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## Connah's Quay Low Carbon Power

# Applicant's Response to Report on the Implications for European Sites

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Document Reference: EN010166/APP/9.35

Planning Act 2008 (as amended)

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations

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# 1. Introduction

## 1.1 Overview

- 1.1.1 This document has been prepared on behalf of Uniper UK Limited (Applicant). It forms part of the application (Application) that has been submitted for a Development Consent Order (DCO) from the Secretary of State (SoS) for Energy Security and Net Zero under Section 37 of the Planning Act 2008 (2008 Act).
- 1.1.2 The Applicant is seeking development consent in respect of the Connah's Quay Low Carbon Power (CQLCP) Project (Proposed Development) on land at, and in the vicinity of, the existing Connah's Quay Power Station, Kelsterton Road, Connah's Quay, within Flintshire, North Wales.
- 1.1.3 The Application has been accepted for examination. The Examination commenced on 13 January 2026.

## 1.2 Purpose and Structure of this Document

- 1.2.1 The purpose of this document is to set out the Applicant's responses to the **Report on Implications for European Sites (RIES) [PD-019]**, which was issued on 5 May 2026. This document contains a table which includes the reference number for each relevant question, the Examining Authority's (ExA) comments and questions and the Applicant's responses to each of those questions.
- 1.2.2 When responding to questions, the Applicant has referenced the version of each document that was current at the time the relevant matter was originally addressed, with updated material cited only where necessary, to clarify or expand upon the Applicant's position, so that the evolution of the evidence base through the Examination is transparent to the ExA. However, where mitigation or controls are discussed that would ultimately be secured through the **Draft DCO (EN010166/APP/3.1)**, the Applicant has referred to the latest version of the relevant securing document, as this is the version to be secured. Accordingly, where issues were addressed in the DCO submission or at Deadlines 1-5, references are provided to those assigned in the examination library (e.g. APP-XXX, REP1-XXX and REP2-XXX). Where a matter is being addressed in a document being submitted at Deadline 6, the document reference is provided (e.g. EN010166/APP/X.X).

**Table 1: Applicant's Responses to Report on the Implications for European Sites Questions**

| Reference | Question to                                 | Source Document Text  | Topic | Applicant's Response  |
|-----------|---|---|-------|---|
| RQ.1      | Natural England                             | RQ.1 Other than the sites listed above, the ExA is not aware of any representations from IPs identifying any additional UK European sites for inclusion in the applicant's RIHRA. NE are requested to advise if they consider that additional sites or qualifying features could be affected by the proposed development. |       | Not addressed to the Applicant.   |
| RQ.2      | The Applicant                               | Please provide a figure showing the location of the projects included in the in-combination assessment.   |       | The Applicant has prepared the requested figure which is now included as Appendix I of the <b>Report to Inform Habitats Regulations Assessment (RIHRA) (EN010166/APP/6.12)</b> .  |
| RQ.3      | The Applicant                               | Confirm if this statement means to say that the air quality impacts from these projects have been included in the in combination assessment of the RIHRA?   |       | <p>NRW identified five cumulative schemes, of which ICT Paper Mill and Padeswood Cement Works have been considered quantitatively within the Application documents.</p> <p>The air quality assessments related to the other emerging schemes identified by NRW have been reviewed and further detail is included in the <b>Additional Operational Air Quality Considerations (EN010166/APP/9.38)</b> which has been referenced and considered within the <b>RIHRA (EN010166/APP/6.12)</b>.</p> <p>Based on the analysis undertaken in the <b>Additional Operational Air Quality Considerations (EN010166/APP/9.38)</b>, no new or different adverse effects on integrity of Habitats sites have been identified beyond those set out within the <b>RIHRA (EN010166/APP/6.12)</b>.</p>       |
| RQ.4      | The Applicant                               | Can the applicant include the Enfinium Parc Aadfer ERF Carbon Capture project in the in-combination assessment or provide a justification as to why it cannot be.   |       | <p>Further consideration of Enfinium Parc Aadfer ERF Carbon Capture project is provided in the <b>Additional Operational Air Quality Considerations (EN010166/APP/9.38)</b>, which has been referenced and considered within the <b>RIHRA (EN010166/APP/6.12)</b>.</p> <p>The dispersion modelling assessment for this scheme was submitted in August 2025 and validated after the finalisation of the Original ES cumulative assessment (<b>Chapter 24: Cumulative and Combined Effects [APP-062]</b>) on 31 March 2025 and was therefore not available to the Applicant at the time the quantitative cumulative effects assessment was undertaken. However, a qualitative assessment is included in the <b>Additional Operational Air Quality Considerations (EN010166/APP/9.38)</b>.</p> |
| RQ.5      | Natural England and Natural Resources Wales | Provide its views on the applicant's explanation [REP4-081] in relation to the study area used for identifying projects for the in-combination assessment.  |       | Not addressed to the Applicant.   |
| RQ.6      | Natural England, Natural Resources          | Respond to the applicant's response to ExQ1.22.7 [REP4-081] as to whether following the applicant's updates, it is now content with the projects included in the in-combination assessment. If not, provide reasoning and clearly set out specific actions that, in your view, the  |       | <p>Not addressed to the Applicant.</p> <p>The Applicant directs the ExA to the Applicant's response to RQ.3 which addresses this matter.</p>  |

| Reference | Question to                                 | Source Document Text  | Topic | Applicant's Response   |
|-----------|---|---|-------|--|
|           | Wales, and FCC                              | applicant should take to resolve outstanding concerns on this matter.   |       |  |
| RQ.7      | The Applicant                               | Liaise directly with NE in relation to the clarity of, and sources included within, the ammonia assessment and provide commentary to the ExA.   |       | <p>The Applicant believes this question is in relation to the Applicant's interpretation of ammonia in relation to impacts on the Dee Estuary Special Area of Conservation (SAC)/Special Protection Area (SPA)/Ramsar and particularly the conclusion of no likely significant effect from ammonia at modelling locations OE2 and traffic transects TE8a to TE8c (paragraphs 7.2.64 and 7.3.33 of the <b>RIHRA (EN010166/APP/6.12)</b>).</p> <p>The Applicant has provided further clarification to Natural England (included as <b>Appendix A</b>) specifically with regard to Natural England's request for clarification regarding impacts in England, including discussion of ammonia at OE2 and transects TE8a to TE8c. This has clarified that all these locations are entirely within Wales and no part of the Dee Estuary SAC/SPA/Ramsar site in England lies within 200 m of roads which are likely to be used for construction traffic. Natural England has informed the Applicant that the updated construction traffic assessment and clarification regarding Welsh and English designated unites has been noted and that, subject to the final HRA documents clearly reflecting these conclusions consistently, this point is capable of resolution. This clarity has been added to the RIHRA at Deadline 6. It is considered that following Natural England's review of the submissions, this matter could be marked as 'Agreed' at Deadline 7 in the SoCG with Natural England (EN010166/APP/8.16).</p> |
| RQ.8      | FCC   | Confirm if, following the applicant's explanation of its methodology for in-combination air quality effects [REP4-081], it is now content with the assessment. If not, provide reasoning and clearly set out specific actions that, in your view, the applicant should take to resolve outstanding concerns on this matter. |       | Not addressed to the Applicant.  |
| RQ.9      | Natural England and Natural Resources Wales | In relation to loss of FLL, are you in agreement with the applicant that as a result of an AEOI being concluded from the project alone, that an in-combination assessment is not required.  |       | <p>Not addressed to the Applicant.</p> <p>The Conservation of Habitats and Species Regulations 2017<sup>1</sup> require consideration of likely significant effects/adverse effects on integrity 'alone or in combination' with other plans and projects as the purpose is to pick up those projects that have dismissed impacts alone, to ensure they consider impacts cumulatively. Since an adverse effect on integrity due to loss of functionally linked land has already been identified 'alone' for the Proposed Development (prior to consideration of mitigation i.e. the Outline Curlew Implementation and Monitoring Plan) there is no legal requirement to consider losses due to 'other plans or projects'. Nonetheless, the <b>RIHRA (EN010166/APP/6.12)</b> has done so for completeness and context.</p>   |
| RQ.10     | Natural Resources Wales and Natural England | The applicant's conclusion of no LSE with respect to the sites above were not disputed by ANCB during the examination. Can NRW and NE confirm it agrees with this conclusion?   |       | Not addressed to the Applicant.  |

<sup>1</sup> Conservation of Habitats and Species Regulations 2017, SI 2017/1012 [online]. Available at: <https://www.legislation.gov.uk/uksi/2017/1012/contents> (Accessed 15/05/2026).

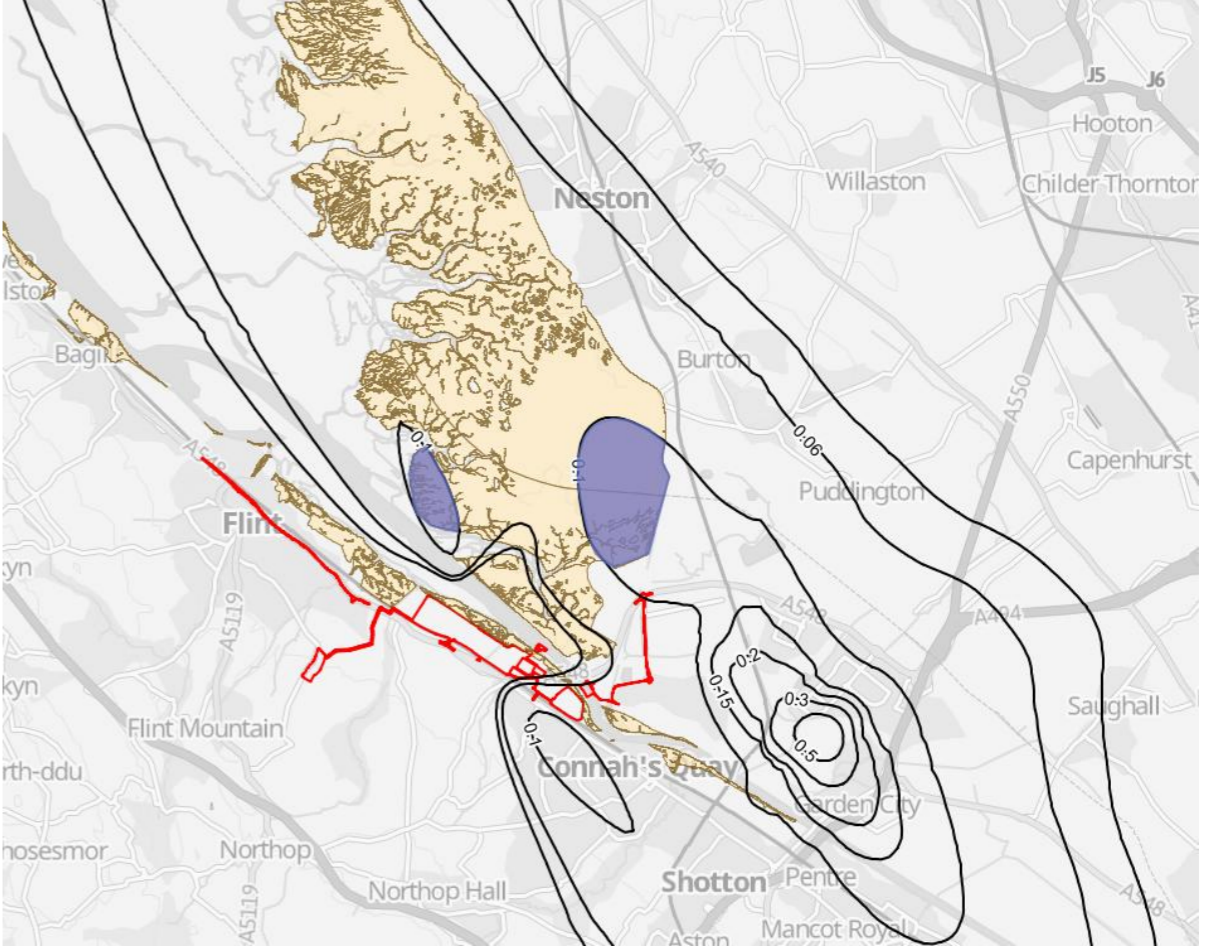
| Reference | Question to   | Source Document Text  | Topic | Applicant's Response  |
|-----------|---------------|---|-------|---|
| RQ.11     | The Applicant | The applicant is requested to clearly set out the indirect effects of the loss of Atlantic salt meadows and atmospheric pollution on the qualifying features of the Dee Estuary SPA and Ramsar site, where effects differ for the qualifying features and criterion this should be clearly set out.   |       | <p><u>Indirect effect of direct loss of Atlantic salt meadow on the SPA and Ramsar site</u></p> <p>Atlantic salt meadows are a habitat used for either roosting or foraging (or both) by most species of non-breeding waterfowl and waders for which the Dee Estuary SPA and Ramsar site are designated (note that the SPA and Ramsar site have the same bird species list). This specifically relates to bar-tailed godwit, pintail, teal, dunlin, knot, oystercatcher, black-tailed godwit, curlew, grey plover, shelduck, and redshank. Therefore, small scale reduction in the quantity of salt meadow habitat reduces the amount of roosting and foraging habitat available for those birds, which could result in a small-scale reduction in the ability of that saltmarsh area to support the same numbers of birds.</p> <p>The breeding tern species of the SPA (common tern, Sandwich tern and little tern) do not use Atlantic salt meadow as a habitat and have not been recorded to be present within the area where habitat loss would occur. The Ramsar site is also designated for natterjack toad, but that species uses sand dunes rather than Atlantic saltmarsh and the colony in the Ramsar site is located 20 km from the Construction and Operation Area. Therefore, there would be no indirect effect on Ramsar natterjack toad.</p> <p><u>Indirect effect of air quality impacts on Atlantic salt meadow on the SPA and Ramsar site</u></p> <p>Since they use the Atlantic salt meadow habitat for resting (roosting) and have relatively broad foraging requirements, wintering SPA and Ramsar waterfowl and waders are not highly sensitive to subtle botanical changes in percentage grass cover, or saltmarsh species richness which would result from increased nitrogen deposition. However, increased nitrogen deposition can also result in changes in habitat structure (e.g. additional growth of grass and other competitive plants) and if sufficiently great this could render the vegetation too tall and dense for some bird species to continue using the affected area to the same degree, without counteracting management in the form of grazing.</p> <p>The indirect effects of atmospheric nitrogen deposition on Ramsar Atlantic salt meadow are the same as that on SAC Atlantic salt meadow as this is the same habitat in the same location. The breeding tern species of the SPA (common tern, Sandwich tern and little tern) do not use Atlantic salt meadow as a habitat and have not been recorded to be present within the area where habitat loss would occur. Ramsar natterjack toad would not be affected because the colony is not within the affected area, being 20 km away. No other Ramsar habitats would be affected because they are either insensitive to nitrogen deposition or not in the affected area.</p> |
| RQ.12     | The Applicant | <p>There are discrepancies between what is provided in appendix G [REP4-054] and what appears to be assessed in the RIHRA. The applicant is requested to provide clarification on the following impact pathways assessed in the HRA:</p> <ul style="list-style-type: none"> <li>Assessment of impacts from noise and vibration on the river lamprey and sea lamprey qualifying features of the</li> </ul> |       | <p>Appendix G of the <b>RIHRA (EN010166/APP/6.12)</b> has been updated for Deadline 6 addressing the identified issues. In summary:</p> <ul style="list-style-type: none"> <li>There would be no noise and vibration impacts on SAC river and sea lamprey during operation (as per paragraph 7.3.3 of the <b>RIHRA (EN010166/APP/6.12)</b> ('<i>There is also no potential for noise and visual disturbance of Dee Estuary SAC fish species during operation of the Proposed Development</i>') because there are no 'in river' activities during</li> </ul>   |

