likely to be impacted, it is possible to reinstate the majority of habitats impacted post construction in the location of the original impact. This is not possible for woodland and trees and as such an appropriate planting ratio of 3:1 for the loss of trees has been applied recognising the time considerations of tree establishment and growth (i.e. for every tree lost, three will be planted), Thirteen mitigation areas have been selected across the Order Limits where mitigation tree planting will be located, as illustrated within Figure 3.4 Landscape and Ecological Mitigation Plan <b>[CR1-103]</b> and discussed within Section 9.10 of Chapter 9 Biodiversity <b>[AS-025]</b>.</p> <p>The Applicant has been in contact with CWCC as evidenced in the BNG Strategy Update <b>[REP2-042]</b>, and as submitted at Deadline 3, to discuss maintenance provision of BNG habitats.</p>
	<i>Survey Reporting and Monitoring Strategy</i>	
2.18	<p>An addition to the submitted REAC the Council's position is that there should be a survey, reporting and monitoring strategy. This would include frequency, phases or stages of survey updates, reporting frequency and the authorities reported to. This could possibly include a working group of interested parties. The Council note that the updated REAC [AS-054] has only been updated in terms of survey data and has not taken on board any of the above requirements.</p>	<p>Survey, reporting and monitoring has been included within the mitigation measures and principles contained within the REAC <b>[REP2-017]</b> and OCEMP <b>[REP2-021]</b>, including items D-BD-001, D-BD-003, D-BD-005, D-BD-006, D-BD-068 and D-BD-069. As part of the requirements of the ECoW (required through D-BD-001) reporting of results (e.g. of surveys undertaken) and compliance (e.g. of construction works against the requirements of the CEMP) will be required. The roles and responsibilities of the ECoW, including reporting requirements, will be developed and included within the detailed CEMP. In addition to the site ECoW, measure D-BD-003 captures the requirement for a third-party auditing ECoW to be appointed.</p> <p>The roles and responsibilities of the auditing ECoW will also be developed and detailed within the detailed CEMP as secured by Requirement 5 of the dDCO <b>[REP1-004]</b>. Reporting and monitoring requirements will be developed and captured within the detailed LEMP and Operations and Maintenance Environment Management Plan (Requirement 11 of the Draft DCO <b>[REP1-004]</b>), which will include consideration of any terms or conditions of any protected species licenses granted for the DCO Proposed Development.</p>
	<i>Local Wildlife Sites (LWS)</i>	
2.19	<p>The impact assessments presented within ES Chapter 9 on Local Wildlife sites (LWS) have not been assessed in terms of the designations, with only general habitat mitigation and compensation alluded to. There is no indication of the percentage of LWS loss, nor any long-term plan to ensure the LWS quality habitat is reinstated (maximum long-term management in LEMP suggested is 10 years).</p>	<p>The Ince AGI location represents the only location where permanent habitat losses will be required within an LWS (the Frodsham, Helby and Ince Marshes LWS). The footprint of the Ince AGI will result in impacts to the grazing pasture/farmland that dominates the field in that location (and chosen for the AGI because of its widespread and common habitat type across the landscape). The footprint of the AGI will result in the permanent loss of approximately 0.39ha which represents 0.03% of the overall LWS landscape cover.</p> <p>The DCO Proposed Development will predominantly result in short term, temporary and localised impacts across the Order Limits, as such habitat reinstatement post construction alongside any requirements for mitigation and compensation are appropriate and proportionate to the impacts of the</p>

		<p>DCO Proposed Development. Efforts to reduce impacts have already been considered and embedded within the design, for example the implementation of trenchless crossing techniques at Shropshire Union Canal. However, further efforts to reduce impacts across the Order Limits, including LWS, as much as practical will be sought through the development of the detailed design in line with mitigation principles and prescriptions (as presented within the OCEMP <b>[REP2-021]</b>). The Applicant recognises that the LWS have additional interests beyond habitats (see descriptions contained within Table 9.6 of Chapter 9 Biodiversity of the ES <b>[AS-025]</b>), supporting for example birds and water vole, and, a range of protected species surveys have been completed as required to assess the potential for habitats within and beyond the Order Limits, inclusive of LWS sites, to support such species. The mitigation measures and principles devised, will safeguard protected and/or notable species during construction, recognising results arising from pre-commencement surveys.</p> <p>Where temporary impacts occur, it is proposed that habitats will be reinstated post construction, either through management and planting or through natural regeneration (only where this is considered appropriate). All reinstated and created habitats, including those within LWSs will be subject to management and monitoring for a minimum of 5 years post construction (10 years for woodland) until the habitat fulfils its function, at which point it will be returned to the landowner. Additionally, Paragraph 6.1.2 of the OLEMP <b>[APP-229]</b> states that a review will be undertaken towards the end of the initial maintenance period whereupon management prescription will be agreed for longer term management where appropriate.