HyNet North West

SCOPING OPINION RESPONSES

HyNet Carbon Dioxide Pipeline DCO

Planning Act 2008

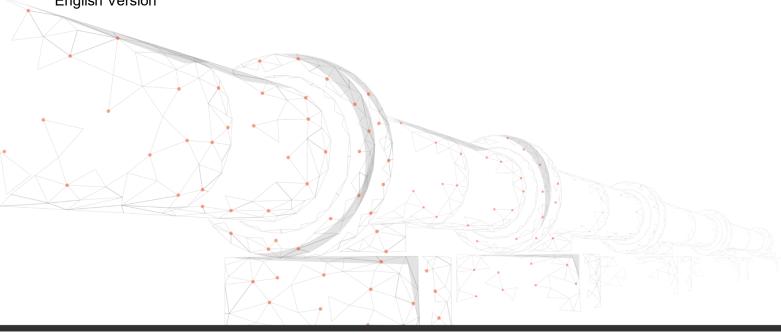
The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulations 5(2)(a)

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Applicant: Liverpool Bay CCS Limited

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HyNet Scoping Opinion Response Tracker

Proposed Matter General	Stakeholder/Statutory Consultee Comment	The Applicant's Response
N/A	The ES submitted by the Applicant should demonstrate consideration of the points raised by the consultation bodies. It is recommended that a table is provided in the ES summarising the scoping responses from the consultation bodies and how they are, or are not, addressed in the ES.	This Appendix (Appendix 1-3: Scoping Opinion Response Tracker (Volume IV)) has been produced to accompany the ES, and provides a response outlining how the scoping responses from the consultation bodies have been addressed in the ES. Where it was not possible to address any comment, this has also been explained.
Description of the proposed development	The Inspectorate notes that the precise location and design of some elements o the Proposed development have not been determined at this stage in the EIA process, and will be refined prior to submission of the DCO application. However, the lack of detailed information provided in the Scoping Report, particularly in relation to the location, design and extent of 'Other Works' has constrained the ability of the Inspectorate, and potentially consultation bodies, to provide meaningful comments on its content and in some cases has prevented the Inspectorate from being able to agree to scope maters out of the assessment at this time.	The Planning Inspectorate's comment is noted. The Preliminary Environmental Assessment Report (PEIR) was produced in February 2022, and provided an updated design and preliminary assessment for the DCO Proposed Development. The design was updated following further environmental and engineering work, and taking into account consultation responses. Further engagement with relevant stakeholders has subsequently been undertaken to provide additional information on the design, where deemed relevant. The design of the DCO Proposed Development is described in Chapter 3 - Description of the DCO Proposed Development (Volume II) and has been assessed in the EIA. Where flexibility remains at this design stage, this is described along with how the EIA has accommodated this in Chapter 5 - EIA Methodology (Volume II).
Description of the proposed development	The ES should describe the number, location and maximum dimensions of these structures, including the temporary vent stacks associated with the AGI and BVS. Where uncertainty exists in relation to these elements, the Applicant must ensure that the Rochdale envelope for the Proposed Development adequately reflects the worst-case scenario.	A description of the DCO Proposed Development including the parameters sought are set out in Chapter 3 - Description of the DCO Proposed Development (Volume II) and assessed within Technical Chapters 6-19 (Volume II) within the ES. Where flexibility remains at this design stage, this is described along with how the EIA has accommodated this in Chapter 5 - EIA Methodology (Volume II).
Description of the proposed development	The ES should also provide information on the location of access routes, construction compounds and the location of trenchless crossings. The potential impacts associated with trenchless crossings (such as the effects of dewatering or the location of entry pits) should also be assessed.	The ES provides information on the location of temporary and permanent access points, temporary construction traffic routes and compounds and the location of trenchless crossings in Chapter 3 - Description of the DCO Proposed Development (Volume II) as well as the potential impacts associated with these features, including trenchless crossings which are assessed where relevant in Technical Chapters 6-19 (Volume II).