| Reference | Question to                                 | Source Document Text  | Topic | Applicant's Response   |
|-----------|---|---|-------|--|
|           |   | <p>Dee Estuary SAC during operation of the proposed development.</p> <ul style="list-style-type: none"> <li>• Likely significant effects from visual disturbance (lighting) on the bird qualifying features of Dee Estuary SPA and Ramsar site during operation of the proposed development.</li> <li>• Likely significant effects from direct habitat loss on bird qualifying features of Dee Estuary SPA and Ramsar site during construction of the proposed development.</li> <li>• Assessment of impacts from noise and vibration on the otter and fish qualifying features of the River Dee and Bala Lake SAC during all phases of the proposed development.</li> <li>• Assessment of loss of FLL on otter qualifying feature of the River Dee and Bala Lake SAC during all phases of the proposed development.</li> </ul> |       | <p>operation. This is why operational noise and vibration impacts were omitted from Appendix G within the revision submitted at Deadline 4 <b>RIHRA [REP4-054]</b>, but this has now been clarified in Appendix G.</p> <ul style="list-style-type: none"> <li>• Paragraphs 7.3.5 and 7.3.6 of the <b>RIHRA (EN010166/APP/6.12)</b> state that there would be no likely significant effect from visual or noise disturbance on qualifying interest features of the Dee Estuary SPA/Ramsar site, except for lighting impacts which are therefore taken forward to Appropriate Assessment (AA). Appendix G has been updated at Deadline 6 to reflect that lighting impacts are screened in for AA.</li> <li>• Likely significant effects on SPA/Ramsar birds from direct habitat loss of Atlantic salt meadow during construction are discussed in paragraphs 7.2.13 to 7.2.15 of the <b>RIHRA (EN010166/APP/6.12)</b> but were inadvertently omitted from Appendix G within the revision submitted at Deadline 4 <b>RIHRA [REP4-054]</b>. They have now been added to Appendix G at Deadline 6.</li> <li>• Likely significant effects from noise and vibration on River Dee and Bala Lake SAC fish and otter during construction and demolition are covered in paragraphs 7.2.24 to 7.2.28 of the <b>RIHRA (EN010166/APP/6.12)</b>. There would be no noise and vibration impacts on River Dee and Bala Lake SAC otter or fish during operation because there are no 'in river' activities during operation and no evidence of otter within the vicinity of the Proposed Development. This impact pathway was inadvertently omitted from Appendix G within the revision submitted at Deadline 4 <b>RIHRA [REP4-054]</b>. It has been added at Deadline 6.</li> <li>• Likely significant effects from loss of functionally linked habitat on River Dee and Bala Lake SAC otter during construction and demolition are covered in paragraph 7.2.50 of the <b>RIHRA (EN010166/APP/6.12)</b> which confirms no evidence of otter within the vicinity of the Proposed Development and therefore no loss of functionally linked land. There will also be no loss of functionally linked land for SAC otters during operation for the same reason. This impact pathway was inadvertently omitted from Appendix G within the revision submitted at Deadline 4 <b>RIHRA [REP4-054]</b> but has been added at Deadline 6.</li> </ul> |
| RQ.13     | Natural Resources Wales and Natural England | Review annex 1 of this RIES and appendix G of the RIHRA [REP4-054] and confirm its position in relation to each impact pathway on each designated site within the relevant column of annex 1 of this RIES. Where NRW and NE do not agree with the applicant's conclusions or any discrepancies are noted between appendix G and what is assessed in the RIHRA, please clearly set out your concerns and what amendments NRW/ NE would propose or specific information that would still be required.   |       | Not addressed to the Applicant.  |
| RQ.14     | The Applicant                               | Provide a full list of qualifying ornithological features/ criterion of the Dee Estuary SPA and Ramsar site, the numbers present and clearly set out where species occur  |       | At Deadline 5, the Applicant submitted the <b>Further Information on Wetland Bird Count Data Report [REP5-065]</b> . As set out in <b>REP5-065</b> and <b>Appendix 11-D: Ornithology Technical Appendix (EN010166/APP/6.4)</b> the Applicant recorded  |

| Reference | Question to   | Source Document Text   | Topic | Applicant's Response   |
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|           |               | <p>in significant numbers (are above the 1% threshold) and clear, evidenced justification for screening species in or out. Where a clear, evidenced justification cannot be provided, the ExA requests the RIHRA is updated to assess that qualifying feature/ criterion.</p>      |       | <p>large numbers of qualifying ornithological features within the Dee Estuary SPA / Ramsar site, including compartments within the Connah's Quay nature reserve. The impacts to these qualifying bird species occurring within the designated site boundary (regardless of whether they exceeded 1% of the cited population) are assessed in the <b>RIHRA (EN010166/APP/6.12)</b> as part of the assessment of impacts to Dee Estuary SPA / Ramsar site.</p> <p>Where qualifying ornithological features were recorded within the Order limits, but <u>outside</u> of the Dee Estuary SPA/Ramsar site boundary, the 1% threshold was used to determine whether that land was important to those species and should therefore be considered 'functionally linked' to the SPA/Ramsar site. As set out in Table 1 of the <b>Further Information on Wetland Bird Count Data Report [REP5-065]</b>, curlew was the only qualifying ornithological feature to be recorded in the Order limits, but <u>outside</u> of the Dee Estuary SPA/Ramsar site boundary, in numbers exceeding 1% of the cited population. Where a qualifying species is not included in Table 1, it is because it has not been recorded during surveys to be utilising land within the Order limits. This position applies for the following species which are qualifying features of the SPA/Ramsar site:</p> <ul style="list-style-type: none"> <li>• Bar-tailed godwit <i>Limosa lapponica</i>;</li> <li>• Black-tailed godwit <i>Limosa islandica</i>;</li> <li>• Grey plover <i>Pluvialis squatarola</i>;</li> <li>• Knot <i>Calidris canutus</i>;</li> <li>• Pintail <i>Anas acuta</i>; and</li> <li>• Teal <i>Anas crecca</i>.</li> </ul> <p>The Applicant has not been provided with any further data to suggest that any other species regularly uses areas of the Order limits <u>outside</u> the designated sites boundaries. As such curlew is the only qualifying bird species for which the impact pathway of 'loss of functionally linked' is considered.</p> <p>No further updates to the <b>RIHRA (EN010166/APP/6.12)</b> are required.</p> |
| RQ.15     | The Applicant | <p>Liaise directly with NRW and NE regarding its approach to applying the 1% criteria for FLL based on the data provided, which indicates that the area of FLL lost supports a range of other SPA waterbird species in significant numbers, and provide commentary to the ExA.</p> |       | <p>The Applicant confirms that both Natural Resources Wales and Natural England agree with the approach to applying the 1% criteria for identification of functionally linked land. The Applicant prepared the <b>Further Information on Wetland Bird Count Data Report [REP6-065]</b> to provide further evidence that the only qualifying ornithological feature to have been recorded at numbers exceeding &gt;1% of the cited SPA population within the Order limits is curlew. The Applicant also confirms that the first year of project specific data is included as an Annex to <b>Appendix 11-C: Botany Technical Appendix [REP3-016]</b> starting on e-page 270. These data together provide suitable evidence to support the Applicant's position, and no further data is considered necessary to justify this. Furthermore, the Applicant highlights the following discussion with Natural Resources Wales prior to the submission of the DCO Application:</p>   |

| Reference | Question to     | Source Document Text   | Topic | Applicant's Response   |
|-----------|-----------------|--|-------|--|
|           |                 |  |       | <ul style="list-style-type: none"> <li>On 18 June 2024, the Applicant and Natural Resources Wales discussed whether the 2022/2023 Aspect Ecology Surveys (reported in <b>Appendix 11-C: Botany Technical Appendix [REP3-016]</b>) and the 2023/2024 surveys reported in <b>Appendix 11-D: Ornithology Technical Appendix (EN010166/APP/6.4)</b> would be suitable in providing two years' worth of project specific data. No concerns were raised by Natural Resources Wales during this discussion, who noted that the findings are in line with expectations.</li> </ul> <p>Natural Resources Wales have requested existing data from the Applicant, which until they have had the opportunity to review, are unable to agree with the Applicant's conclusion on whether the land at the Main Development Area is functionally linked for any other species features. The data requested includes that collected by the Deeside Naturalists Society (DNS).</p> <p>In response to Natural Resources Wales's position, the Applicant can confirm that the data provided by the DNS has been included within <b>Appendix 11-D: Ornithology Technical Appendix (EN010166/APP/6.4)</b>, however contrary to Natural Resources Wales's understanding there is no data for the Order limits collected by the DNS.</p> <p>As recorded in the <b>Final Statement of Common Ground (SoCG) between the Applicant and Natural England (EN010166/APP/8.16)</b>, Natural England have confirmed they consider that sufficient information has not been provided to justify that other qualifying ornithological features could be present in numbers exceeding &gt;1% of the cited SPA population within the Order limits.</p> |
| RQ.16     | Natural England | Do NE consider the FLL lost to be FLL for redshank, wigeon and teal in addition to curlew? Can NE confirm the qualifying features of the Dee Estuary SPA and Ramsar site it considers should be assessed in relation to loss of FLL. |       | <p>Not addressed to the Applicant.</p> <p>The Applicant directs the ExA to the response provided to RQ.14 above.</p>   |
| RQ.17     | Natural England | Are NE satisfied with the applicant's response to this matter? If not, please provide reasoning and clearly set out specific actions that, in your view, the applicant should take to resolve outstanding concerns on this matter.   |       | <p>Not addressed to the Applicant.</p>   |
| RQ.18     | The Applicant   | The ExA requests a response to FCC's concerns.   |       | <p>The Applicant notes that all matters relating to otter are agreed with Natural Resources Wales, including those relating to the survey methods. The otter surveys (reported in <b>Appendix 11-J; Otter Technical Appendix [REP3-020]</b>) were undertaken in line with best practice surveying methodology. In the initially submitted report <b>Appendix 11-J; Otter Technical Appendix [APP-201]</b> there was a typographical error that suggested this was not the case, but this was amended in the report and re-submitted at Deadline 3 in <b>Appendix 11-J; Otter Technical Appendix [REP3-020]</b>. The otter survey methodology was presented to Natural Resources Wales and Flintshire County Council (FCC) and agreed prior to submission of the DCO Application. As noted in FCC's <b>Comments on any submissions received by Deadline 4 [REP5-067]</b> FCC did not have time to consider this document ahead of Deadline 5 and will provide any further comments</p>  |

| Reference | Question to                                 | Source Document Text   | Topic | Applicant's Response  |
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|           |   |  |       | at Deadline 6. Whilst the Applicant remains engaged with FCC this matter has not been raised by FCC in discussions relating to the SoCG.  |
| RQ.19     | Natural Resources Wales and Natural England | The ExA requests an update on progress on this matter.   |       | Not addressed to the Applicant.   |
| RQ.20     | Natural England                             | Can NE clearly set out specific actions that, in your view, the applicant should take to fully resolve outstanding concerns on this matter.                          |       | Not addressed to the Applicant.<br><br>The Applicant directs the ExA to the response provided to RQ.7 and RQ.21 above.  |
| RQ.21     | The Applicant                               | Can the applicant signpost to, or provide, the relevant construction traffic and dust modelling including a unit-level breakdown of the results.                     |       | The SoCG with Natural England <b>[REP3-051] [REP4-072]</b> stated that the relevant appendices do not appear to include construction traffic or dust modelling and do not distinguish English from Welsh units. As a result, Natural England <b>[REP3-051]</b> noted that it could not assess construction impacts on any English units from the evidence provided and therefore maintained a holding position for English units until unit level mapping and construction deposition results were provided. The Applicant has subsequently provided further clarification to Natural England (included as <b>Appendix A</b> ) including mapping information regarding air quality impacts in England. This has demonstrated that there are no English designated sites, or parts of designated sites, that lie within 200 m of roads which are likely to be used for construction traffic for the Proposed Development. As such there can be no construction traffic exhaust or dust impacts on those sites as they are beyond the zone of influence from roads (which is 200 m from the roadside), which is why no modelling was required or undertaken. This information has also been included within <b>Chapter 11: Terrestrial and Aquatic Ecology (EN010166/APP/6.2.11)</b> and the <b>RIHRA (EN01066/APP/6.12)</b> submitted at Deadline 6. |
| RQ.22     | The Applicant                               | Can the applicant signpost to or provide the relevant information setting out the ammonia baseline values and ammonia process contributions at OE receptors?         |       | Full details on the baseline air quality are provided in <b>Chapter 8: Air Quality (EN010166/APP/6.2.8)</b> and <b>Appendix 8-A: Air Quality Baseline Information</b> but ammonia background concentrations and process contributions at all OE receptors are reported in <b>Appendix 8-D: Air Quality Operational Assessment</b> , in tables 38, 44, 51, 58, D-6, D-11, D-16 and D-21 for various modelling scenarios.   |
| RQ.23     | The Applicant                               | Can the applicant provide information to explain how the reported in-combination Atlantic salt meadow area affected by the proposed development has been determined? |       | The area of salt meadow affected by 'in combination' nitrogen deposition was calculated as the area that lies within the 0.1 kgN/ha/yr contour line on isopleth mapping presented in Appendix E, Figure E1: Nitrogen Deposition within Saltmarsh of the <b>RIHRA (EN010166/APP/6.12)</b> , as the area within this contour exceeds 1% of the minimum critical load for saltmarsh (10 kgN/ha/yr). This zone is identified by the purple areas on the image below which is an adaptation of Figure E1 for clarity and is included in full within <b>Appendix B</b> .  |

| Reference | Question to     | Source Document Text  | Topic | Applicant's Response   |
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|           |                 |   |       |  <p data-bbox="1694 1129 2828 1241">© Crown Copyright 2025. All rights reserved. Ordnance Survey Licence AC0000808122. Contains Natural Resources Wales information<br/>© Natural Resources Wales and database right. All rights reserved</p>  |
| RQ.24     | The Applicant   | Can the applicant explain the range of sources of ammonia emissions that were considered in the in combination assessment?  |       | The baseline ammonia contributions from industrial sources, transport sources and agricultural sources are included in the Air Pollution Information System (APIS) background concentration values. The combined concentrations from baseline contributions and operational scenario contributions have been considered in the in combination assessment.  |
| RQ.25     | Natural England | What further evidence is required for the applicant to justify their conclusion that the critical levels of ammonia and nitrogen would not be exceeded at River Dee and Bala Lake SAC from exhaust emissions during construction? |       | Not addressed to the Applicant.<br><br>The Applicant directs the ExA to the response provided to RQ.7 and RQ.21 above.   |
| RQ.26     | The Applicant   | Can the applicant provide further justification to explain why it considers using higher critical level for the assessment of nitrogen deposition on the Mersey Estuary SPA and Ramsar site during operation to be appropriate.   |       | Critical loads are primarily set to protect botanical criteria of habitats, such as species richness and percentage grass cover. The reasons for lowering the critical load for saltmarsh to 10 kgN/ha/yr are provided in the document 'Review and revision of empirical critical loads of nitrogen for Europe' <sup>2</sup> . In Table 3.1, this document states that the effect of nitrogen deposition on upper-mid saltmarsh is 'increase in dominance of graminoids [grasses]; decline positive indicator species [i.e. certain plant species indicative of good botanical quality saltmarsh]' and the |

<sup>2</sup> [Review and revision of empirical critical loads of nitrogen for Europe](#)

| Reference | Question to                               | Source Document Text   | Topic | Applicant's Response  |
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|           |   |  |       | preceding text suggests this reduction of the critical load arose because an Irish study found a reduction in positive indicator species (i.e. plant species that one would like to find in a good quality saltmarsh) at deposition rates lower than the previous minimum critical load of 20 kgN/ha/yr. The lowest nitrogen critical load for saltmarsh of 10 kgN/ha/yr is therefore driven by botanical criteria and in particular the desire to preserve or maximise the number of positive indicator plant species. However, great crested grebes are large wading birds that forage on fish and aquatic invertebrates, using saltmarsh primarily for roosting (resting), for wading across and foraging in pools and creeks. Non-breeding great crested grebes are therefore not affected by the presence or absence (or abundance) of saltmarsh plant species, but rather by the structure of the habitat in very broad terms. Atlantic salt meadow is unlikely to become unsuitable for great crested grebes unless the habitat became so tall, dense and rank that it no longer provided suitable open habitat for foraging and roosting. Great crested grebes would therefore only be affected by major structural changes to their habitat, and these would not arise until the upper nitrogen critical load of 20 kgN/ha/yr is exceeded. |
| RQ.27     | The Applicant                             | Can the applicant signpost to, or provide, information setting out the relevant screening criteria and data used for assessing acid deposition and ammonia on Mersey Estuary SPA and Ramsar site during operation. |       | The data are provided in a table appended to this document ( <b>Appendix A</b> ) which has also been shared with Natural England on 12 May 2026. For both ammonia and acid deposition the contribution of the Proposed Development (the Process Contribution) to concentrations/deposition rates at the Mersey Estuary during operation is below 0.01 µgm <sup>-3</sup> (for ammonia) and below 0.01 keq/ha/yr (for acid deposition). It is thus too small to be visible in the model. Therefore, no likely significant effect will arise from the Proposed Development alone or in combination with other projects and plans.  |
| RQ.28     | The Applicant and Natural Resources Wales | The ExA requests an update on progress on this matter.   |       | <p>The Applicant and Natural Resources Wales have discussed this matter further and the Applicant has updated the <b>RIHRA (EN010166/APP/6.12)</b> at Deadline 6 to move the water quality assessment to the Appropriate Assessment stage. This does not change the conclusions of the <b>RIHRA (EN010166/APP/6.12)</b> but only where the assessment is located within the report itself.</p> <p>This matter is recorded as not agreed in the <b>Final Statement of Common Ground between Uniper and Natural Resources Wales (EN010166/APP/8.2)</b> as Natural Resources Wales have not had an opportunity to review the updated <b>RIHRA (EN010166/APP/6.12)</b>.</p>   |
| RQ.29     | The Applicant and Natural England         | The ExA requests an update on progress on this matter.   |       | <p>As noted above in response to RQ.28, the Applicant has updated the <b>RIHRA (EN010166/APP/6.12)</b> at Deadline 6 to move the water quality assessment to the Appropriate Assessment stage. This does not change the conclusions of the <b>RIHRA (EN010166/APP/6.12)</b> but only where the assessment is located within the report itself.</p> <p>This matter is recorded as not agreed in the <b>Final Statement of Common Ground between Uniper and Natural England (EN010166/APP/8.16)</b> as Natural England have not had an opportunity to review the updated <b>RIHRA (EN010166/APP/6.12)</b>.</p>  |
| RQ.30     | Natural England                           | Confirm your position on this matter? If this matter is not resolved, provide reasoning and clearly set out specific   |       | Not addressed to the Applicant.   |