</p> <p>As discussed within the response in row 2.17 above, it is not appropriate to conflate mitigation planting with BNG, being separate and distinct concepts. The detailed LEMP will set out objectives for ecological and landscape elements and provide detailed prescriptions in respect of management of habitats and targets to ensure appropriate condition is achieved. Where permanent impacts to habitats are anticipated associated within the Ince AGI, baseline habitats, whilst captured within the bounds of the Frodsham, Helsby and Ince Marshes LWS, will be mitigated and compensated for through a landscape plan. Baseline habitat within the field to accommodate the AGI comprises improved grassland. The landscape plan associated with the AGI will provide additional habitats including scrub, riparian planting, species rich grassland, hedgerows, and an ephemeral detention pond (see Sheet 3 of BVS and AGI Landscape Layout Plans <b>[CR1-009]</b>), providing additional benefits to birds and water vole. The remainder of the field beyond the landscape design will be retained as its current habitat type.</p>
2.20	LWS are referred to in table 9.11 [AS-025] when considering the Likely Significant Effects during construction, but no further analysis other than “temporary” impacts during construction; no detail of the sensitivity, replaceability, quality of the habitat and percentage impact on each LWS as a whole, has been made.	The Applicant can confirm that this is an omission within the document which will be rectified within a future iteration of Chapter 9 Biodiversity of the ES prior to the end of Examination. Habitats have been subject to survey across the Order Limits as presented within Appendix 9.1 Habitats and Designated Sites <b>[CR1-054]</b> . The Applicant has sought to reduce and avoid impacts upon habitats and receptors as much as possible. This has included utilising habitats that are of reduced ecological value wherever possible (comparative to habitats of increased ecological value, e.g. opting for impacts to farmland over impacts to woodland). Further opportunities to reduce and avoid impacts will continue through the development of the detailed design (see response in row 2.19 above).
2.21	In addition to the identified impacts in Table 9.11 [AS-025] the Council raises the need to consider impacts from permanent losses of trees within	Please see response in row 2.14 above.

	the planting exclusion zone over the pipeline and the resulting impacts upon the connectivity between LWS and habitats.	
	<i>Protected Species Considerations – Bats</i>	
2.22	<p>There remains to be no indication of the percentage of missing survey data on Bats. No analysis has been made of the confirmed roost locations nor of impact of habitat loss (BLE prefer to emerge into dark corridors straight from the roost and hedgerow/tree losses may impact on roost success of any species) around these locations due to the works. Foraging and commuting impact at a population (landscape) scale has not been considered in any detail. It should also be noted that it is not confirmed which trees require removal at this stage, so any resulting impact is not clear</p>	<p>The Applicant has undertaken an extensive suite of surveys to determine the presence (or otherwise) of features with bat roost potential which have subsequently informed the needs for further assessment and survey for the presence of bats and bat roosts (as detailed within Appendix 9.3 Bat Activity Survey <b>[CR1-062]</b>). Table 9.8 Summary of Species Survey Results within Chapter 9 Biodiversity <b>[AS-025]</b>, details rationale and importance valuations per species for both ‘roosting’ and ‘foraging and commuting’ bats (captured within separate rows within the table) utilising relevant guidance (e.g. Wray <i>et al</i> and Bat Conservation Trust (Collins, 2016)). Bats, both ‘Roosts’ and ‘Foraging and Commuting Bats’ are assessed within Table 9.11 Likely Significant Effects during the Construction Stage of Chapter 9 Biodiversity <b>[AS-025]</b> and include consideration of the potential effects of construction of the DCO Proposed Development upon bats and the roosts identified (or precautionarily assumed) during the course of surveys as well as consideration of severance of habitats (in respect of foraging and commuting).</p> <p>At the landscape scale, the Applicant has undertaken an extensive array of surveys and assessments to assess bat use of linear features across the Order Limits landscape and determine potential impacts and effects upon foraging and commuting bats. Additionally, within the hedgerow assessment, bat records within 2km of the Order Limits and wider habitat connections have been taken into consideration. Consequently, the Applicant has provisioned mitigation principles and items to safeguard bats during construction (see mitigation items D-BD-024 through to D-BD-033 within the OCEMP <b>[REP2-021]</b>).</p> <p>The Applicant acknowledges CWCC’s comment regarding that trees require felling is currently undetermined but has provisioned appropriate mitigation principles and measures to safeguard bats, their roosts and linear foraging and commuting routes (associated with hedgerows) during construction of the DCO Proposed Development (as detailed within the OCEMP <b>[REP2-021]</b>). This is inclusive of measures to safeguard and buffer maternity roosts wherever present (see item D-BD-025 of the OCEMP <b>[REP2-021]</b>).</p>