Description of the proposed development	The Inspectorate considers that an assessment of the decommissioning phase should be provided in the ES. This should be proportionate and include a description of the decommissioning works, land-use requirements, and estimated timescales. The Applicant should clearly demonstrate that the complete lifecycle of the Proposed Development, including the decommissioning phase, has been described and adequately assessed in the ES. In addition, the Applicant should ensure that the operational lifetime of the Proposed Development specified in the ES is consistent with that set out in the DCO.	Where appropriate, Technical Chapters 6-19 (Volume II) have assessed (or given justification for scoping-out) the decommissioning stage. A description of how the DCO Proposed Development will be decommissioned once it reached the end of its operational life is provided in Chapter 3 - Description of the DCO Proposed Development (Volume II). The operational lifetime of the DCO Proposed Development aligns with that which is set out in the DCO.
Description of the proposed development	The Scoping Report does not state when construction of the Proposed Development is likely to commence or when it is to become fully operational. The Applicant should clearly describe the construction and operation phase of the Proposed Development in the ES, and ensure this information is consistent with that set out in the DCO.	Chapter 3 - Description of the DCO Proposed Development (Volume II) includes the anticipated construction schedule and when it is anticipated that the DCO Proposed Development will commence operation.
Description of the proposed development	The Scoping Report does not consider the potential environmental effects as result of construction, operation or decommissioning of the CP system. The Applicant should provide an assessment of this matter where significant effects are likely to occur. In addition, the ES should describe how the CP system would be decommissioned following the 40-year operational lifetime of the Proposed Development.	The CP system is described in Chapter 3 - Description of the DCO Proposed Development (Volume II) and has been assessed, where relevant, within Technical Chapters 6-19 (Volume II).
Description of the proposed development	The ES should clearly describe the relationship between the Proposed Development and the Wider Scheme, including the extent to which the Proposed Development is dependent on the delivery of the other projects. In addition, the Applicant should describe the development timelines of projects that form the Wider Scheme, including an explanation of how these will be coordinated.	Chapter 2 - The Project (Volume II) describes the wider HyNet North West Project including the relationship with the DCO Proposed Development. Chapter 19 - Combined and Cumulative Effects (Volume II) assesses (where possible and appropriate) the predicted cumulative effects of the DCO Proposed Development combined with the other HyNet North West Project elements. Detailed information relating to the timescales of the other components that form the Project are not all available at the time of writing, however where information has been available it is referred to in Chapter 19 - Combined and Cumulative Effects (Volume II).
Description of the proposed development		Construction and operational lighting have been outlined in Chapter 3 - Description of the DCO Proposed Development (Volume II) which includes detail such as all lighting will be kept to the minimum required, directional and operational lighting would only be operated when required thus not permanently on, as well as the design standards that will be used. Any potential effects associated with lighting are described in Technical Chapters 6-19 (Volume II) in the ES.
Description of the proposed development	The Inspectorate notes that potential impacts arising from Close Sheet Piling have only been clearly considered in relation to Water Resources and Flood Risk. The Applicant should ensure that the potential environmental effects of these activities are described in other relevant aspect chapters of the ES (e.g. Noise and Vibration) and assessed where significant effects are likely to occur.	Chapter 3 - Description of the DCO Proposed Development (Volume II) describes where sheet piling is proposed during construction. Where appropriate, this activity has been assessed in the relevant Technical Chapters 6-19 (Volume II) of the ES, including Chapter 15 - Noise and Vibration and Chapter 18 - Water Resources and Flood Risk (Volume II).
Description of the proposed development	Paragraph 3.6.27 of the Scoping Report outlines pre-commissioning activities following installation of the CO2 pipeline. The Applicant should ensure that the potential environmental effects of these activities are described in the relevant aspect chapters of the ES and assessed where significant effects are likely to	Chapter 3 - Description of the DCO Proposed Development (Volume II) describes the proposed pre-commissioning activities. Where relevant, the potential environmental effects of pre-commissioning activities are assessed within the Technical Chapters 6-19 (Volume II) and associated consultation, mitigation and permitting requirements detailed. This includes, in particular Chapter 18 - Water Resources and Flood Risk (Volume II).