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|           |                                | actions that, in your view, the applicant should take to resolve outstanding concerns on this matter.  |       | The Applicant directs the ExA to the response provided to RQ.29 above.   |
| RQ.31     | Natural Resources Wales        | Confirm your position on this matter? If this matter is not resolved, provide reasoning and clearly set out specific actions that, in your view, the applicant should take to resolve outstanding concerns on this matter  |       | Not addressed to the Applicant.<br><br>The Applicant directs the ExA to the response provided to RQ.29 above.  |
| RQ.32     | FCC                            | Confirm whether your concerns relating to INNS are of relevance to the RIHRA and, if so, confirm whether these been addressed through the applicant's response to NRW [REP1-062]. If not, provide reasoning and clearly set out specific actions that, in your view, the applicant should take to resolve outstanding concerns on this matter. |       | Not addressed to the Applicant.<br><br>The Applicant clarifies that if FCC's comments do relate to the <b>RIHRA (EN01066/APP/6.12)</b> these matters are addressed by the existing provisions identified in Section 7.2 in the sub-section on Introduction of Invasive Non-Native Species (INNS).<br><br>The <b>RIHRA (EN01066/APP/6.12)</b> notes there are several legislative instruments relating to INNS. The purpose of this legislation is to prevent and reduce the negative economic and environmental impacts of these species. Taken together, the relevant legislation makes it an offence to plant or otherwise cause to grow (including allowing to spread) listed species in the wild. While it is not illegal to have any of the identified INNS on a property, even when growing on managed land, the spread of Schedule 9 Wildlife and Countryside Act (WCA) species should be kept under control such that the species is not having an appreciable adverse impact on habitats and their native biodiversity. Therefore, appropriate biosecurity measures would be implemented during works carried out during the construction and decommissioning phases of any scheme to prevent the spread of INNS, irrespective of whether there are Habitats sites in the vicinity. |
| RQ.33     | Natural Resources Wales and NE | Confirm the conservation status for all European sites taken to stage 2 of the HRA appropriate assessment.   |       | Not addressed to the Applicant.  |
| RQ.34     | The Applicant                  | <ul style="list-style-type: none"> <li>a) Clarify the location and amount of the outfall pipe likely to be buried and where the above ground locations would be.</li> <li>b) Update the RIHRA to include the results of the GWSR.</li> </ul>   |       | <ul style="list-style-type: none"> <li>a) The location of the outfall pipe would be entirely within the Surface Water Outfall Area as shown in Annex G of <b>Appendix 13-D: Outline Surface Water Drainage Strategy [REP4-038]</b>. The length of pipe that would be buried within the Dee Estuary SAC is approximately 35 m until reaching the proposed headwall. Annex G is provided in full in <b>Appendix C</b>, however, a zoomed in image of the relevant map is provided below with the proposed drainage infrastructure shown in blue and the existing drainage infrastructure shown in black. With the exception of the headwall all infrastructure shown in this image is sub-surface:</li> </ul>  |

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|           |                         |  |       | <p>or higher and as such the majority of the tidal and wave energy is prevented from transmitting past the saltmarsh edge... The SMP policy covering this site is "Hold the Line" and does allow for localised realignment of the coastal defence structure provided that consideration of any potential impacts of the realignment to the estuary and flood risk to railway and infrastructure are assessed."</p> <p>As identified in Natural Resources Wales's <b>Deadline 5 Submission [REP5-069]</b>, they agree that the Shoreline Management Plan allows for managed realignment within the Hold the Line policy.</p> <p>The implications of the Saltmarsh Creation Area to invested stakeholders or signatories are that in the proposed location there is unlikely to be a negative impact to the adjacent saltmarsh. On the contrary the Saltmarsh Creation Area is expected to positively affect the local environment through its integration with the existing saltmarsh and creek system.</p> <p>The risk that the rate of inundation into the Saltmarsh Creation Area would accelerate is believed to be an unlikely occurrence due to the distance of the site from the saltmarsh edge and mouth of the creeks system that would supply tidal water. There is limited risk of accelerated coastal erosion adjacent to Saltmarsh Creation Area as it will be designed and constructed to coexist sympathetically with the adjacent existing saltmarsh. As identified in the <b>Applicant's Response to Deadline 3 Submissions [REP4-081]</b> and the <b>Applicant's Response to Deadline 4 Submissions [REP5-062]</b>, the Applicant is also exploring options which would avoid the realignment of the existing defences but would introduce a controllable inlet (culvert) into the Saltmarsh Creation Area which could be closed in certain events to hold the existing defence alignment. The current working plan, as detailed in the <b>Outline Saltmarsh Implementation and Monitoring Plan (EN010166/APP/6.16)</b> is not to remove an entire section of the existing embankment, but to insert a culvert structure through the embankment, preserving the "hold the line" policy, and allowing the natural inundation between the Saltmarsh Creation Area and adjacent saltmarsh system to occur synergistically and therefore allow the sharing of resources and ecology.</p> |
| RQ.39     | Natural Resources Wales | The ExA requests an update on progress on this matter.   |       | <p>Not addressed to the Applicant.</p> <p>The Applicant refers the ExA to the response provided to RQ.50 below.</p>   |
| RQ.40     | Natural England         | Can NE confirm if it is requesting 2 years of ornithological surveys for the whole of the proposed development site or certain areas of concern? |       | <p>Not addressed to the Applicant.</p>  |
| RQ.41     | The Applicant           | Liaise directly with NRW and NE in relation to the scope and extent of ornithological surveys and provide commentary to the ExA.                 |       | <p>At Deadline 5 the Applicant submitted the technical note <b>Further Information on Wetland Bird Count Data Report [REP5-065]</b> which provided further clarity on the scope and extent of ornithological surveys undertaken. <b>Appendix 11-D: Ornithology Technical Appendix (EN010166/APP/6.4)</b> also provides a summary of the most recent data collected by the DNS for the Connah's Quay Nature Reserve compartments 1 and 2 (which are adjacent to the Order limits). The</p>   |

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|           |                 |   |       | <p>Applicant has also confirmed that ornithological surveys reports of the Order limits are also included within an Annex to <b>Appendix 11-C: Botanical Surveys (EN010166/APP/6.4)</b> as they are included within the Preliminary Ecological Appraisal Report. The reports therefore demonstrate that 2 years of survey data is provided for land within the Order limits which is considered suitable to demonstrate that the only qualifying ornithological feature to have been recorded at numbers exceeding &gt;1% of the cited SPA population within the Order limits is curlew. Furthermore, the Applicant highlights the following discussion with Natural Resources Wales prior to the submission of the DCO Application:</p> <ul style="list-style-type: none"> <li>On 18 June 2024, the Applicant and Natural Resources Wales discussed whether the 2022/2023 Aspect Ecology Surveys (reported in <b>Appendix 11-C: Botany Technical Appendix [REP3-016]</b>) and the 2023/2024 surveys reported in <b>Appendix 11-D: Ornithology Technical Appendix (EN010166/APP/6.4)</b> would be suitable in providing two years' worth of project specific data. No concerns were raised by Natural Resources Wales during this discussion, who noted that the findings are in line with expectations.</li> </ul> <p>Natural Resources Wales have requested existing data from the Applicant, which until they have had the opportunity to review, are unable to agree with the Applicant's conclusion on whether the land at the Main Development Area is functionally linked for any other species features. The requested data includes that collected by the DNS.</p> <p>As recorded in the <b>Final SoCG between the Applicant and Natural England (EN010166/APP/8.16)</b>, Natural England have confirmed they do not agree that two years of comparable project specific data covering areas within the Order limits has been provided.</p> <p>In response to Natural Resources Wales's position, the Applicant can confirm that the data provided by the DNS has been included within <b>Appendix 11-D: Ornithology Technical Appendix (EN010166/APP/6.4)</b>, however contrary to Natural Resources Wales's understanding there is no data for the Order limits collected by the DNS.</p> <p>Further to this question, please see RQ.15 for the Applicant's response regarding the ornithological data used within the assessment.</p> |
| RQ.42     | Natural England | Are NE satisfied with the applicant's response on this matter [REP1-062]? If not, please provide reasoning and clearly set out specific actions that, in your view, the applicant should take to resolve outstanding concerns on this matter. |       | <p>Not addressed to the Applicant.</p> <p>The Applicant discussed this matter with Natural England ahead of Deadline 6 and has provided further baseline information for the Gronant Fields site. This information has been included in the <b>Outline Curlew Implementation and Monitoring Plan (EN010166/APP/6.13)</b> submitted at Deadline 6.</p>   |
| RQ.43     | Natural England | Can NE confirm if this matter is resolved? If not, provide reasoning and clearly set out specific actions that, in your   |       | <p>Not addressed to the Applicant.</p>  |

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|           |   | view, the applicant should take to resolve outstanding concerns on this matter.   |       | The Applicant refers the ExA to the Applicant's response provided to RQ.42.  |
| RQ.44     | Natural Resources Wales and Natural England | Do NRW or NE have any additional comments in relation to the Hilde Orleans case law?  |       | Not addressed to the Applicant.  |
| RQ.45     | Natural Resources Wales                     | Are NRW's concerns resolved by the updated CMS [REP4-056]? If not, provide reasoning and clearly set out specific actions that, in your view, the applicant should take to resolve outstanding concerns on this matter.   |       | Not addressed to the Applicant.  |
| RQ.46     | The Applicant                               | The ExA requests an update on progress on this matter.  |       | <p>The Applicant has made a number of updates to the <b>Outline Curlew Implementation and Monitoring Plan (EN010166/APP/6.13)</b> which address comments from Natural Resources Wales and the Royal Society for the Protection of Birds (RSPB). These changes include:</p> <ul style="list-style-type: none"> <li>• Introducing flexibility on the Phase 3 enhancement measures to note these could include the provision of several larger shallow flashes instead of a network of footdrains;</li> <li>• Recognition of provision of cattle grazing where it is viable;</li> <li>• Extending the monitoring to cover each month of the year (rather than August to April inclusive);</li> <li>• Clarification on the definition of 'in perpetuity';</li> <li>• A summary of data collected between October 2015 and October 2017 and March 2022 to December 2025; and</li> <li>• Clarification that the last cut would be undertaken no later than October in any given year (if a cut is deemed necessary).</li> </ul>  |
| RQ.47     | The Applicant                               | <p>The ExA requests clarification on the following matters:</p> <ol style="list-style-type: none"> <li>When will the completed survey results at Gronant Fields be submitted to the ExA? The ExA requests that the survey results are supplied to NRW, NE, RSPB and any other IP who would like sight of them ahead of submission into the examination to expedite the ExA getting views from those parties.</li> <li>An explanation on why Gronant Fields is not included in the red line boundary.</li> <li>What the nature of the proposed works at Gronant Fields are and if these constitute development. If the works do constitute development, would they require a HRA?</li> <li>Would the works at Gronant Fields impact the Dee Estuary SAC, SPA or Ramsar site, how will this be considered?</li> </ol> |       | <p>a) The ongoing bird surveys at Gronant Fields are part of the Applicant's continued monitoring of the site in order to establish usage by Curlew as the phased management and enhancement is implemented and to inform discussions going forward as part of the Curlew Steering Group. They are not to establish a baseline against which to determine whether the Gronant Fields site will provide suitable offsetting habitat. The Applicant has provided this evidence in the <b>Outline Curlew Implementation and Monitoring Plan (EN010166/APP/6.13)</b> through the inclusion of WeBS data and surveys undertaken by the Applicant prior to submission of the application. The results of ongoing bird surveys to date for Gronant Fields have been provided in the <b>Outline Curlew Implementation and Monitoring Plan (EN010166/APP/6.13)</b> as a record of the ongoing usage of the Gronant Fields site. It is envisaged that data will continue to be shared with Natural Resources Wales, Natural England and the RSPB by email following completion of each survey, until such time that another reporting format is agreed with the Curlew Steering Group. The latest survey results (up to end of April 2026), inclusive of all species recorded, have been submitted at Deadline 6. The requested distribution list is noted by the Applicant and it can confirm it has discussed this information with the relevant parties during meetings ahead of Deadline 6. The Applicant has also included additional historic data of bird occurrence at Gronant Fields that was provided by</p> |

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|           |             | <p>e) - Can the applicant explain if there are any conflicts in the measures provided for curlew and measures set out in the NBB strategy. Where conflicts exist the ExA requests an explanation of the measures taken to address these and where these are secured in the relevant action plans and the dDCO.</p> |       | <p>Natural Resources Wales in advance of Deadline 6. The Applicant would highlight that results from the remaining bird surveys (due to be completed in September 2026) will not alter the provisions already set out in the <b>Outline Curlew Implementation and Monitoring Plan (EN010166/APP/6.13)</b>.</p> <p>b) As explained in the <b>Applicant's Response to ExQ1 [REP3-059]</b>, the Applicant does not consider it to be necessary for the off-site mitigation land at Gronant Fields to be within the Order limits. This is because (i) no third-party land rights are required (the Applicant has already acquired the freehold to Gronant Fields) and (ii) pending detailed design, it is not yet certain that any activities at Gronant Fields would constitute development requiring planning permission. If such consent is required, it would be secured separately by the Applicant through the appropriate consenting route.</p> <p>c) The habitats at Gronant Fields will be sensitively restored, managed and enhanced for curlew and, by extension, other SPA/ Ramsar qualifying features with similar non-breeding habitat requirements, in line with the conservation objectives of the Dee Estuary SPA/Ramsar site/Site of Special Scientific Interest (SSSI). The Applicant will work closely with the Curlew Steering Group to improve Gronant Fields for non-breeding curlew in-line with the <b>Outline Curlew Implementation and Monitoring Plan (EN010166/APP/6.13)</b>. Moreover, under Requirement 18 of the Draft DCO, the Applicant will prepare a detailed Landscape and Ecology Management Plan (LEMP) for the whole of Gronant Fields which will detail habitat creation and management activities required to deliver Net Benefit for Biodiversity (NBB) as well as a Curlew Implementation and Monitoring Plan. The Applicant has prepared Appendix A of the <b>Outline Curlew Implementation and Monitoring Plan (EN010166/APP/6.13)</b> to demonstrate that the consideration of the measures included in the plan would not change the conclusions of the <b>RIHRA (En010166/APP/6.12)</b> or <b>Environmental Statement (EN010166)</b>.</p> <p>d) The proposed restoration, management and enhancement works at Gronant Fields would be undertaken sensitively, as per the <b>Outline Curlew Implementation and Monitoring Plan (EN010166/APP/6.13)</b> and to be further detailed in the forthcoming LEMP and Curlew Implementation and Monitoring Plan. Moreover, the works will be undertaken in collaboration with the Curlew Steering Group. Gronant Fields is not within the Dee Estuary SAC and the proposed management and enhancement of the site will not impact the SAC. Appendix A of the <b>Outline Curlew Implementation and Monitoring Plan (EN010166/APP/6.13)</b> considers the potential impacts on the Dee Estuary SAC, SPA or Ramsar site and concludes there would be no adverse effects on integrity of any Habitat sites.</p> <p>e) There are no such conflicts between the <b>Outline Curlew Implementation and Monitoring Plan (EN010166/APP/6.13)</b> and the LEMP. The LEMP for Gronant Fields will detail habitat creation and management activities required to deliver NBB. Whilst this detailed LEMP does not need to include the measures which will be separately outlined in the forthcoming Curlew Implementation and Monitoring Plan, prepared pursuant to Requirement 11 and Schedule 16 of the Draft DCO, it also</p> |