2.23	<p>Within ES paragraph 9.5.39 <b>[AS-025]</b> the Council note that certain roost types have been assumed in trees and buildings that have potential. Further detail is required to explain the logic of this, in terms of which buildings were assumed to have roosts and why certain roost types and sizes were assumed. The updated surveys have been completed in this respect, however, the above general comments still stand, with additional queries, as below.</p>	<p>The Applicant refers CWCC to the ‘Bats – Roosting’ row within Table 9.8 Summary of Species Survey Results within Chapter 9 Biodiversity of the ES <b>[AS-025]</b>, which details the precautionary approach to assumed roost presence within the five buildings and 31 trees. To paraphrase, the results of the Preliminary Bat Roost Assessment have been taken into consideration alongside the known roosts recorded across the Order Limits. Acknowledging these aspects, inferences can be made as to the likelihood of a similar mix of species and roosts being present in the buildings/trees unable to be surveyed.</p>
2.24	<p>In relation to bat roosts identified in the Appendix Bat Activity Reports <b>[AS- 029 / 030 / 057 / 058]</b>: the Council note that the numbers of trees and buildings in the DCO limits are now lower (e.g. trees subject to aerial</p>	<p>The Applicant can confirm that the differences in the numbers of trees and structures reported in Appendix 9.3 Bat Activity Report Rev A <b>[APP-098 to APP-101]</b> and Appendix 9.3 Bat Activity Report Rev B <b>[AS-029-030, AS-057 to 058]</b> is due to a review of trees and structures following the completion</p>

	inspection) than previously recorded. This may be because these are now not affected by the project. The Council ask for clarification on this matter.	of the surveys against the Order Limits. This resulted in a reduced number of trees which will not be affected by the DCO Proposed Development due to their location, which wasn't previously reflected within <b>[APP-098 to APP-101]</b> . As some of these trees were subject to an aerial tree climb inspection, this has altered the numbers and results of the aerial tree climb inspection surveys also which has consequently been reflected within the updated reporting.
2.25	It is noted from the above surveys that five buildings and thirty-one trees are now assumed as having roosts due to no access being available for survey. It is not clear how the species and type of roost been assumed, or if potential for hibernation roosts been considered? The Council ask for clarification on this matter.	<p>The Applicant refers CWCC to its response to 2.23 above regarding consideration of precautionary roost presence in the absence of survey.</p> <p>The Applicant additionally refers CWCC to its response in row 2.56.7 <i>Hibernation Surveys</i> within the Applicant's Response to Relevant Representations <b>[REP1-042]</b>. In summary, the Applicant did not undertake hibernation surveys as these were considered disproportionate given the broadly short term, temporary and localised nature of the impacts of construction. However, Moderate trees and buildings can be considered to offer hibernation potential for low or individual numbers of bats; with high and confirmed roosts offering potential for multiple bats, in line with guidance definitions within the Bat Conservation Trust Bat Surveys for Professional Ecologists Good Practice Guidelines (Collins, 2016). The Applicant has included provision for completion of pre-commencement surveys to update baseline results in advance of construction (where necessary). Additional provision has been afforded within mitigation principle D-BD-025 of the OCEMP <b>[REP2-021]</b>, that defines the procedure for safeguarding of any identified maternity or hibernation roost (e.g. exclusion buffers, seasonal working restrictions, and/or licensing where required).</p>
<i>Protected Species Considerations – Bat Foraging/Commuting</i>		
2.26	The Council note that the updated / further surveys and analysis [AS-031-038 / 059] report that fewer hedgerows are to be affected when compared to the surveys provided in the original submission [APP-098-105]. The updated surveys state that there are now 102 (previously 82) Poor hedgerows, 144 (previously 250) Good hedgerows and 45 (previously 23) Excellent hedgerows. The Council note that this equates to a loss of approx. 86 hedgerows from the original surveys, clarification is requested on this matter.	The numbers quoted by CWCC are not in relation to the total numbers of hedgerows to be impacted by the DCO Proposed Development. The numbers refer to the results of the initial Bat Habitat Suitability Assessment (BHSA) and subsequent categories applied per hedgerow. The reduced numbers reference hedgerows post grouping (where considered appropriate) and following determination of a final BHSA category applied post static detector data analysis and interpretation. Section 2.4 of Appendix 9.4 Bats and Hedgerows Assessment <b>[CR1-064]</b> details the methodology applied to determining final BHSA categories per individual and grouped hedgerows. Annex D Hedgerow Survey Data and Annex H Final BHSA Categories of Appendix 9.4 Part 3 <b>[CR1-066]</b> provide the initial BHSA results of individual hedgerows and final BHSA categories and justifications per hedgerow or hedgerow group respectively. A combination of grouping of hedgerows and recategorization of hedgerows post static deployment and data analysis has resulted in the number variances.