Description of the proposed development		The Planning Inspectorate's comment is noted. A Glossary (Document Reference: D.0.1.3) has been produced which outlines the key terms associated with the DCO application, including the ES. Consistency checks have been undertaken with all documents associated with the DCO Application, to align documents with the Glossary.

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Description of the proposed development	Paragraph 3.7.5 of the Scoping Report outlines typical inspection and maintenance activities that may be undertaken during operation of the Proposed Development. The Applicant should ensure that the potential environmental effects of these activities, particularly bi-weekly helicopter surveys, are described in the relevant aspect chapters of the ES and assessed where significant effects are likely to occur. In addition, the Applicant should also consider the potential environmental effects arising from the 25m easement required during the 40-year operational phase of the Proposed Development.	
Description of the proposed development	Paragraph 3.7.6 of the Scoping Report states that issues identified during inspection of the Proposed Development would be corrected using appropriate remedial works. However, the Scoping Report does not include a description of the works required for remediation. The Applicant should ensure that the activities and associated land use requirements of remediation works are clearly described in the ES and assessed where significant effects are likely to occur.	Chapter 3 - Description of the DCO Proposed Development (Volume II) describes the maintenance and inspection routine, sets out the design life of the DCO Proposed Development and confirms that no major replacement during operation is anticipated for the pipeline, AGIs or BVSs.
Description of the proposed development	Paragraph 4.11.16 of the Scoping Report states that the Outline Construction Traffic Management Plan (CTMP) will include a description of; the number of vehicles, routes, frequency and timing of movements; worker hours and shift patterns; laydown areas and parking; and Abnormal Indivisible Loads (AlLs). The Applicant should include information set out in the CTMP in the ES where relevant to the assessment. The ES should also explain how AlLs would be transported to the Proposed Development site, including the number of AlLs required during construction. The Applicant should consider the potential effects of transporting AlLs to the Proposed Development site within the relevant aspect chapters of the ES. In addition, the Applicant should seek agreement with the relevant consultation bodies on worker hours/shift patterns during construction of the Proposed Development. The Applicant's attention is drawn to Cheshire West and Chester Council's consultation response in this regard (see Appendix 2 of this report).	Chapter 3 - Description of the DCO Proposed Development and Chapter 17 - Traffic and Transport (Volume II) include detail relating to the predicted number and type of construction and operational vehicle movements. Chapter 17 - Traffic and Transport (Volume II) also assesses the potential effects and the measures to minimise the impacts are set out in the Outline Construction Traffic Management Plan (Document Reference D.6.5.4.2). Consultation with relevant traffic and transport stakeholders including the Local Authorities Highways team and National Highways/North and Mid Wales Trunk Road Agency has also been undertaken. The transportation of D6 bulldozers are the only AlLs that will be required for the DCO Proposed Development. AlLs are not considered within this assessment and will be assessed under separate cover by a specialist AlL contractor prior to construction.
Description of the proposed development	Rivers, canals, waterway users and associated infrastructure have not been identified as sensitive receptors in some potentially relevant aspect chapters of the Scoping Report. The Applicant should ensure that the potential environmental effects of the Proposed Development on these receptors, particularly during construction, are considered in the relevant aspect chapters of the ES and assessed where significant effects are likely to occur.	The assessments presented in Technical Chapters 6-19 (Volume II) have considered rivers, canals, waterway users and associated infrastructure as sensitive receptors, where relevant.