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|           |   |   |       | cannot include anything that would conflict with these measures. Therefore, whilst there would not be one combined plan for curlew and NBB mitigation across the whole of Gronant Fields, there will still be sufficient continuity of approach between the Curlew Implementation and Monitoring Plan and the LEMP for Gronant Fields to ensure that no conflicts occur. Indeed, the measures outlined within the <b>Outline Curlew Implementation and Monitoring Plan (EN010166/APP/6.13)</b> are considered within the <b>Green Infrastructure Statement (EN010166/APP/6.11)</b> to ensure that the approaches for providing NBB are aligned. Noting the site's location within the Dee Estuary SPA/Ramsar site/SSSI, the Applicant will engage Natural Resources Wales during the preparation of both the Curlew Implementation and Monitoring Plan and the LEMP for Gronant Fields. |
| RQ.48     | Natural England and Natural Resources Wales | Are you satisfied that acid deposition from increased exhaust emissions during construction of the proposed development would not result in AEoI on the Dee Estuary SAC, SPA and Ramsar site?   |       | The Applicant provided Natural England with updated information regarding atmospheric pollution at the Dee Estuary SAC, Ramsar site and SPA. This information has now been included within <b>Chapter 11: Terrestrial and Aquatic Ecology (EN010166/APP/6.2.11)</b> and the <b>RIHRA (EN010166/APP/6.12)</b> at Deadline 6. However, as NE have not been able to review the updated documentation prior to Deadline 6, this matter is marked as 'Not Agreed'. It is considered that following further review this matter could be marked as 'Agreed' at Deadline 7.   |
| RQ.49     | The Applicant                               | Can the applicant set out whether the changes to predicted nitrogen deposition process contribution from the proposed development alone and in-combination with other projects, as a result of the changes to stack height and HRSG FEED 1 volume flow, would alter the area of Atlantic salt meadow predicted to be affected by nitrogen deposition during operation. If the area of Atlantic salt meadow affected is not predicted to change, please explain why? |       | The <b>Change Application Report (EN010166/APP/9.1)</b> , specifically <b>Appendix 8-D: Operational Air Quality Assessment [CR1-089]</b> , indicates that the area subject to predicted nitrogen deposition rates above 0.1 kgN/ha/yr (1%) of the critical load is likely to decrease to a small extent, compared to the original assessment within <b>Chapter 8: Air Quality [APP-046]</b> and <b>Appendix 8-D: Operational Air Quality Assessment [APP-183]</b> submitted with the DCO Application. This is as a result of changes to stack height and HRSG FEED 1 volumetric flow. Therefore, the size of the affected area reported in the <b>RIHRA (EN010166/APP/6.12)</b> is precautionary.   |
| RQ.50     | The Applicant                               | Can the applicant explain why it considers the continued management of the Connah's Quay conservation areas following decommissioning of the old power station to be new mitigation for the impacts on the Dee Estuary SAC, SPA and Ramsar site from atmospheric pollution during operation of the proposed development?  |       | The Applicant has not considered the continued management of the Connah's Quay conservation areas following decommissioning of the existing Connah's Quay Power Station as mitigation within the <b>RIHRA (EN010166/APP/6.12)</b> . This is clarified in the submission made at Deadline 6.   |
| RQ.51     | Natural Resources Wales and The Applicant   | Can NRW and the applicant provide an update on the discussions with NRW regarding further habitat improvements to contribute to additional mitigation? and can the applicant explain how these measures would be secured?   |       | The Applicant and Natural Resources Wales have been in discussion on this matter. The Applicant has included a financial contribution to Flintshire County Council (FCC) within the <b>Deed of Development Consent Obligation (EN010166/APP/9.25)</b> for management of saltmarsh throughout the operational life of the Proposed Development. The value of this contribution has been informed by ongoing discussions with Natural Resources Wales (NRW).  |
| RQ.52     | Natural Resources Wales                     | Can NRW provide details of the additional mitigation measures it is seeking?  |       | Not addressed to the Applicant  |
| RQ.53     | The Applicant                               | Can the applicant provide an update on the discussions with NRW regarding the monitoring project raised in [REP1-062] and how the results of the monitoring would   |       | Following initial discussions with Natural Resources Wales, there has been limited further discussion on the monitoring project raised in the <b>Applicant's Response to Relevant Representations [REP1-062]</b> . Instead, Natural Resources Wales   |

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|           |                         | inform the management of the Atlantic salt meadow realignment?  |       | suggested the Applicant consider providing a financial contribution to FCC, which is now included in the <b>Deed of Development Consent Obligation (EN010166/APP/9.25)</b> .  |
| RQ.54     | FCC                     | Are FCC in a position to provide an in principal letter of support for securing the relevant nitrogen deposition mitigation through a section 106 agreement? If not, please explain what further information FCC require?   |       | Not addressed to the Applicant.   |
| RQ.55     | Natural Resources Wales | Taking into account updates to the RIHRA [REP4-054] as a result of the changes made to the emission source parameters, are NRW satisfied that the measures proposed to mitigate nitrogen deposition effects on the Deeside and Buckley Newt Sites SAC are adequate? If not, please explain what further information is required.  |       | Not addressed to the Applicant.<br><br>The Applicant believes this matter is agreed. The Applicant has provided feedback on the commentary provided by Natural Resources Wales on the draft management prescriptions that are included in the draft <b>Deed of Development Consent Obligations (EN010166/APP/9.25)</b> . The Applicant and Natural Resources Wales have exchanged a number of emails on this matter, which is also recorded as agreed in the <b>Final Statement of Common Ground between Uniper UK Limited and Natural Resources Wales (EN010166/APP/8.2)</b> submitted at Deadline 6. Please see ID 3.7.   |
| RQ.56     | Natural Resources Wales | Are NRW satisfied with the applicant's approach and conclusions in regard to the assessment of noise disturbance to the qualifying features of the Dee Estuary SPA and Ramsar site during construction of the proposed development? If not, please provide reasoning and clearly set out specific actions that, in your view, the applicant should take to resolve outstanding concerns on this matter. |       | Not addressed to the Applicant.<br><br>The Applicant believes this matter is agreed as noted in the <b>Final Statement of Common Ground between Uniper UK Limited and Natural Resources Wales (EN010166/APP/8.2)</b> submitted at Deadline 6. Please see ID 3.13.   |
| RQ.57     | The Applicant           | Can the applicant clarify the meaning of "meaningful difference" and explain why, with reference to estimated barge movements during construction, the intensification of barge movements would not lead to AEol of the Dee Estuary SPA and Ramsar site?  |       | For the purposes of the assessment within the <b>RIHRA (EN010166/APP/6.12)</b> , a 'meaningful difference' in barge/vessel activity is a material increase over baseline vessel movements that is capable, by reason of its frequency, duration, timing, routing or proximity to qualifying bird supporting habitat, of causing additional disturbance to the qualifying features of the Dee Estuary SPA and Ramsar site. In this context, the relevant disturbance pathway is not limited to AIL-related barge movements, but includes the vessel activity and associated construction presence required for works within the Water Connection Corridor such as support boats and barges where required. Having regard to the temporary and intermittent nature of all AIL deliveries at the existing Connah's Quay North jetty, the existing navigational baseline within the estuary and the seasonal restriction of the works within the Water Connection Corridor, the report concludes that the forecast increase in barge traffic would not constitute a material additional disturbance pressure and would not result in an adverse effect on Integrity (AEol). |
| RQ.58     | Natural Resources Wales | Are NRW content with the applicant's conclusions regarding the assessment of noise and visual disturbance from increased barge movements during construction on the qualifying features of the Dee Estuary SPA and Ramsar site? If not, please provide reasoning and clearly  |       | Not addressed to the Applicant.<br><br>The Applicant believes this matter is agreed as noted in the <b>Final Statement of Common Ground between Uniper UK Limited and Natural Resources Wales (EN010166/APP/8.2)</b> submitted at Deadline 6. Please see ID 3.13.   |

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|           |                         | set out specific actions that, in your view, the applicant should take to resolve outstanding concerns on this matter.  |       |   |
| RQ.59     | Natural Resources Wales | Are NRW satisfied with the applicant's approach and conclusions in regard to the assessment of lighting on the qualifying features of the Dee Estuary SPA and Ramsar site during operation of the proposed development? If not, please provide reasoning and clearly set out specific actions that, in your view, the applicant should take to resolve outstanding concerns on this matter.   |       | Not addressed to the Applicant.<br><br>The Applicant believes this matter is agreed as noted in the <b>Final Statement of Common Ground between Uniper UK Limited and Natural Resources Wales (EN010166/APP/8.2)</b> submitted at Deadline 6. Please see ID 3.14.   |
| RQ.60     | DNS and RSPB            | Are you content that your concerns regarding the noise and visual disturbance assessment have been addressed by the applicant? If not, please provide reasoning and clearly set out specific actions that, in your view, the applicant should take to resolve outstanding concerns on this matter.  |       | Not addressed to the Applicant.   |
| RQ.61     |                         | <p>The ExA requests a revised without prejudice derogations case and updated dDCO for the compensatory measures is submitted, details of which are set out in the questions below (<b>RQ.61, RQ.62 &amp; RQ.63</b>).</p> <p>The ExA requests that two separate and independent outline Implementation and Monitoring Plan (IMP) documents are submitted for Atlantic salt meadow and curlew. The ExA notes that there is a section on Saltmarsh Implementation and Monitoring Plan (SIMP) within the SCS but requests this is set out as a separate document with further information. The ExA also notes that a CMMP is currently proposed and requests this is set out as a separate outline Curlew Implementation and Monitoring Plan (CIMP) with further information.</p> |       | <p>The Applicant has submitted updated revisions of the <b>Notice of a proposed without prejudice HRA derogation in Wales (EN010166/APP/9.2)</b> and <b>Draft DCO (EN010166/APP/3.1)</b> at Deadline 6 as requested.</p> <p>To avoid confusion the Applicant has renamed the Curlew Mitigation Strategy to the <b>Outline Curlew Implementation and Monitoring Plan (EN010166/APP/6.13)</b>, and the Saltmarsh Creation Strategy to the <b>Outline Saltmarsh Implementation and Monitoring Plan (EN010166/APP/6.16)</b>, as these form outline versions of the full Implementation and Monitoring Plans to be prepared in the future.</p> <p>The full Curlew Implementation and Monitoring Plan and Saltmarsh Implementation and Monitoring Plan can only be produced following consent as they require further studies to be undertaken before a design can be produced, and that design will then inform the expansion of details currently in the outline plans. The Applicant notes that Natural Resources Wales have stated in their Deadline 5 submission [<b>REP5-069</b>] that they are 'broadly satisfied with the approach in principle'.</p> |
| RQ.62     |                         | <p>The ExA requests that the SIMP and CIMP are both updated with the information from the SCS [REP3-026] and CMS [REP4-056] for Atlantic salt meadow and curlew respectively, but should both include the following further information:</p> <ul style="list-style-type: none"> <li>a) Detail on how the proposed compensatory measures would provide optimal conditions</li> <li>b) Details on why the sites are ecologically suitable for the proposed compensation</li> <li>c) Implementation timetables and programmes</li> <li>d) Details as to any consents, licences, and approvals needed for implementation</li> <li>e) Ongoing management and maintenance of the compensation measures and sites</li> </ul>   |       | <p>The Applicant has updated the <b>Outline Curlew Implementation and Monitoring Plan (EN010166/APP/6.13)</b> and the <b>Outline Saltmarsh Implementation and Monitoring Plan (EN010166/APP/6.16)</b> to include the details requested within RQ.62 where possible. A number of the matters requested in RQ.62 are not able to be determined at this stage due to the need to complete further surveys to inform design as well as a need to agree the final measures with the relevant steering group which could influence implementation timetables. In the absence of detailed information, indicative details have been included.</p>  |

| Reference | Question to | Source Document Text   | Topic | Applicant's Response   |
|-----------|-------------|--|-------|--|
|           |             | <p>f) Details of access and biosecurity of the compensation sites</p> <p>g) Further detail on the methodology for baseline and post implementation monitoring of the compensatory measures. For example, for curlew this should include details of regular monitoring of curlew populations and their productivity</p> <p>h) Details of the success criteria, including thresholds for determining compensation success and the trigger thresholds for adaptive management measures</p> <p>i) Details of the annual reporting process to the Secretary of State and environmental data sharing.</p>  |       |  |
| RQ.63     |             | <p>The ExA requests submission of an updated dDCO [REP4-004] with the following amendments:</p> <p>a) A compensation schedule within the dDCO with part 1 on Atlantic salt meadow and part 2 on curlew.</p> <p>b) Both parts of the compensation schedule (for Atlantic salt meadow and curlew respectively) must include more detail than what has currently been provided [REP4-004], including, but not limited to:</p> <p>i. A requirement for a compensation steering group to be formed, and for a plan of works for the group to be submitted to and approved by the Secretary of State</p> <p>ii. The key sections and details required within the final IMPs</p> <p>iii. Data-sharing including how monitoring and reporting data will be made publicly available and submitted to the relevant Local Environmental Records Centre(s)</p> <p>iv. The process by which the final IMPs will be approved</p> <p>v. The reporting process to the Secretary of State and adaptive management process.</p> <p>c) Requirements within the compensation schedule of the revised dDCO should provide that the Secretary of State (as the competent authority), in consultation with the relevant ANCB, is responsible for approving the final IMPs and monitoring reports.</p> |       | <p>The Applicant has made the requested amendments within RQ.63 in the Deadline 6 version of the <b>Draft DCO (EN010166/APP/3.1)</b> to add a new Schedule 16 covering the protection of the coherence of the national site network in respect of functionally linked land and saltmarsh measures.</p> |

# Abbreviations

| Abbreviation | Term   |
|--------------|--|
| AA           | Appropriate Assessment                           |
| AEoI         | Adverse Effect On Integrity                      |
| APIS         | Air Pollution Information System                 |
| CQLCP        | Connah's Quay Low Carbon Power                   |
| DCO          | Development Consent Order                        |
| DNS          | Deeside Naturalists Society                      |
| ExA          | Examining Authority                              |
| FCC          | Flintshire County Council                        |
| FLL          | Functionally Linked Land                         |
| HCS          | Habitat Creation Strategy                        |
| HRA          | Habitats Regulations Assessment                  |
| INNS         | Invasive Non-Native Species                      |
| LEMP         | Landscape and Ecology Management Plan            |
| LSE          | Likely Significant Effects                       |
| NBB          | Net Benefit for Biodiversity                     |
| NE           | Natural England                                  |
| NRW          | Natural Resources Wales                          |
| RIES         | Report on Implications for European Sites        |
| RIHRA        | Report to Inform Habitats Regulations Assessment |
| RSPB         | Royal Society for the Protection of Birds        |
| SAC          | Special Area of Conservation                     |
| SoCG         | Statement of Common Ground                       |
| SoS          | Secretary of State                               |
| SPA          | Special Protection Area                          |
| SSSI         | Site of Special Scientific Interest              |
| WCA          | Wildlife and Countryside Act                     |
|              |  |

# Appendix A: Response to Natural England



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# Connah's Quay Low Carbon Power Response to NE on Air Quality Matters

Revision 00

May 2026

Prepared for:  
Uniper UK Limited

Prepared by:  
AECOM Limited

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# 1. Introduction

1.1.1 This note has been prepared to address the outstanding matters raised by Natural England at Deadline 5 relating to the Air Quality Assessment (**Appendix 8-D: Air Quality Operational Assessment [CR1-089]**) for the Connah's Quay Low Carbon Power Project (the 'Proposed Development').

1.1.2 This note comprises the following Sections:

- Section 2: Provides an explanation of the site context and construction traffic routes in the context of designated sites within England.
- Section 3: Provides responses in relation to queries on the assessment of construction traffic emissions.
- Section 4: Provides responses in relation to queries on the assessment of operational emissions.