2.27	Updated ES Chapter 9 [AS-025] states that "Surveys have been completed on 32 of the 45 'Excellent' hedgerows, 10 of which met the existing Defra thresholds". However, paragraph 4.1.3 of Appendix 9.4 (Bats and Hedgerows Assessment) [AS-031] states "Modified DEFRA Local Scale surveys are due to be conducted for the 45 'Excellent' hedgerows. To date, 32 'Excellent' hedgerows have been subject to two initial surveys, 10 of which met the relevant thresholds and require a further four survey visits prior to construction. The initial two surveys for	The Applicant recognises the ambiguity in the wording of the opening sentence of paragraph 4.1.3 within Appendix 9.4 <b>[AS-031]</b> (superseded by <b>[CR1-064]</b> ) and will seek to amend this in a future iteration of the appendix. The remainder of the text remains accurate and are not conflicting. The Applicant has completed the required two surveys in line with the stated methodology (see Section 2.5 of Appendix 9.4 <b>[CR1-064]</b> ) for 32 of the excellent hedgerows, with 10 of these 32 triggering the threshold requirements for a further four surveys in line with the methods in Section 3.2.

	<p>the remaining 13 'Excellent' hedgerows will be completed prior to construction along with any further surveys required for hedgerows which meet the threshold, in addition to the remaining surveys required for the 10 hedgerows to date which have met the threshold." These seem to be conflicting statements, again highlighting that not all surveys have been completed and therefore raising doubt on the robustness of conclusions of level of impacts.</p>	<p>The 13 excellent hedgerows that to date have not been subject to the two initial surveys (to determine whether thresholds are triggered) will be completed in advance of construction and in response to the detailed design of the DCO Proposed Development (which may consequently reduce the number of hedgerows requiring survey). These pre-commencement surveys are not required to inform the impact assessment owing to the use of the precautionary approach to the assessment (and as a consequence the application of mitigation accordingly for their categorisation).</p> <p>The volume of data recorded through static detector deployment alone provides a sufficient level of confidence with which to consider bat activity along hedgerows, hence the inclusion of these hedgerows under the 'Excellent' category. The undertaking of crossing point surveys seeks to substantiate the levels of activity recorded during static detector deployment, or otherwise. However, in the absence of crossing point survey data, the application of the mitigation principles presented within the OCEMP <b>[REP2-021]</b> (see items D-BD-031 and D-BD-032) at the excellent hedgerow category would be applied and is therefore considered by the Applicant to be robust.</p>
2.28	<p>As with the watercourse data, there is no indication of the percentage coverage of the total hedgerows impacted that the surveys have covered so far. It is stated that "the 10 hedgerows which have met the existing Defra thresholds, plus the remaining 13 Excellent hedgerows which were unable to be surveyed are currently precautionarily assessed Important FCRs." This is seen as a reasonable approach, although seems again to conflict with the numbers quoted in the Appendix 9.4 report. An updated survey progress table, as presented in the last meeting with the Applicant, showing the percentage, lengths and numbers of hedgerows surveyed, would be useful to clarify the information, as well as a timetable for further, or updated surveys.</p>	<p>The Applicant has arranged a meeting with CWCC and will seek to provide the information CWCC is requesting during and following that meeting. Details of the meeting and outcomes will be captured within an updated SoCG <b>[REP2-027]</b>.</p> <p>The Applicant can confirm that a future programme of surveys is yet to be developed but will be progressed in response to the detailed design of the DCO Proposed Development with surveys to be completed (as required) in advance of construction commencement per mitigation items detailed within the OCEMP <b>[REP2-021]</b> (see items D-BD-001, D-BD-005, D-BD-006).</p>
	<p><i>Protected Species Considerations – Riparian Mammals</i></p>	