Description of the proposed development	The Scoping Report refers to 'other enabling activities' and 'in-carriageway works'. However, the Scoping Report provides no further detail regarding the nature of these works. The Applicant should include a clear description of enabling activities and in-carriageway works in the ES, including the location and associated land-use requirements, and provide an assessment of these matters where significant effects are likely to occur.	The construction methodology is set out in Chapter 3 - Description of the DCO Proposed Development (Volume II). This describes the anticipated 'pre construction activities' as well as the anticipated crossing methods. This also describes that the method of crossing major roads would be via trenchless crossing technique, however minor roads would be crossed via open-cut trenching which would involve in-carriageway works. This impacts of this are assessed, where relevant, in the EIA including Chapter 17 - Traffic and Transport (Volume II)
Flexibility	The Applicant should make every attempt to narrow the range of options and explain clearly in the ES which elements of the Proposed Development have yet to be finalised and provide the reasons. At the time of application, any Proposed Development parameters should not be so wide-ranging as to represent effectively different developments. The development parameters should be clearly defined in the DCO and in the accompanying ES. It is a matter for the Applicant, in preparing an ES, to consider whether it is possible to robustly assess a range of impacts resulting from a large number of undecided parameters. The description of the Proposed Development in the ES must not be so wide that it is insufficiently certain to comply with the requirements of Regulation 14 of the EIA Regulations.	The iterative design process has been informed by further studies, additional survey data and consultation feedback and has resulted in substantially refining the design from that presented at Scoping. Chapter 4 - Consideration of Alternatives (Document Reference D.6.2.4) sets out how the design has been refined, where alternatives were considered and the reason for choosing the selected option. Where the design still contains areas of flexibility at this stage, this is described in Chapter 3 - Description of the DCO Proposed Development (Document Reference D.6.2.3) and the way in which this has been assessed in the EIA is described in Chapter 5 - EIA Methodology (Document Reference D.6.2.5)
National Policy Statement	The Applicant should ensure that the revised requirements set out in any emerging or updated NPSs for energy infrastructure have been considered in the ES where relevant to the Proposed Development.	The ES considers the most recent NPSs relevant to the DCO Proposed Development.
Scope of assessment (general)	The Inspectorate recommends that in order to assist the decision-making process, the Applicant uses tables: • to demonstrate how the assessment has taken account of this Opinion; • to identify and collate the residual effects after mitigation for each of the aspect chapters, including the relevant interrelationships and cumulative effects; • to set out the proposed mitigation and/ or monitoring measures including cross-reference to the means of securing such measures (eg a dDCO requirement) • to describe any remedial measures that are identified as being necessary following monitoring; and • to identify where details are contained in the Habitats Regulations Assessment (HRA report) (where relevant), such as descriptions of National Site Network sites and their locations, together with any mitigation or compensation measures, that inform the findings of the ES.	Tables are used throughout the Environmental Statement to provide clear and structured information, where appropriate. Technical Chapters 6-19 (Volume II) are structured in a consistent way to allow for direct comparison between topics. Chapter 20 - Summary of Likely Significant Effects (Document Reference D.6.2.20) is also provided in tabular form to aid the readers understanding of the key outcomes of the ES.
baseline scenario	The ES should include a description of the baseline scenario with and without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge. In light of the number of ongoing developments within the vicinity of the Proposed Development application site, the Applicant should clearly state which developments will be assumed to be under construction or operational as part of the future baseline.	Each of the Technical Chapters 6-19 (Volume II) contains a description of the baseline environmental condition. Chapter 3 - Description of the DCO Proposed Development (Volume II) contains a description of the Future Baseline scenario, which is then assessed within Technical Chapters 6-19 (Volume II). Nearby developments, as well as other elements of the HyNet North West Project is assessed in Chapter 19 - Combined and Cumulative Effects (Volume II).
baseline scenario	The Scoping Report provides a description of the Study Area for each environmental aspect to be included in the ES. However, some of the Study Areas have not been depicted in corresponding figures in the Scoping Report. The Applicant should illustrate the geographic extent of Study Areas in appropriate figures for each environmental aspect considered in the ES.	Where relevant, figures associated with Technical Chapters 6-19 (Volume II) show relevant study areas.
residues and emissions	The EIA Regulations require an estimate, by type and quantity, of expected residues and emissions. Specific reference should be made to water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases, where relevant. This information should be provided in a clear and consistent fashion and may be integrated into the relevant aspect assessments. The ES should include an assessment of the effects of any lighting required for the construction or operation of the Proposed Development.	The listed factors have been assessed where appropriate in Technical Chapters 6-19 (Volume II) in the ES. This in includes in particular Chapter 6 - Air Quality (Document Reference D.6.2.6), Chapter 10 - Greenhouse Gases (Document Reference D.6.2.10), Chapter 11 - Land and Soils (Document Reference D.6.2.11), Chapter 14 - Materials and Wate (Document Reference D.6.2.14) and Chapter 15 - Noise and Vibration (Document Reference D.6.2.15). Construction and operational lighting has been described in Chapter 3 - Description of the DCO Proposed Development (Volume II) with any effects described in Technical Chapters 6-19 (Volume II) in the ES.