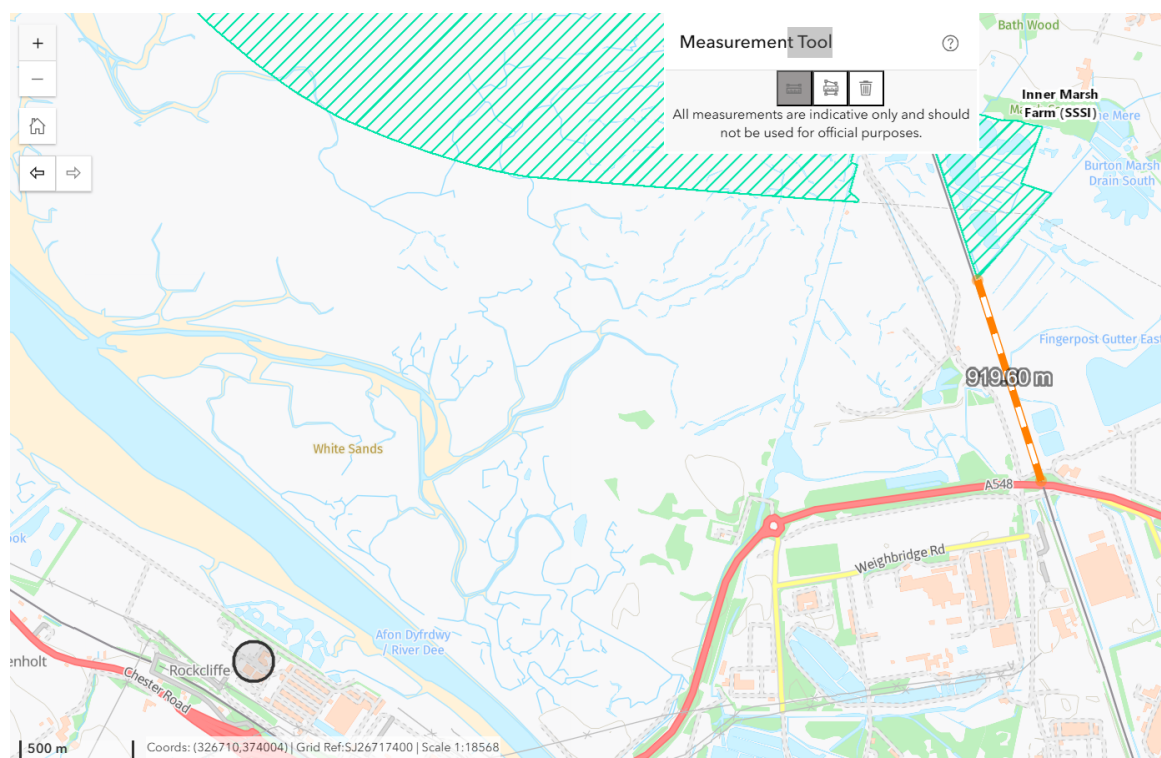
## 2. Explanation of Assessment and Site Context

### 2.1 Overview

2.1.1 There are no English Sites of Special Scientific Interest (SSSIs) within 20km of the Proposed Development that also lie within 200m of roads which are likely to be used for construction traffic.

### 2.2 Dee Estuary SSSI and Inner Marsh Farm SSSI

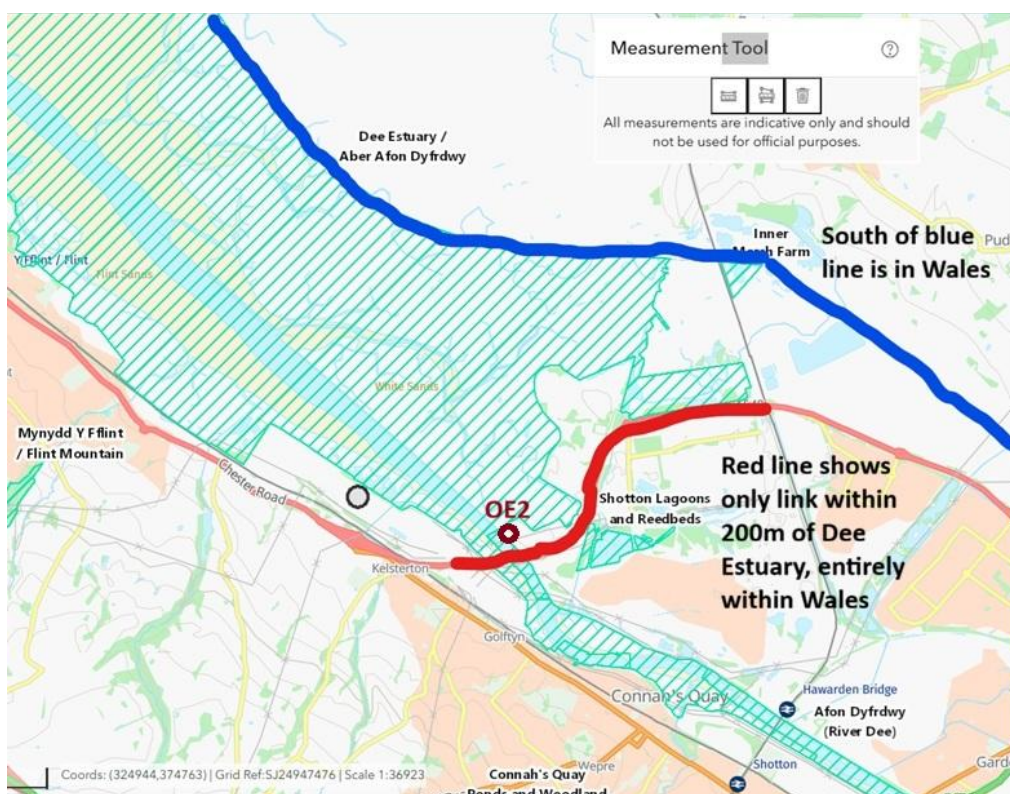
2.2.1 Dee Estuary SSSI and Inner Marsh Farm SSSI are the nearest English SSSIs, and the only English SSSIs within 10km of the Proposed Development. On the English side of the border these are both well over 200m from the nearest through-route from the M56 (the main route for construction traffic) to the Proposed Development. Inner Marsh Farm SSSI is almost 1km from the A548 as shown below in **Figure 1** and Dee Estuary SSSI is even more distant.



**Figure 1: Proximity of Inner Marsh Farm SSSI from the A548 (Source [Magic.defra.gov.uk](http://Magic.defra.gov.uk))**

## 2.3 Dee Estuary SSSI/SPA/SAC/Ramsar

- 2.3.1 The only place where Dee Estuary SSSI/Special Protection Area (SPA)/Special Area of Conservation (SAC)/Ramsar site lies within 200m of a road to be used by construction traffic is located entirely in Wales, where the A548 Weighbridge Road crosses the River Dee (Flintshire Bridge) as shown in **Figure 2**. This has been modelled as transects TE8a to TE8c and reported in the **Report to Inform Habitats Regulations Assessment (RIHRA) [REP5-030]** (paragraphs 10.2.25 to 10.2.26). This is also the location for operational modelling location OE02 and its associated 1km grid square, again entirely within Wales. The only notable source of ammonia within the grid square used for background ammonia is the A548. It would be reasonable to assume background concentrations of ammonia are homogenous across the remainder of the square.
- 2.3.2 Natural Resources Wales (NRW) have not raised any issues with the assessment. Since this applies entirely to a part of the designated site in Wales, the Applicant assumes Natural England are content to defer to NRW as suggested in their comments raised at Deadline 5. If so, this would therefore resolve Natural England's points 3.4, 3.7, 3.10 and 3.11 raised at Deadline 5 as these all relate to receptor OE02 and transects TE8a to TE8c, located entirely in Wales.



**Figure 2: Proximity of A548 to the Dee Estuary SSSI/SPA/Ramsar (Source Magic.defra.gov.uk)**

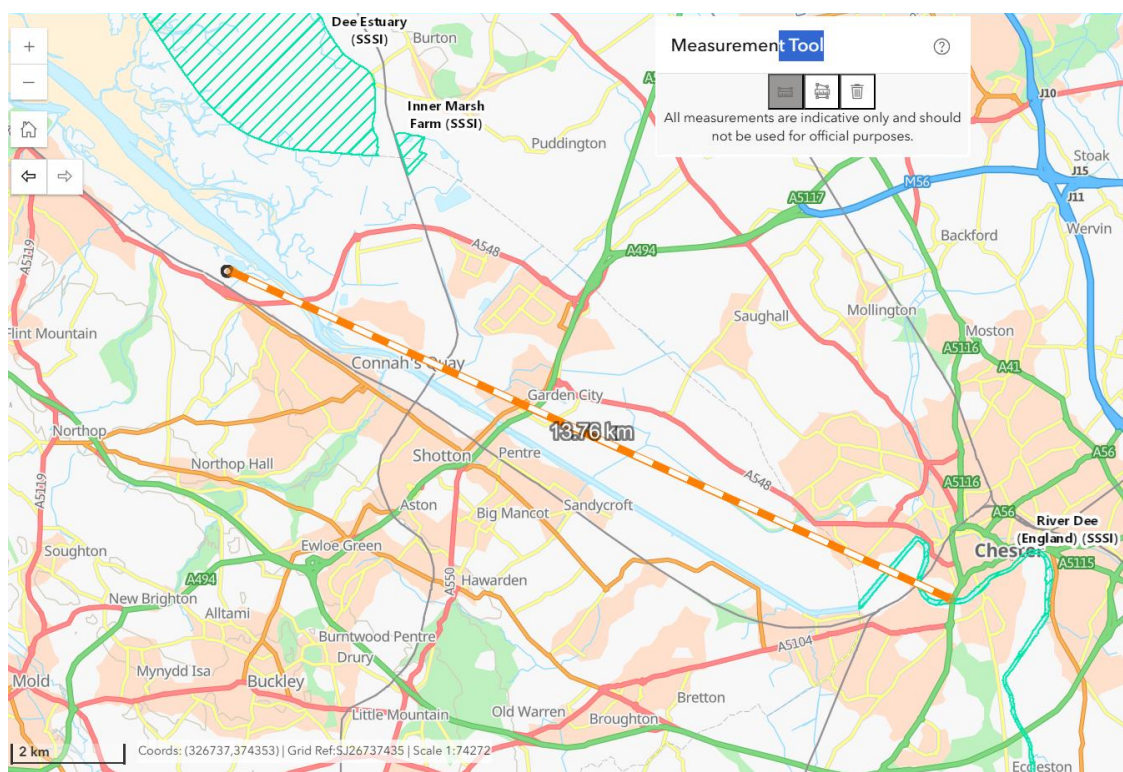
## 2.4 River Dee SSSI

- 2.4.1 The River Dee SSSI in England is approximately 12km east of the Proposed Development at its closest point, and nearly 14km east of the Proposed Development where it lies within 200m of a through-road (the A483 at Chester) as shown in **Figure 3**. Traffic to the Proposed Development from the north will travel down the M56 and A494. Traffic from the south will either travel up the M6, then down the M56 and A494, or will travel through Wrexham in Wales.
- 2.4.2 Construction traffic is unlikely to travel through Chester, unless originating locally. Even then the qualifying interest features of the River Dee (England) SSSI are listed below and are not identified on APIS as being sensitive to air quality.

**River Dee (England) SSSI - Monitoring features and Features from overlapping sites**

| Feature   | Overlapping site         | Site Designation |
|---|--------------------------|------------------|
| Atlantic salmon, <i>Salmo salar</i>   | River Dee (England) SSSI | SSSI             |
| IA - Fluvial Geomorphology  | River Dee (England) SSSI | SSSI             |
| IS - Fluvial Geomorphology  | River Dee (England) SSSI | SSSI             |
| Nationally rare and scarce dragonfly species - <i>Gomphus vulgatissimus</i> , Club-tailed Dragonfly | River Dee (England) SSSI | SSSI             |
| Otter, <i>Lutra lutra</i>   | River Dee (England) SSSI | SSSI             |
| River supporting habitat  | River Dee (England) SSSI | SSSI             |
| Rivers and Streams  | River Dee (England) SSSI | SSSI             |

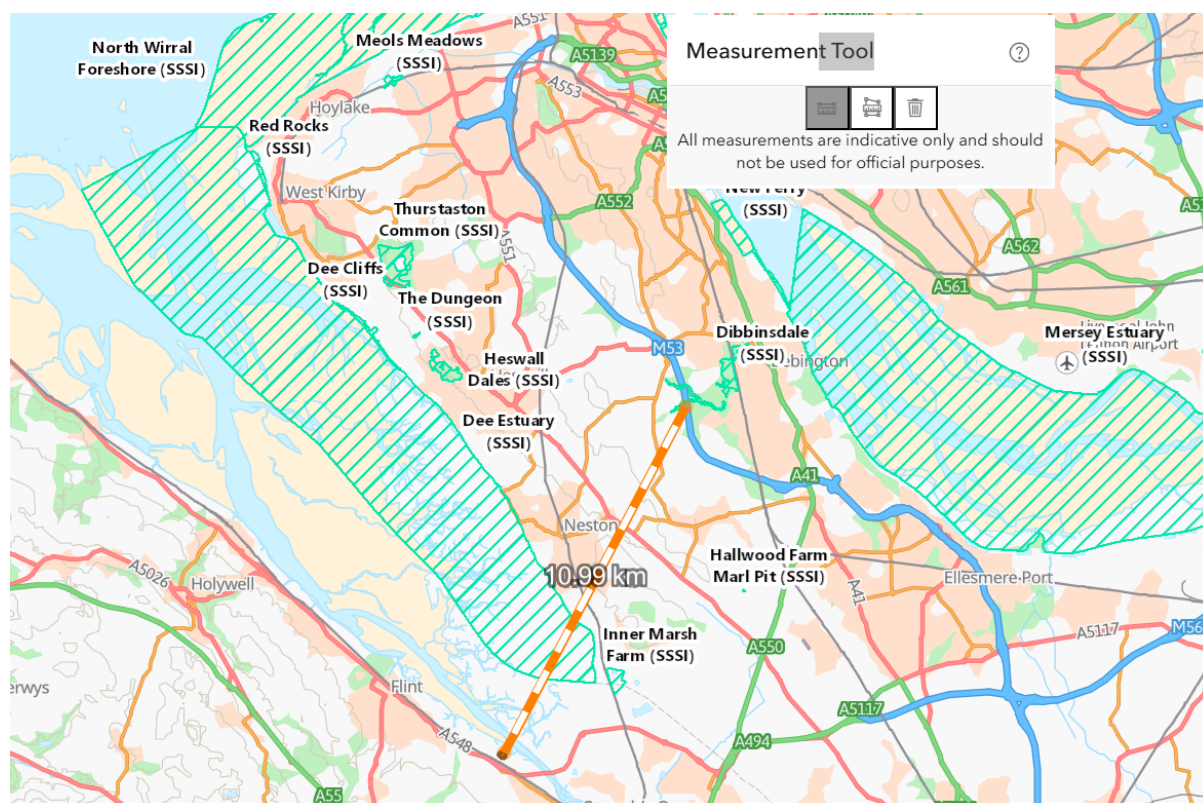
- 2.4.3 None of these are sensitive to atmosphere nitrogen or acid deposition according to APIS, which states either 'No critical load has been assigned for this feature' or 'No comparable habitat with established critical load estimate available'. Therefore, the River Dee SSSI in England can be excluded from the air quality assessment.



**Figure 3: Proximity of River Dee SSSI to the Proposed Development where it lies within 200m of a through-road (Source Magic.defra.gov.uk)**

## 2.5 Dibbinsdale SSSI

2.5.1 Dibbinsdale SSSI is located 12km from the Proposed Development as the crow flies and lies within 200m of the M53, but this is on the Wirral peninsula and therefore not on a route which is likely to be used by through construction traffic accessing the Proposed Development, which would use the M56. It is located approximately 11km from the A548 as shown in **Figure 4**.



**Figure 4: Proximity of Dibbinsdale SSSI to the A548 (Source Magic.defra.gov.uk)**

## 2.6 Mersey Estuary SPA/Ramsar

2.6.1 As shown in **Figure 5**, the Mersey Estuary SPA/Ramsar site is located 26km from the Proposed Development at the only point the SPA/Ramsar site lies within 200m of a significant road (the A557 Silver Jubilee Bridge between Runcorn and Widnes). This is remote from the M56 which would be the main route for construction traffic to reach the Proposed Development and is also a toll bridge.