2.29	<p>The Council highlight that it is not clear why some watercourses with Water vole burrows were only classed as suitable for foraging/commuting Water vole, rather than breeding populations. The phrase "suitable for burrowing water vole" is used, however, it is not clear what this refers to. These should be classed as breeding at this stage, unless further surveys demonstrate otherwise. There is no assessment of connectivity required and severance of watercourse that the project is likely to cause, thereby missing impacts on the populations present.</p>	<p>Figure 9.6.2 Riparian Mammals (Water vole) within Appendix 9.6 Riparian Mammal Survey Report <b>[CR1-072 to 073]</b> displays watercourse suitability for water voles, and all watercourses where burrows have been recorded have been mapped as suitable for 'Commuting, Foraging and Burrowing' water voles. The phrase 'suitable for burrowing water vole' has been used to describe the habitat suitability on each watercourse, e.g., if the bank substrate and profile is suitable for burrow creation, as part of the habitat suitability assessment detailed within Section 2.3 of Appendix 9.6 Riparian Mammal Survey Report <b>[CR1-072 to 073]</b> in line with current relevant best practice guidance. The Applicant does not believe it necessary to re-categorise watercourses as breeding, under the presumption that all watercourses with suitability for burrowing can consequently be considered suitable for breeding. The Wildlife and Countryside Act (1981) additionally considers protection of individuals and places of shelter and therefore no differentiation in use (e.g. breeding or otherwise) is considered necessary in this instance, particularly as this would not alter the mitigation prescriptions and measures already captured within the OCEMP <b>[REP2-021]</b> (see items D-BD-034 and D-BD-035 in particular).</p>



		Impacts to water vole populations have been assessed at County scale, given the occurrence of water vole populations across the project in England. Temporary severance of watercourses (e.g., open cut trench techniques and temporary culverts) will be kept to the construction width of 32m, and direct loss of resting places, such as burrows is anticipated during construction as detailed within Table 9.11 of Chapter 9 Rev B <b>[AS-025]</b> and Table 9.6 of Environmental Statement Addendum Change Request 1 <b>[CR1-124]</b> . Mitigation has been prescribed within the REAC <b>[REP2-017]</b> in relation to riparian mammals (see items D-BD-034-035, D-BD-048, D-BD-059-060) including a description of displacement method techniques which will be carried out under licence. The Applicant has additionally provisioned, wherever possible, for a reduction in the construction corridor width at watercourse crossings (see item D-BD-018 of the OCEMP <b>[REP2-021]</b> ), with no watercourses to be permanently severed, all affected watercourses being reinstated in full after construction.
2.30	With specific references to the revised ES chapter 9 <b>[AS-26]</b> and supported by Appendix 9.6 Riparian Mammal Surveys <b>[AS-039-042]</b> :  It is stated that presence of Otter/Water vole has been assumed in some watercourses, due to access restrictions for second survey. There is no basis for assumed presence on some watercourses and not others and this should be clarified.	As presented within Table 2 – Summary of Otter and Water Vole Survey Results and Section 4 - Summary of Appendix 9.6 Riparian Mammal Survey Report <b>[CR1-072]</b> , where second surveys have not been possible due to access restrictions, but suitable habitat was identified during the first survey visit (to warrant a second survey visit), these have been assessed precautionarily as suitable to support otter and/or water vole. Where watercourses have been scoped initially (as absent of supporting habitat) or a watercourse has been subject to two surveys with no evidence of otter/water vole present these species have been assessed as likely absent on the basis of initial habitat assessment or the riparian mammal survey results.
2.31	The Council ask that an updated survey progress table, as presented in the last biodiversity meeting between the Applicant and the Council, showing the percentage, lengths and numbers of watercourses surveyed, and the lengths to be surveyed to complete to accepted survey standards would be useful to clarify the information, as well as a timetable for further, or updated surveys.	The Applicant can confirm that surveys to support the DCO Application and through examination have been completed and no further surveys are anticipated during the examination period. Where surveys have not been able to be completed, due to access constraints or other restrictions, these will be completed as pre-commencement (pre-construction) surveys in response to the detailed design (which may result in some surveys no longer being required). A survey suite will be developed upon confirmation of the detailed design as captured by items D-BD-005 and D-BD-006 of the OCEMP <b>[REP2-021]</b> to update baseline survey results (where required) and provide data for any areas not previously able to be accessed. The results of these surveys will determine what mitigation measures/principles need applied and/or any needs for protected species licensing to facilitate construction.  The Applicant proposes to discuss this point further with CWCC through the SoCG and will capture discussions with revisions to the SoCG with CWCC <b>[REP2-027]</b> .