residues and emissions	Paragraph 3.7.9 of the Scoping Report states that venting operations will be required during operation of the Proposed Development. The Applicant should consider the potential environmental effects of venting operations in relevant aspect chapters of the ES and provide an assessment of this matter where significant effects are likely to occur. In addition, the Applicant should clearly describe the location, frequency and duration of venting activities, including the type, nature and quantity of component gases to be released into the atmosphere.	Chapter 3 - Description of the DCO Proposed Development (Volume II) contains a description of the proposed venting operations associated with the AGIs of the DCO Proposed Development, which is then assessed within the relevant Technical Chapters 6-19 (Volume II) including Chapter 6 - Air Quality (Volume II).

Mitigation and Monitoring	mitigation measures to be delivered in accordance with the Construction Environmental Management Plan (CEMP). However, paragraph 4.7.8 of the Scoping Report states that a draft CEMP will not be provided with the DCO application as detail of mitigation will be set out in the REAC. The Inspectorate requests that the DCO application contain all documents which describe measures relied upon for the purposes of the EIA, including draft versions of the CEMP, Construction Traffic Management Plan (CTMP), Materials Management Plan (MMP), Site Waste Management Plan (SWMP), Construction Workers Travel Plan	A Register of Environmental Actions and Commitments (REAC) (Document Reference: D.6.5.1) and an Outline CEMP (Document Reference D.6.5.4) have been prepared to support the DCO Application. The REAC contains the mitigation commitments to be implemented, as identified within the t Technical Chapters 6-19 (Volume II). Furthermore, the ES and Outline CEMP is supported by Outline versions of key management plans including Overarching Written Scheme of Investigation (Document Reference D.6.5.2), Outline Construction Traffic Management Plan (Document Reference D.6.5.3), Interim Worker Travel Plan (Appendix 17.14 (Volume III) (Document Reference D.6.3.17.14)) Outline Soil Management Plan (Document Reference D.6.5.4.1) and Outline Peat Management Plan (Document Reference D.6.5.4.2). These supporting document and management plans are referenced in Technical Chapters 6-19 (Volume II) where they are relied upon.
Transboundary effects	Schedule 4 Part 5 of the EIA Regulations requires a description of the likely significant transboundary effects to be provided in an ES. The Scoping Report has not indicated whether the Proposed Development is likely to have significant impacts on a European Economic Area (EEA) State. Regulation 32 of the EIA Regulations inter alia requires the Inspectorate to publicise a DCO application on behalf of the SoS if it is of the view that the proposal is likely to have significant effects on the environment of a EEA state, and where relevant, to consult with the EEA state affected. The Inspectorate considers that where Regulation 32 applies, this is likely to have implications for the examination of a DCO application. The Inspectorate notes that the ES will include a description of any transboundary effects. Where the potential for significant transboundary impacts is identified it should be made clear which EEA States would be affected.	Chapter 5 - EIA Methodology (Volume II) confirms that no transboundary impacts are likely to be experienced as a result of the DCO Proposed Development.
General comments raised by CRT.	The Trust own and manage the Shropshire Union Canal, water and the towpath network in the vicinity of the proposed route crossing. Separate discussion would be needed to take place between the Trust and the applicant in terms of any formal agreements that may be required for crossing our land. Please note that as a Statutory Undertaker, the Trust would seek to challenge the use of any compulsory purchase powers to acquire rights over any of our land. Accordingly, to avoid unnecessary delay and the incurrence of excess costs, any acquisition of Trust land or rights should be arranged voluntarily.	The Canal and Rivers Trust was consulted as part of the Statutory Consultation process. The Applicant will seek to acquire all formal consents on a voluntary basis as part of the land strategy, however as the HyNet Project has been deemed a Nationally Significant Infrastructure Project the Applicant would have the ability to seek a compulsory purchase order should voluntary agreement not be reached.