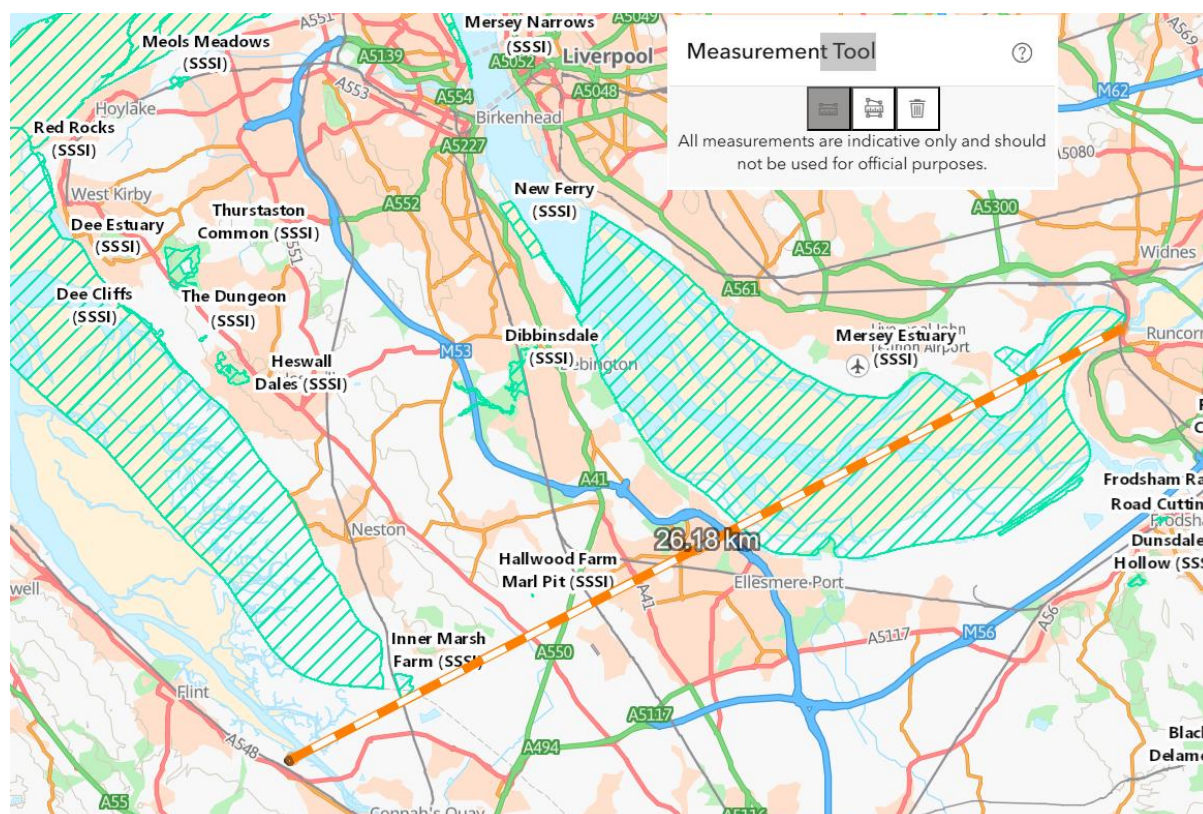


Figure 5: Proximity of Mersey Estuary SPA/Ramsar to the Proposed Development (Source [magic.defra.gov.uk](http://magic.defra.gov.uk))

### 3. Response to Matters Relating to Construction Traffic Emissions

3.1.1 The points referenced below in bold text are those raised by Natural England at Deadline 5. The Applicant's response follows:

- **Point 3.1 – ‘source assumptions, traffic methodology and in-combination assessment matters should be addressed clearly within the final agreed assessment documents to enable this point to be concluded’**
  - As explained in Section 2, there are no English SSSIs within 20km of the Proposed Development that also lie within 200m of roads which are likely to be used for construction traffic. Location OE2 (and the associated traffic transects TE8a to TE8c) are entirely within Wales. These are mapped and discussed in Section 2 but the Applicant assumes from the statement in point 3.4 below that Natural England will therefore defer to NRW.
- **Point 3.3 – ‘Please provide clear evidence to support the conclusion that no relevant affected road links fall within the applicable screening distance of the Mersey Estuary SPA / Ramsar.’**
  - As explained in Section 2, the Mersey Estuary SPA does not lie within 200m of any roads which would be used for construction traffic.
- **Point 3.4 – ‘To conclude this point for English [Dee Estuary] designated habitat, please provide confirmation of whether the assessed receptors**

***relate to English units, Welsh units, or both, together with confirmation of how these results are reflected in the HRA conclusions. Natural England would defer Welsh only matters to NRW.***

- Location OE02 (and the associated traffic transects TE8a to TE8c) are entirely within Wales. These are mapped and discussed in Section 2 but the Applicant assumes from the statement in point 3.4 above that Natural England will therefore defer to NRW.
- ***Point 3.6 – ‘To conclude this point [regarding the updated traffic assessment], please provide a concise list of plans and projects included within the in-combination assessment, with a brief explanation of inclusion/exclusion, and a summary of project alone and in combination results at the relevant designated site receptors.’***
  - As explained in Section 2, there are no English SSSIs within 20km of the Proposed Development that also lie within 200m of roads which are likely to be used for construction traffic. On this basis, no assessment is required.
- ***Point 3.7 – ‘Previous comments broadly remain regarding the interpretation of operational nitrogen deposition and ammonia effects at the Dee Estuary [for the grid square within which OE02 sits], including the application of lower bound critical levels and loads and the implications for sites where baseline conditions are already close to, or exceed, relevant thresholds. Please provide the final agreed assessment conclusions on these matters.’***
  - Location OE02 (and the associated traffic transects TE8a to TE8c) are entirely within Wales. These are mapped and discussed in Section 2 but the Applicant assumes from the statement in point 3.4 above that Natural England will therefore defer to NRW. On this basis, no further information on this matter is provided within this note.
- ***Point 3.10 – ‘Natural England notes the Applicant’s explanation [regarding the traffic impact on the Dee Estuary SAC on transects TE8a to TE8c]. Previous comments broadly remain regarding the ecological interpretation of deposition impacts on qualifying saltmarsh habitat and the associated conservation objectives’.***
  - Traffic transects TE8a to TE8c are entirely within Wales. These are mapped and discussed in Section 2 but the Applicant assumes from the statement in point 3.4 above that Natural England will therefore defer to NRW. On this basis, no further information on this matter is provided within this note.
- ***Point 3.11 regarding operational receptor OE2 on the Dee Estuary – ‘Given the acknowledged spatial variability of ammonia and proximity to thresholds [within the 1km grid square in which OE02 is situated], ammonia should be addressed explicitly within the operational Appropriate Assessment unless robust, site-specific evidence demonstrates that relevant critical levels will not be exceeded.’***
  - Location OE02 (and the associated traffic transects TE8a to TE8c) are entirely within Wales. These are mapped and discussed in Section 2 but the Applicant assumes from the statement in point 3.4 above that Natural England will therefore defer to NRW. On this basis, no further information on this matter is provided within this note.

- **Point 3.16 – ‘Natural England notes the updated information. Previous comments broadly remain regarding the transparency of in combination conclusions for designated ecological receptors.’**
  - As explained in Section 2 there are no English SSSIs within 20km of the Proposed Development that also lie within 200m of roads which are likely to be used for construction traffic. Location OE2 (and the associated traffic transects TE8a to TE8c) are entirely within Wales. These are mapped and discussed in Section 2 but the Applicant assumes from the statement in point 3.4 above that Natural England will therefore defer to Natural Resources Wales. On this basis, no further information on this matter is provided within this note.
- **Point 6.4 regarding exclusion of English SSSI units of the Dee Estuary SSSI from the air quality assessment – ‘To conclude this point, please provide confirmation of the relevant English SSSI units assessed, the receptor locations used, and the associated impact conclusions.’**
  - As discussed in Section 2, none of the qualifying interest features of the Dee Estuary SSSI as identified on the Natural England Designated Sites View website are identified on the Air Pollution Information System (APIS) as having applicable critical loads for nitrogen/acid deposition assessment.
- **Point 6.6 regarding exclusion of English SSSIs from the construction phase assessment - ‘Natural England maintains a holding position pending verifiable deposition tables and construction assessment outputs for the English SSSIs. We are reviewing this point following receipt of the updated air quality assessment.’**
  - As explained in Section 2, there are no English SSSIs within 20km of the Proposed Development that also lie within 200m of roads which would be used for construction traffic.

## 4. Responses Related to Operation Emissions

- 4.1.1 **Table 1** below addresses Natural England comments 3.1 and 3.16, (regarding clearer presentation of assessment including in combination), 3.9 (regarding Mersey Estuary SSSI), 6.2 (regarding Thurstaston Common SSSI), and 6.3 (regarding Inner Marsh Farm SSSI) raised at Deadline 5.

**Table 1: Responses related to operational emissions**

| Receptor ID | SSSI          | Air quality data summary   | Ecological interpretation   |
|-------------|---------------|--|---|
| OE01        | Heswall Dales | <ul style="list-style-type: none"> <li>Annual NO<sub>x</sub> = Under all scenarios (Tables 36, 42, 48 and 55), Process Contribution (PC) for the Proposed Development is below 1% of the critical level. Under no scenario is the critical level for NO<sub>x</sub> exceeded even in combination (Tables D-4, D-9, D-14 and D-19).</li> <li>Ammonia = Under all scenarios (Tables 38, 44, 51 and 58), PC for the Proposed Development is imperceptible, being below 0.01 µgm<sup>-3</sup> and thus not visible in the model. Therefore, the contribution of the Proposed Development can be dismissed.</li> <li><b>Nitrogen = Under all scenarios, PC for the Proposed Development (Tables 39, 45, 52 and 59) is below 1% of the critical load (5 kgN/ha/yr). However, worst-case cumulative PC as shown in Table D-12 column PC/AQAL (%) does exceed 1% of the CL being 1.3%, and total deposition exceeds the CL being 15 kgN/ha/yr.</b></li> <li>Acid = Under all scenarios, PC for the Proposed Development (Tables 41, 47, 54 and 61) is below 1% of the critical load. Under no scenario is the</li> </ul> | <p>The cumulative nitrogen impact is small (though not mathematically imperceptible) being only 1.4% of the critical load (rounded up from 0.065 to 0.07 kgN/ha/yr) under the worst-case scenario. It is therefore only just over threshold for dismissal on mathematical grounds, and the contribution of the Proposed Development alone is below that threshold (being 0.7% of the critical load, see Table 45).</p> <p>The Caporn et al (2016)<sup>1</sup> study, which included heathland, noted that for some parameters such as species richness, the botanical impact of further nitrogen reduced relative to the background nitrogen deposition rates, possibly because nitrogen was already present in excess at higher deposition rates. This is contextually relevant as background nitrogen deposition rates for Heswall Dales SSSI is well above the critical load. For Heswall Dales SSSI, deposition rates are 15 kgN/ha/yr and thus well above the 5 kgN/ha/yr critical load for heathland (the most sensitive designated habitat).</p> <p>Therefore, the cumulative impact would equate to a 0.4% increase in deposition compared to existing deposition rates. For heathland, Caporn et al (2016)</p> |

<sup>1</sup> Caporn, S., Field, C., Payne, R., Dise, N., Britton, A., Emmett, B., Stevens, C. (2016). *Assessing the Effects of Small Increments of Atmospheric Nitrogen Deposition (Above the Critical Load) on Semi Natural Habitats of Conservation Importance. Natural England Commissioned Report 210. Natural England*

| Receptor ID | SSSI               | Air quality data summary  | Ecological interpretation  |
|-------------|--------------------|---|--|
|             |                    | <p>critical load for acid exceeded even in combination (Tables D-8, D-13, D-18, D23).</p>   | <p>identified that at background deposition rates of 15 kgN/ha/yr a nitrogen dose of 1.3 kgN/ha/yr would be required to reduce species richness by one species. This dose is far greater than that forecast to arise cumulatively on the SSSI (0.07 kgN/ha/yr). Therefore, no significant effects will arise from the Proposed Development.</p>  |
| OE04        | Thurstaston Common | <ul style="list-style-type: none"> <li>Annual NOx = Under all scenarios (Tables 36, 42, 48 and 55), PC for the Proposed Development is below 1% of the critical level. Under no scenario is the critical level for NOx exceeded even in combination (Tables D-4, D-9, D-14 and D-19).</li> <li>Ammonia = Under all scenarios (Tables 38, 44, 51 and 58), PC for the Proposed Development is imperceptible, being below 0.01 µgm<sup>-3</sup> and thus not visible in the model. Therefore, the contribution of the Proposed Development can be dismissed.</li> <li><b>Nitrogen = Under all scenarios (Tables 39, 45, 52 and 59), PC for the Proposed Development is below 1% of the critical load (5 kgN/ha/yr). However, worst-case cumulative PC as shown in D-12 column PC/AQAL (%) does exceed 1% of the CL being 1.2%, and total deposition exceeds the CL being 14.20 kgN/ha/yr.</b></li> <li>Acid = Under all scenarios (Tables 41, 47, 54 and 61), PC for the Proposed Development is imperceptible, being below 0.01 keq/ha/yr and thus</li> </ul> | <p>The cumulative nitrogen impact is small (though not mathematically imperceptible) being only 1.2% of the critical load (0.06 kgN/ha/yr) under the worst-case scenario. It is therefore only just over threshold for dismissal on mathematical grounds, and the contribution of the Proposed Development alone is below that threshold (being 0.7% of the critical load, see Table 45).</p> <p>The Caporn et al (2016) study, which included heathland, noted that for some parameters such as species richness, the botanical impact of further nitrogen reduced relative to the background nitrogen deposition rates, possibly because nitrogen was already present in excess at higher deposition rates. This is contextually relevant as background nitrogen deposition rates for Thurstaston Common SSSI is well above the critical load. For Thurstaston Common SSSI, deposition rates are 14 kgN/ha/yr and thus well above the 5 kgN/ha/yr critical load for heathland (the most sensitive designated habitat).</p> |

| Receptor ID | SSSI        | Air quality data summary  | Ecological interpretation  |
|-------------|-------------|---|--|
|             |             | <p>not visible in the model. Therefore, the contribution of the Proposed Development can be dismissed.</p>  | <p>Therefore, the cumulative impact would equate to a 0.4% increase in deposition compared to existing deposition rates. For heathland, Caporn et al (2016) identified that at background deposition rates of 15 kgN/ha/yr a nitrogen dose of 1.3 kgN/ha/yr would be required to reduce species richness by one species. This dose is far greater than that forecast to arise cumulatively on the SSSI (0.06 kgN/ha/yr). Therefore, no significant effects will arise from the Proposed Development.</p> |
| OE05        | Dibbinsdale | <ul style="list-style-type: none"> <li>• Annual NO<sub>x</sub> = Under all scenarios (Tables 36, 42, 48 and 55), PC for the Proposed Development is below 1% of the critical level. Under no scenario is the critical level for NO<sub>x</sub> exceeded even in combination (Tables D-4, D-9, D-14 and D-19)</li> <li>• Ammonia = Under all scenarios (Tables 38, 44, 51 and 58), PC for the Proposed Development is imperceptible, being below 0.01 µgm<sup>-3</sup> and thus not visible in the model. Therefore, the contribution of the Proposed Development can be dismissed.</li> <li>• Nitrogen = Under all scenarios, PC alone (Tables 39, 45, 52 and 59) and cumulatively (Tables D-7, D-12, D17 and D-22) is below 1% of the critical load (10 kgN/ha/yr).</li> <li>• Acid = Under all scenarios (Tables 41, 47, 54 and 61), PC for the Proposed Development is imperceptible, being below 0.01 keq/ha/yr and thus</li> </ul> | <p>In all scenarios either the critical level/load is not exceeded, the cumulative PC is less than 1% of the critical level/load or the contribution of the Proposed Development is imperceptible in the model. Therefore, no significant effects will arise from the Proposed Development.</p>  |