2.32	Within table 9.11 <b>[AS-025]</b> It is noted that the riparian mammal Likely Significant Effects (LSE) during construction has increased from minor adverse significant (not significant) to Moderate adverse significant (significant) and then from negligible to minor adverse in Table 9.13 Summary of Residual Effects. The Council ask that clarification be made in this respect.	Table 9.11 presented within Chapter 9 Biodiversity of the ES <b>[AS-025]</b> captures and reflects the results of the completed further surveys that were outstanding from the submission of the DCO Application (as presented within Table 9.11 of Chapter 9 Biodiversity of the 2022 ES <b>[APP-061]</b> ). In the updated Chapter 9 Biodiversity of the ES <b>[AS-025]</b> , the table notes the confirmation of water vole presence on additional watercourses as well as consideration of “ <i>potential otter holts or lay-ups</i> ” on other watercourses. Additionally, the table includes consideration of those watercourses precautionarily assessed for the presence of otter and water vole that was absent from the table within Chapter 9 Biodiversity of the 2022 ES <b>[APP-061]</b> . As such, to reflect the updated results and in acknowledging the precautionary assessment of some watercourses, the effect significance was precautionarily

		increased accordingly for both during construction and residual effects. This is considered by the Applicant to be appropriate in the context of the updated survey results and application of precautionary assessment of some watercourses.
	<i>Protected Species Considerations – Great Crested Newts (GCN)</i>	
2.33	<p>There is a discrepancy of GCN presence within the Red Risk Zone around Chester Zoo, with 6 ponds reported, 5 ponds reported elsewhere and on mapping (Figure 9.2.3 - Presence/Likely Absence Results Overview), 7 ponds in the LSE assessment, with a further 5 having precautionary presence assumed (Table 9.11). It should be noted that publicly available data for GCN from planning application shows GCN presence in 10 ponds within the Red Risk Zone at Chester Zoo, which has not been used in this analysis. There is no indication of the terrestrial habitat mitigation and compensation required for GCN within the Red Zone.</p>	<p>Within Chapter 9 Biodiversity of the ES Rev B <b>[AS-025]</b>, Table 9.8 Summary of Species Survey Results states that five waterbodies in England were found to have a small population of GCN. A single waterbody (166) (see Annex C Table 8 – Presence / Likely Absence Survey Results of Appendix 9.2 Great Crested Newt Survey Report <b>[CR1-060]</b>), had confirmed GCN presence through identification of GCN eggs, with no adult newts recorded during any surveys. This waterbody constitutes the sixth waterbody alluded to within Table 9.8. The Applicant will update the final Chapter 9 Biodiversity document to clarify this within the text, with an updated Chapter 9 to be submitted before the end of the Examination. Table 9.11 Likely Significant Effects during the Construction Stage <b>[AS-025]</b> details GCN have been confirmed in 6 waterbodies, and 5 additional waterbodies have been precautionarily assessed with GCN presence. Figure 9.2.3 - Presence/Likely Absence Results Sheet 7 and Sheet 8 within Appendix 9.2 Great Crested Newt Survey Report <b>[CR1-060]</b> show all 6 ponds with confirmed GCN presence as reported within Chapter 9 Biodiversity of the ES <b>[AS-025]</b> (ponds 43, 46, 166, 167, 169 (all sheet 8) and 171 (sheet 7)).</p> <p>Survey data within Appendix 9.2 Great Crested Newt Survey Report <b>[CR1-060]</b> utilises GCN survey results provided by Cheshire Zoo (via updated third-party data request from Record) from the ongoing GCN monitoring programme. The Applicant is aware of the large number of GCN records in the Chester Zoo area, having reviewed the third-party data and communicated directly with Chester Zoo during the survey period in preparation for the ES. The impact assessment and the development of appropriate mitigation measures has been devised based on the survey results and review of third-party data.</p> <p>The Applicant refers CWCC to the REAC <b>[REP2-017]</b> which provides commitments for terrestrial habitat mitigation (items D-BD-014, D-BD-044 and D-BD-055), as secured by the CEMP within Requirement 5 of the dDCO <b>[REP1-004]</b>, and Section 9.10 within Chapter 9 Biodiversity of the ES Rev B <b>[AS-025]</b>. Areas within the Red Risk Zone will be subject to a traditional EPS Licence application which will also include mitigation and compensation requirements for GCN. The Applicant is currently preparing a draft European Protected Species (EPS) licence for GCN (applicable to the Red Risk Zone) which will be provided to and discussed with Natural England during the Examination. The results of discussions will be captured within updates to the SoCG with Natural England <b>[REP1-022]</b> and form the basis for a Letter of No Impediment.</p>
2.34	<p>There is no indication of procedure when it comes to applying to Natural England for District Level Licence and which authorities the Impact and Conservation Payment Certificate will be provided to</p>	<p>The Applicant refers CWCC to footnote 9 within Chapter 9 Biodiversity of the ES <b>[AS-025]</b>, which provides a summary of the District Level Licence approach. The Applicant recognises through discussions within Natural England and CWCC that the conservation payment is likely to be distributed to CWCC as the actioning body. Whilst a provisional compensation payment amount has been received from Natural England, upon confirmation of the detailed design this will require recalculation</p>

		by Natural England. The Applicant will seek to keep CWCC apprised of future discussions regarding District Level Licensing.
	<i>Protected Species Considerations – Badgers</i>	
2.35	<p>In Table 9.3 of Chapter 9 [AS-025], there is no indication that 30m from the works area was surveyed for Badger setts, as is standard. As previously recommended bait-marking or territory studies have not been undertaken for Badgers, to assess any potential severance impacts on the Badger population as a whole. As above, Badgers being a large mammal rely on being able to forage over extensive areas in a rural environment. The Badger report states that some locations 30m from the NIB were surveyed, due to the area of works reducing, however, this was only on an ad-hoc basis and not due to habitat suitability. Cameras were deployed at the three Main setts found so far, whereas it may have been more useful to camera-trap at setts which showed some activity, to ascertain if they were small Main setts or not. It is stated in Table 9.11 that there is only loss of three outlier Badger setts, whereas the drawings show main setts adjacent and within the NIB, so it is not clear how this conclusion has been reached.</p>	<p>The entirety of the Order Limits has been surveyed for evidence of presence or activity of badger. As alluded to, surveys have taken place beyond the Order Limits in a number of locations, with results presented within Appendix 9.5 Badger Survey Report [CR1-071] to provide additional context to results and setts recorded within the Order Limits. Where setts were recorded within the Order Limits a 30m buffer was surveyed for further evidence, including land beyond the Order Limits, where accessible. Mitigation principles and prescriptions have additionally been developed on the basis of 'assumed presence' of features beyond the Order Limits (see for example (but not limited to) items D-BD-015, D-BD-021, D-BD-024, D-BD-025, D-BD-028, D-BD-040 within the OCEMP [REP2-021]). In addition, the Applicant has provisioned for the completion of pre-commencement/ construction surveys (see items D-BD-005 and D-BD-006 of the OCEMP [REP2-021] as secured by Requirement 5 of the dDCO [REP1-004]) that will ensure that the mitigation measures and mitigation principles presented within Chapter 9 Biodiversity of the ES [AS-025] (and secured in the OCEMP) can be appropriately applied in response to the detailed design.</p> <p>Bait marking and territory surveys were not considered proportionate or necessary in the context of the DCO Proposed Development and its predominantly short term, localised and temporary construction. On the assumption that badger movement and activity will continue to occur within the Order Limits during construction, measures have been included within the mitigation prescriptions and principles to ensure permeability of movement by animals, including badger, during construction (see D-BD-022 and D-BD-023 of the OCEMP [REP2-021]).</p> <p>In respect of setts, as per item D-BD-020 within Table 9.12 Design and Mitigation Measures and their Delivery Mechanisms in Chapter 9 Biodiversity of the ES [AS-025], the three main setts identified during surveys are envisaged to be retained and safeguarded during construction through implementation of a 30m buffer from each sett entrance and maintenance of permeability to the wider landscape and habitats. As such, the reference to setts likely to be lost during construction presented within Table 9.11 Likely Significant Effects during the Construction Stage [AS-025] is accurate. The figures associated within Appendix 9.5 Badger Survey Report [CR1-071] present all baseline survey results, regardless of whether they are likely to be lost or safeguarded during construction.</p>
2.36	The Council ask for clarification of sett numbers and that all areas surveyed 30m from the works has been undertaken.	See response to question 2.35 above.