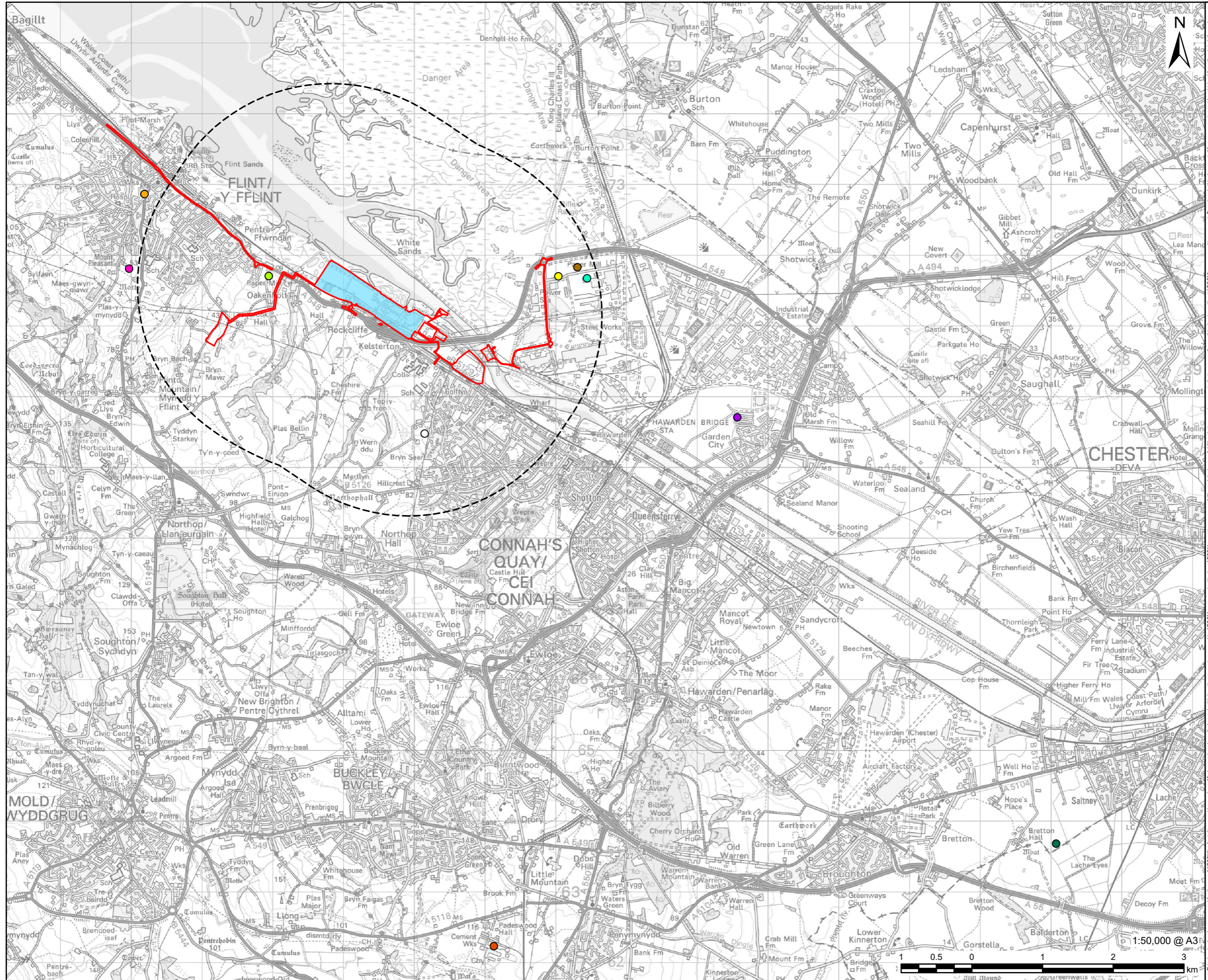
| Receptor ID | SSSI           | Air quality data summary  | Ecological interpretation  |
|-------------|----------------|---|--|
|             |                | not visible in the model. Therefore, the contribution of the Proposed Development can be dismissed.   |  |
| OE06        | Mersey Estuary | <ul style="list-style-type: none"> <li>• Annual NOx = Under all scenarios (Tables 36, 42, 48 and 55), PC for the Proposed Development is below 1% of the critical level. Under no scenario is the critical level for NOx exceeded even in combination (Tables D-4, D-9, D-14 and D-19)</li> <li>• Ammonia = Under all scenarios (Tables 38, 44, 51 and 58), PC for the Proposed Development is imperceptible, being below 0.01 µgm<sup>-3</sup> and thus not visible in the model. Moreover, total ammonia does not exceed the critical level of 3 µgm<sup>-3</sup>. Therefore, the contribution of the Proposed Development can be dismissed.</li> <li>• Nitrogen - Table D-12 (Abated FEED 2) shows that for receptor OE6 worst-case 'in combination' nitrogen deposition is forecast to be 0.03 kg N/ha/yr (0.6% of the critical load) which is well below 1% of the minimum critical load for saltmarsh of 10 kgN/ha/yr. Moreover, with a Predicted Environmental Concentration of 17.29 kg N/ha/yr, the critical load of 20 kg N/ha/yr suitable for great crested grebe at the SPA/Ramsar would also not be exceeded.</li> <li>• Acid = Under all scenarios (Tables 41, 47, 54 and 61), PC for the Proposed Development is imperceptible, being below 0.01 keq/ha/yr and thus</li> </ul> | <p>Mersey Estuary SPA / Ramsar is designated solely for its non-breeding bird interest while the SSSI is also designated for saltmarsh.</p> <p>For all SPA birds APIS indicates that they are either not sensitive to air quality impacts on their habitats, or air quality impacts are as likely to be positive (e.g. through increasing prey abundance) as negative. The exceptions are <i>Numenius arquata</i> and <i>Pluvialis apricaria</i> which are listed as being sensitive to nitrogen deposition in hay meadow habitat. However, that habitat is not present within Mersey Estuary SSSI. Podiceps cristatus (great crested grebe) is identified as being potentially negatively affected by nitrogen deposition on saltmarsh habitat. The lowest nitrogen critical load for saltmarsh of 10 kg N/ha/yr is driven by botanical criteria. Great crested grebes would only be affected by major structural changes to their habitat. Therefore, the upper nitrogen critical load of 20 kg N/ha/yr is considered appropriate for this species.</p> <p>The cumulative PC for nitrogen deposition falls below 1% of the critical load, while total nitrogen deposition does not exceed the appropriate critical load for great crested grebe.</p> |

| Receptor ID | SSSI                   | Air quality data summary  | Ecological interpretation  |
|-------------|------------------------|---|--|
|             |                        | not visible in the model. Therefore, the contribution of the Proposed Development can be dismissed.   |  |
| OE07        | New Ferry              | <ul style="list-style-type: none"> <li>• Annual NO<sub>x</sub> = Under all scenarios (Tables 36, 42, 48 and 55), PC for the Proposed Development is below 1% of the critical level. Under no scenario is the critical level for NO<sub>x</sub> exceeded even in combination (Tables D-4, D-9, D-14 and D-19)</li> <li>• Ammonia = Under all scenarios (Tables 38, 44, 51 and 58), PC for the Proposed Development is imperceptible, being below 0.01 µgm<sup>-3</sup> and thus not visible in the model. Moreover, total ammonia does not exceed the critical level of 3 µgm<sup>-3</sup>. Therefore, the contribution of the Proposed Development can be dismissed.</li> <li>• Nitrogen = Under all scenarios, PC alone (Tables 39, 45, 52 and 59), and cumulatively (Tables D-7, D-12, D17 and D-22) is below 1% of the critical load (10 kgN/ha/yr), with the cumulative PC being 0.02 kgN/ha/yr (0.2%).</li> <li>• Acid = Not sensitive according to APIS.</li> </ul> | <p>In all scenarios either the critical level/load is not exceeded, the cumulative PC is less than 1% of the critical level/load or the contribution of the Proposed Development is imperceptible in the model. Therefore, no significant effects will arise from the Proposed Development.</p> <p>Moreover, the APIS Site Relevant Critical Load application lists two bird species for the SSSI: pintail and black-tailed godwit. For pintail, APIS indicates nitrogen deposition may be positive rather than negative. For black-tailed godwit APIS indicates that nitrogen deposition is as likely to be positive as negative. In addition, the critical loads provided on APIS are for saltmarsh, but data from MAGIC and aerial photography show no saltmarsh in the SSSI, with the habitat entirely consisting of intertidal mudflat. While standing open water and canals is also identified as a habitat for pintail, MAGIC indicates this habitat is also absent from the SSSI. Therefore, there is no reason to conclude the bird interest of this SSSI would be adversely affected by nitrogen deposition.</p> |
| OE08        | Hallwood Farm Marl Pit | <ul style="list-style-type: none"> <li>• Annual NO<sub>x</sub> = Under all scenarios (Tables 36, 42, 48 and 55), PC for the Proposed Development is below 1% of the critical level. Under no scenario is</li> </ul>   | <p>The site is designated for its population of black poplar. APIS does not indicate this plant is sensitive to nitrogen deposition, and notes for nitrogen</p>  |

| Receptor ID | SSSI             | Air quality data summary  | Ecological interpretation   |
|-------------|------------------|---|---|
|             |                  | <p>the critical level for NOx exceeded even in combination (Tables D-4, D-9, D-14 and D-19)</p> <ul style="list-style-type: none"> <li>• Ammonia = Under all scenarios (Tables 38, 44, 51 and 58), PC for the Proposed Development is imperceptible, being below 0.01 µgm<sup>-3</sup> and thus not visible in the model. Moreover, total ammonia does not exceed the critical level of 3 µgm<sup>-3</sup>. Therefore, the contribution of the Proposed Development can be dismissed.</li> <li>• Nitrogen = Not sensitive according to APIS</li> <li>• Acid = Not sensitive according to APIS.</li> </ul>   | <p>deposition that 'No critical load has been assigned for this feature'.</p> <p>For NOx and ammonia, in all scenarios either the critical level/load is not exceeded, the cumulative PC is less than 1% of the critical level/load or the contribution of the Proposed Development is imperceptible in the model. Therefore, no significant effects will arise from the Proposed Development.</p>  |
| OE09        | Inner Marsh Farm | <ul style="list-style-type: none"> <li>• Annual NOx = Under all scenarios (Tables 36, 42, 48 and 55), PC for the Proposed Development is below 1% of the critical level. Under no scenario is the critical level for NOx exceeded even in combination (Tables D-4, D-9, D-14 and D-19)</li> <li>• Ammonia = Under all scenarios (Tables 38, 44, 51 and 58), PC for the Proposed Development is imperceptible, being below 0.01 µgm<sup>-3</sup> and thus not visible in the model. Moreover, total ammonia does not exceed the critical level of 3 µgm<sup>-3</sup>. Therefore, the contribution of the Proposed Development can be dismissed.</li> <li>• Nitrogen – Under the worst-case scenario (Table D-12) nitrogen deposition is modelled to exceed 1% of the critical load cumulatively (0.14 kg/hr/yr), being 1.4% of the critical load.</li> </ul> | <p>The APIS Site Relevant Critical Load application lists three bird species for the SSSI: pintail, teal and black-tailed godwit. For pintail and teal, APIS indicates nitrogen deposition may be positive. For black-tailed godwit APIS indicates that nitrogen deposition is as likely to be positive as negative. While standing open water and canals is also identified as a habitat for pintail and teal, APIS identifies that there is no critical load available for this habitat. It also identifies that impacts depend on nitrogen or phosphorus limitation. Most lowland freshwater bodies are phosphorus limited rather than nitrogen limited.</p> <p>Therefore, there is no reason to conclude the bird interest of this SSSI would be adversely affected by nitrogen deposition.</p> |

| Receptor ID | SSSI | Air quality data summary  | Ecological interpretation |
|-------------|------|---|---------------------------|
|             |      | <ul style="list-style-type: none"><li>• Acid = Not sensitive according to APIS.</li></ul> |                           |

# Appendix B: Figure E1 of the RIHRA (EN010166/APP/6.12)



**PROJECT**  
**Connah's Quay Low Carbon Power**

**CONSULTANT**  
 AECOM Limited  
 The Colmore Building  
 Colmore Circus, Queensway  
 Birmingham, B4 6AT  
 www.aecom.com

**LEGEND**

- Order limits
- Main Development Area
- 2.5km Buffer of the Main Development Area

**Cumulative Schemes Considered in the Report to Inform Habitats Regulations Assessment**

- 3 - FUL/000353/24
- 9 - FUL/001038/25
- 38 - FUL/000916/25
- 55 - DNS/3279559
- 92 - FUL/000414/22
- 102 - DNS CAS-02009-W1R1Z7
- 103 - 22/02042/FUL
- 113 - FUL/000034/22
- 141 - 063721
- 311 - 058314

**NOTES**  
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**ISSUE PURPOSE**  
 Report to Inform Habitats Regulations Assessment

**DATE**  
 May 2026

**PROJECT NUMBER**  
 60768754

**FIGURE TITLE**  
 Cumulative Schemes Considered in the Report to Inform Habitats Regulations Assessment

**FIGURE NUMBER**  
 Figure 1

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# Appendix C: Annex G of Appendix 13-D: Outline Surface Water Drainage Strategy [REP4-038]

# Results Matrix for Free Discharge & Tidal Lock Conditions

| Pipe Details<br>PN Dia (mm) | Matrix showing hydraulic test model simulation results |            |            |               |                         |              |            |            |               |                         | Attenuation Tank 1000m <sup>2</sup> |            |            |               | Attenuation Tank 2400m <sup>2</sup> |              |            |            | Pipe<br>PN |               |
|-----------------------------|--|------------|------------|---------------|-------------------------|--------------|------------|------------|---------------|-------------------------|-------------------------------------|------------|------------|---------------|-------------------------------------|--------------|------------|------------|------------|---------------|
|                             | No Surge Condition Test Results                        |            |            |               |                         | Tide Lock    |            |            |               |                         | Tide Lock                           |            |            |               | Tide Lock                           |              |            |            |            |               |
|                             | 1 in 30 Year   | 1:50 yr    | 1:75 yr    | 1 in 100 Year | Comparison 1 in 30 Year | 1 in 30 Year | 1:50 yr    | 1:75 yr    | 1 in 100 Year | Comparison 1 in 30 Year | 1 in 30 Year                        | 1:50 yr    | 1:75 yr    | 1 in 100 Year | Comparison 1 in 30 Year             | 1 in 30 Year | 1:50 yr    | 1:75 yr    |            | 1 in 100 Year |
| 1.000 Swale                 | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 1.001 300                   | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged                          | Surcharged | Surcharged | Surcharged    | Surcharged                          | Surcharged   | Surcharged | Surcharged | Surcharged | Surcharged    |
| 1.002 750                   | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 1.003 750                   | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 2.000 375                   | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 1.004 750                   | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged                          | Surcharged | Surcharged | Surcharged    | Surcharged                          | Surcharged   | Surcharged | Surcharged | Surcharged | Surcharged    |
| 3.000 375                   | Surcharged   | Flood Risk | Flood Risk | Flood Risk    | Flood Risk              | Flood Risk   | Flood Risk | Flood Risk | Flood Risk    | Flood Risk              | Flood Risk                          | Flood Risk | Flood Risk | Flood Risk    | Flood Risk                          | Flood Risk   | Flood Risk | Flood Risk | Flood Risk | Flood Risk    |
| 4.000 Swale                 | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 4.001 300                   | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged                          | Surcharged | Surcharged | Surcharged    | Surcharged                          | Surcharged   | Surcharged | Surcharged | Surcharged | Surcharged    |
| 4.002 600                   | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 1.005 750                   | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 5.000 Swale                 | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 5.001 300                   | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged                          | Surcharged | Surcharged | Surcharged    | Surcharged                          | Surcharged   | Surcharged | Surcharged | Surcharged | Surcharged    |
| 5.002 900                   | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 1.006 1050                  | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 1.007 1050                  | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged                          | Surcharged | Surcharged | Surcharged    | Surcharged                          | Surcharged   | Surcharged | Surcharged | Surcharged | Surcharged    |
| 1.008 1050                  | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 1.009 1050                  | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 6.000 Swale                 | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 6.001 300                   | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged                          | Surcharged | Surcharged | Surcharged    | Surcharged                          | Surcharged   | Surcharged | Surcharged | Surcharged | Surcharged    |
| 6.002 300                   | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged                          | Surcharged | Surcharged | Surcharged    | Surcharged                          | Surcharged   | Surcharged | Surcharged | Surcharged | Surcharged    |
| 6.003 300                   | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 7.000 450                   | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 7.001 450                   | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 7.002 450                   | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 8.000 300                   | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged                          | Surcharged | Surcharged | Surcharged    | Surcharged                          | Surcharged   | Surcharged | Surcharged | Surcharged | Surcharged    |
| 9.000 Swale                 | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 9.001 300                   | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged                          | Surcharged | Surcharged | Surcharged    | Surcharged                          | Surcharged   | Surcharged | Surcharged | Surcharged | Surcharged    |
| 6.004 450                   | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged                          | Surcharged | Surcharged | Surcharged    | Surcharged                          | Surcharged   | Surcharged | Surcharged | Surcharged | Surcharged    |
| 1.010 1200                  | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 1.011 1200                  | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 10.000 525                  | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 10.001 525                  | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged                          | Surcharged | Surcharged | Surcharged    | Surcharged                          | Surcharged   | Surcharged | Surcharged | Surcharged | Surcharged    |
| 10.002 525                  | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 11.000 Swale                | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 11.001 300                  | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged                          | Surcharged | Surcharged | Surcharged    | Surcharged                          | Surcharged   | Surcharged | Surcharged | Surcharged | Surcharged    |
| 11.002 300                  | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 10.003 525                  | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged                          | Surcharged | Surcharged | Surcharged    | Surcharged                          | Surcharged   | Surcharged | Surcharged | Surcharged | Surcharged    |
| 10.004 525                  | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged                          | Surcharged | Surcharged | Surcharged    | Surcharged                          | Surcharged   | Surcharged | Surcharged | Surcharged | Surcharged    |
| 10.005 525                  | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged   | Surcharged | Surcharged | Surcharged    | Surcharged              | Surcharged                          | Surcharged | Surcharged | Surcharged    | Surcharged                          | Surcharged   | Surcharged | Surcharged | Surcharged | Surcharged    |
| 1.012 1350                  | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 1.013 1350                  | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 1.014 1350                  | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |
| 1.015 1350                  | X  | X          | X          | X             | 0 CC                    | 0 CC         | 0 CC       | 0 CC       | 0 CC          | 0 CC                    | 0 CC                                | 0 CC       | 0 CC       | 0 CC          | 0 CC                                | 0 CC         | 0 CC       | 0 CC       | 0 CC       | 0 CC          |

**Key to Flood Volumes**

- Flood Volume < 5m<sup>3</sup>
- Flood Volume < 50m<sup>3</sup>
- Flood Volume > 50m<sup>3</sup>

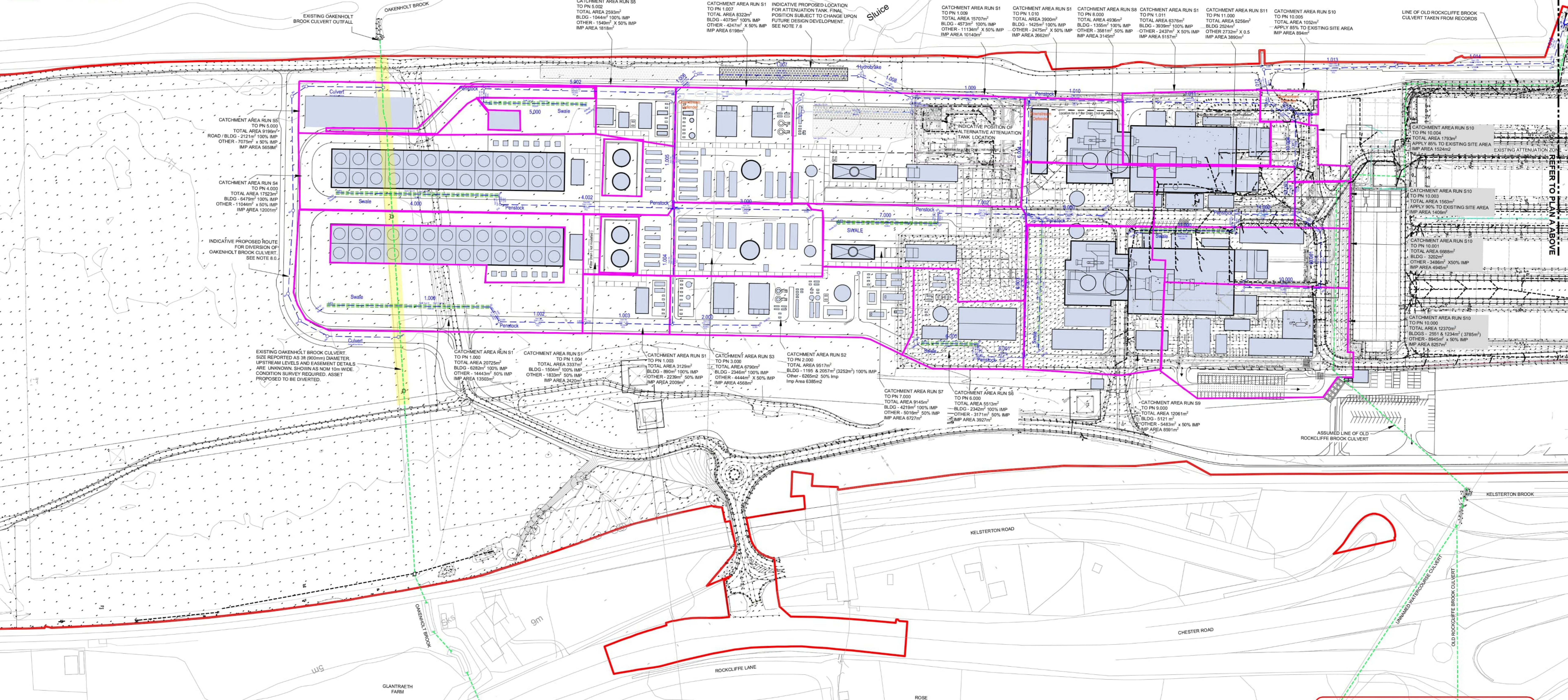
**Key for Flooding Event**

- Pipe lengths with water level less than 300mm from cover
- Flood - 1:30 Year Return 15 minute duration Winter
- Flood - 1:100 Year Return 15 minute duration Summer

**West Catchment**

**Central Catchment**

**East Catchment**

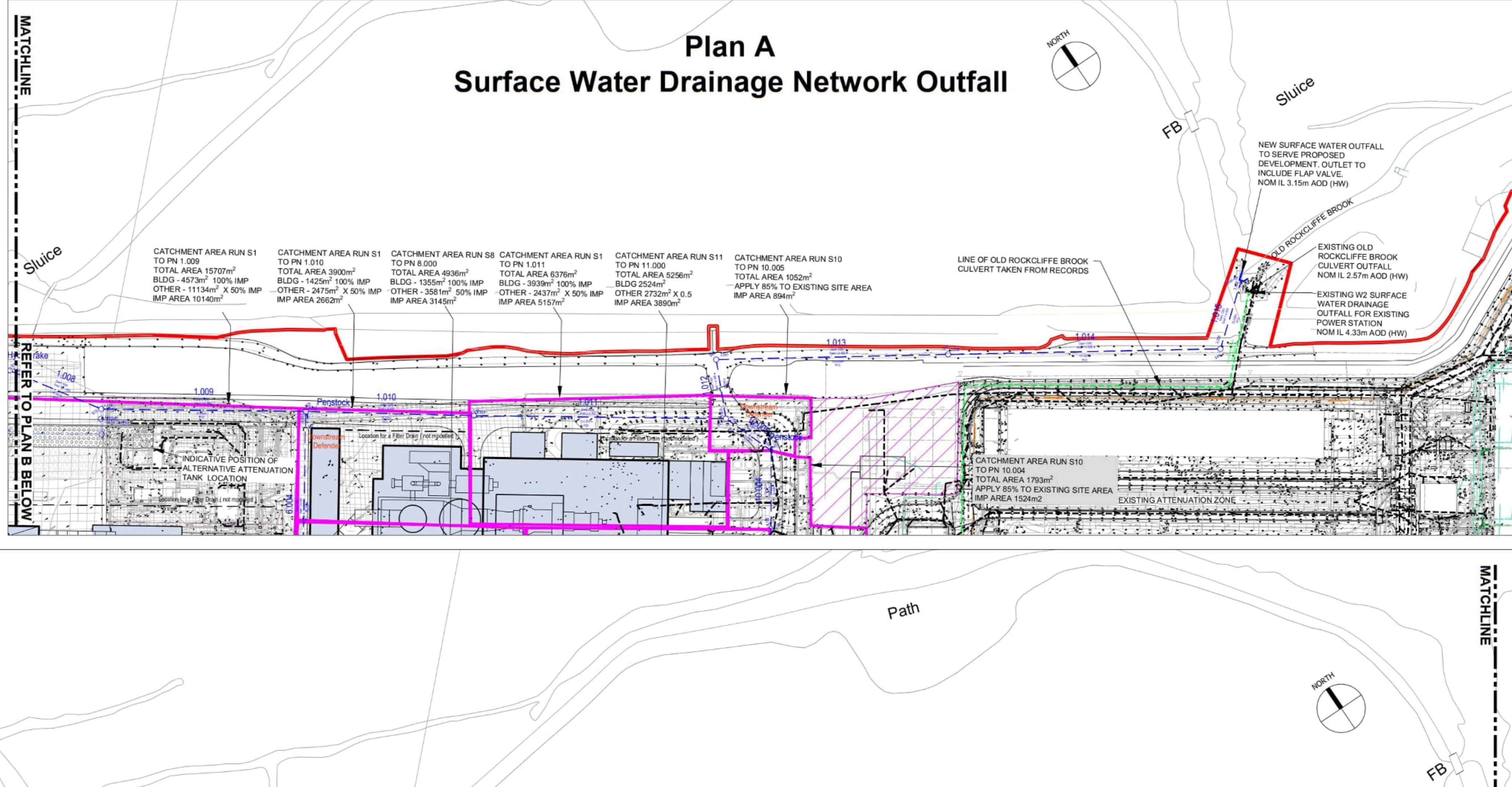


**Plan B**

**Surface Water Drainage Network**

**FOR INFORMATION ONLY**

**NOT FOR CONSTRUCTION**



**PROJECT**  
CONNAH'S QUAY  
LOW CARBON POWER

**CLIENT**  
UNIPER

**CONSULTANT**  
AECOM  
Colmore Building 20  
20 Colmore Circus, Queensway  
Birmingham B4 6AT  
www.AECOM.com

- NOTES**
- Do not scale from this drawing.
  - All dimensions, coordinates, and levels are given in metres. Pipe sizes given in mm.
  - Existing ground levels based on Topographical Survey ref. 62330 1 undertaken by Malcolm Hughes Land Surveys, December 2024. Confirmation of existing outfall location profiles and levels provided 13.5.25.
  - Existing utility information based on GPR survey ref. 62330 1 undertaken by Malcolm Hughes Land Surveys, December 2024.
  - For details of the existing Surface Water (SW) drainage network details refer to AECOM drawings: CQLCP-ACM-XX-XX-DR-00100 & 00101.
  - Proposed drainage levels and outfall nodes are provisional and based on the existing ground levels provided by topographic survey in the event that levels on the Main Development Area are revised for flood protection purposes, the proposed drainage strategy and hydraulic modelling will need to be re-evaluated.
  - Drainage Philosophy**
    - Proposed development site normally split into 3 primary catchments and sub-catchments thereof defined by pipe runs.
    - Proposed drainage layout based on proposed site layout Revision Q, supplied by GSA.
    - Impassable areas for catchments 1 & 2 (West & Central) are typically based on 100% for buildings and 50% for all remaining spaces. Some impassable areas in catchment 3 (East) are based on nominal 20% throughout. Catchment analysis is suitable for provisional modelling only as subject to layout and usage change.
    - Proposed outfall location coordinates are E327875, N271263. The provisional design is based on a single outfall. The position coincides with existing site outfall and located within Order limits.
    - Some existing surface water drainage network discharging to outfall W2 will be affected by the proposed works. Extent of defunct, remediated or capped drainage to be determined at detailed design stage.
    - Sustainable Drainage Systems (SuDS) provision for drainage network could include wetlands, reed beds, filter drains, permeable paving, underground attenuation tanks, tree planting, green roofs, permeable driveways and other similar approved water quality structures. Provision and extent of such structures on layout and coordinated values in hydraulic model are indicative and subject to change.
    - Provisional hydraulic modelling is based on maximum level requirements and set up for validation of the drainage network for both free discharge and tidal lock conditions.
    - Provisional drainage model for free discharge analysis ref. MacroDrainage MDX Model ref. K System 1 & Sems dated 15.04.25.
    - Provisional drainage model for tidal lock analysis ref. MacroDrainage MDX Model ref. K System 1 & Sems dated 16.04.25.
    - 100% lock level requirements for the proposed development are based on the following: Tables: Def\_ACM\_2070\_10000\_016.021 (0.60 hours).
    - Main design results for provisional analysis of free discharge and tidal lock conditions.
    - Main design results indicate that a tank size of 2,000m<sup>3</sup> may ensure no flooding during the 1 in 30 year AEP free discharge event, with 20% allowance for increases in rainfall intensity due to climate change, but a larger attenuation volume may be required to accommodate higher climate change allowances and site locking scenarios. Future design work will assess the Surface Water Drainage Strategy to be prepared pursuant to requirement 8 of the Draft DCO (D3019160/APV3) 1. It will include the following: Application of the Strategic Approach set out in the SuDS Manual; to confirm types and locations of SuDS features and to ensure sufficient treatment of water runoff from the Main Development Area.
    - Detailed hydraulic modelling using latest Flood Estimation Handbook (FEH) rainfall data.
    - Assessment of observed field data.
    - Comparison with H2019 which return periods will be applied to the tidal lock analysis.
    - Review of current climate change guidance and project programmes to ensure appropriate climate change allowances and site locking scenarios. Future design work will assess the Surface Water Drainage Strategy to be prepared pursuant to requirement 8 of the Draft DCO (D3019160/APV3) 1. It will include the following: Application of the Strategic Approach set out in the SuDS Manual; to confirm types and locations of SuDS features and to ensure sufficient treatment of water runoff from the Main Development Area.
    - The Dakenholt Brook (ordinary watercourse) traverses the site through the western catchment. In order to control the flow of water through the site, details of diversion or other options are pending future design development and consultation with LIFA. The proposed design includes a diversion of the Dakenholt Brook as an outfall for the Main Development Area. Asset levels, condition survey and catchment assessments are required to inform future design. If required, detailed design of the diverted outfall shall be carried out following an assessment of the existing catchment, valuation, capacity and pipe size. For any proposed diversion ecological mitigation is to be considered as required. For example, to ensure the known presence of eels.
    - This drawing is supplied solely to support the DCO application and the SuDS Approving Body (SAB) pre application with Fifehshire County Council.
    - Provisional drainage network is indicative only and subject to future design development. For purposes of evaluation the provisional drainage network includes a single attenuation tank and control. The proposed surface water network and site layout may benefit from multiple attenuation features and/or hydraulic controls.
    - Detailed design to take account of known high water table and seasonal variations.
    - 10 National locations of Peatstocks shown.
    - Future development of surface water drainage design to consider integration with fire safety and fire water run-off requirements. Locations and sizes of SuDS features shown do not allow for firewater run-off. All details to be confirmed.
    - This drawing is not to be used for any setting out or construction related purposes.

**Key for Provisional Drainage Network**

- Order Limits
- Proposed SW pipe lengths with MacroDrainage (MDX) pipe ref.
- Proposed SW swales with MacroDrainage (MDX) pipe ref.
- Proposed Attenuation Tank
- Proposed Permeous Paving
- Proposed Catchment Areas
- Proposed Downstream Defender or similar Treatment Unit
- Proposed Filter Drains
- Existing W2 Surface Water Drainage Pipe
- Existing Culverted Watercourse

| ISSUE/REVISION | DATE     | DESCRIPTION                             |
|----------------|----------|---|
| P6             | 24.07.25 | Minor updates                           |
| P5             | 11.7.25  | Order limits, pipe refs & notes updated |
| P4             | 19.5.25  | Client revisions                        |
| P3             | 16.4.25  | Drainage layout & matrix updated        |
| P2             | 2.4.25   | For SAB pre app discussions             |
| P1             | 27.3.25  | For Client Meeting                      |
| I/R            | DATE     | DESCRIPTION                             |

**PROJECT NUMBER**  
60717119

**SHEET TITLE**  
Outline Surface Water Drainage Strategy  
General Arrangement

**SHEET NUMBER**  
CQLCP-ACM-XX-XX-DR-D-10-0501

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