	<i>Protected Species Considerations – Barn Owls</i>	
2.37	Three features were found to contain evidence of barn owl. The Barn Owl Survey reports [APP-108] states that barn owl evidence of a potential roost site was recorded at T472 (SJ35006 66638), and barn owl were recorded nesting within; BOB3 (SJ35043 66642); and T465 (SJ 41653 71153). This does not align with the mapping in the report which shows	As per paragraph 3.2.7 of Appendix 9.7 Barn Owl Survey Report [APP-108] (superseded by [CR1-076]), barn owl pellets were previously discovered at T472 and T41. No barn owl activity was recorded at T41 during vantage point surveys, as such T41 has been classed as a Temporary Rest Site (TRS)

	two occupied nest sites and two temporary rest sites. It should also be noted that it is not confirmed which trees require removal at this stage, so the impact is not clear	and captured accordingly within the figures. As noted by CWCC, the number and location of trees required to be removed is not currently known and will be determined during detailed design.
2.38	Within the amended Chapter 9, Table 9.12 (Design and Mitigation Measures and their Delivery Mechanisms) [AS-025] states that a worst-case scenario for barn owl presence has been applied to one location, however, this is not discussed in any of the previous sections. The Council would therefore ask that this be clarified before the residual effects can be accepted.	As detailed within Appendix 9.7 Barn Owl Survey Report [CR1-077], tree T471 was identified during initial ground-based inspection to have features assessed suitable to support barn owl (see Table 1 – Preliminary on-site scoping survey information of Appendix 9.7 Barn Owl Survey Report [CR1-077]). As detailed within Table 2 – Aerial Inspection Results, T471 was unable to be aerially inspected due to lack of access. The lack of access additionally impacted the ability to complete vantage point surveys as captured within paragraphs 2.4.3 and 3.2.6 of Appendix 9.7 Barn Owl Survey Report [CR1-077]. As such, in line with a precautionary approach, tree T471 has been included within the mitigation approach presented within item D-BD-037 (as included within the OCEMP [REP2-021]).
	<i>Protected Species Considerations – Breeding/Wintering Birds</i>	
2.39	Four transects were undertaken in CWCC (3, 4, 5 and 7), with distribution skewed to take in the Mersey Estuary due to the importance of wintering birds. It is not clear if this meant that habitats that would have been ideally surveyed for breeding birds were missed. The Council ask that the reasoning for the choice of transect locations is provided.	As per paragraph 2.2.1 of Appendix 9.8 Bird Report [APP-112] (superseded by [CR1-079]), the Applicant identified transect routes across the Order Limits capturing a mixture of habitat types to allow representative bird communities to be sampled, whilst acknowledging areas/habitats that were of likely increased importance to birds, both breeding and wintering (e.g. LWS). As such, the transects undertaken are considered appropriate and proportionate to understand the representative bird assemblages and use by birds during both breeding and wintering seasons, whilst ensuring consideration of areas of potential increased importance to birds and possible functionally linked land.
	<i>Fish</i>	
2.40	The Council note that the logic for survey locations and types is not clear and it is requested that this be clarified by the Applicant.	<p>The Applicant refers CWCC to its response to row 2.12.8 and 2.57.27 within the Applicant's Response to the Relevant Representations [REP1-042], which provide further information for the justification of fish survey locations and approaches.</p> <p>The Applicant has completed aquatic habitat scoping assessments along as much of the watercourses that was physically accessible present within the Order Limits. As per Section 2.2 Habitat Scoping Assessments of Appendix 9.9 Aquatic Ecology (Watercourses) [CR1-080] and illustrated within Figure 9.9.1, aquatic habitat scoping assessments were conducted on watercourses across the Order Limits to identify the need for detailed aquatic surveys on the basis of habitats present and the potential for protected and/or notable species receptors. Figure 9.9.1 details the locations all watercourses subject to Habitat Scoping Assessment and subsequently where each further survey type was completed. As detailed within paragraph 2.7.1 of Appendix 9.9 Aquatic Ecology (Watercourses) [CR1-080], Canal Ditch was not subject to habitat scoping assessment due to a lack of access, however, this was addressed through an assessment of aerial imagery. The need for further surveys (e.g. eDNA, electric fishing, macroinvertebrates) was assessed in light of the habitat scoping results, per Section 2.2 Habitat Scoping Assessments, with further surveys subsequently undertaken utilising appropriate methods in light of access or health and safety considerations.</p>