General comments raised by CWCC.	The provision of a detailed Assessment of Alternatives including the three-stage appraisal process of route options for the CO2 pipeline as is advised within sections 3.4 and 3.5 of the Scoping Report is welcomed. It is however, asked that the Assessment of Alternatives also include consideration of the overall location and design of the development as well as for siting and layout of the individual Above Ground Installations (AGIs).	Chapter 4: Assessment of Alternatives (Volume II) includes a comprehensive consideration of the overall location and design of the DCO Proposed Development as well as for siting and layout of the individual AGIs.
General comments raised by FCC.	It is noted that table 3-2: 'Location and surroundings of Proposed BVS' provides details of the respective 'Parish' in which the BVS is proposed to be located. Please note that the Local Government Act 1972 renamed Welsh parish council's as 'Community Councils'. For example, the proposed Coed-y-Cra BVS is located within the 'community of Flint Town'. Please note, the Cornist BVS as proposed also lies within the boundary of Halkyn Community Council as well as Flint Town Council as it crosses the boundary and therefore this should be referenced within table 3-2.	Noted by the Applicant. References to Welsh parish council's have been changed to Community Councils in the ES. Reference to Cornist BVS mentions being within the Halkyn Community Council boundary as well as Flint Town Council with requested consultees added to the list of consultation bodies.
General comments raised by FCC.	It is noted that this project is a cross boundary project which would affect both England and Wales. Therefore, the section of the new pipeline and associated works with both the new and the existing pipeline that lie in Wales, should be considered against the Development Plan within Wales. I would draw the consultants' attention to the legislation in force in Wales as guidance and legislation are different for Wales than for England and this is not reflected in the submitted Scoping Report as there is very little reference to the relevant Welsh guidance/policy/legislation. The submitted environmental statement will therefore need to have regard for Planning Policy Wales (PPW) (edition 11, 2021) and any relevant legislation that is in force in Wales. Also the application should have regard to the respective and relevant policies within the Flintshire Unitary Development Plan (UDP). The Flintshire deposit Local Development Plan (LDP) is currently under examination. However, by the time this application is submitted, the Flintshire LDP could be adopted and therefore the applicant and its consultants should be made aware of the LDP policies which may be in place when the application is submitted and determined. The Development Plan for the section of the project that lies within Wales comprises Planning Policy Wales, (PPW) (edition 11, 2021) relevant Technical Advice Notes and also the Flintshire UDP or the Flintshire LDP, should it be adopted when this application is submitted, and any supplementary planning documents that may be relevant to the project.	The ES, including the assessments presented in Technical Chapters 6-19 (Volume II) has considered, where appropriate, the latest applicable plans and policy for both England and Wales.
Consultees	It is noted that a list of statutory and non-statutory consultees has been provided in the Scoping Report at paragraph 4.2.1. It is suggested that Network Rail should be added to this list and consulted as the proposed and existing pipeline may affect their assets. Likewise the same is suggested in relation to the utility companies that have assets in the area of the proposed and existing pipeline. The County Council has consulted the Clwyd-Powys Archaeological Trust (CPAT) and their response is summarised below. CPAT and Cheshire Archaeology should also be added to the list along with the Parish/Community Councils which the pipelines; both existing and proposed could potentially effect. It would also be advisable to consult neighbouring authority Denbighshire County Council due to the proximity to the Flintshire/Denbighshire County Council borders and the potential impact on the communities of Denbighshire. It is also noted that Cheshire West and Chester Council includes the former local authority area of Chester City Council which now no longer exists.	Network Rail, Denbighshire County Council, CPAT, Cheshire Archaeology, Community and Parish Councils along the route and utility providers who have assets in proximity to the DCO Proposed Development have been added to the list of statutory and non-statutory consultees, and were consulted as part of the Statutory Consultation process as detailed within the HyNet DCO Consultation Report (Document ref: D.5.1).
Common Land	Sections of the pipeline potentially pass though Common Land of Halykn and that under the Commons Act 2006 works may require consent to construct works on common land under Section 38. A Wales specific guidance note is contained in the following link: https://gov.wales/sites/default/files/publications/2019-01/commons act-2006-guidance-on-applying-under-section-38.pdf	The Applicant has reviewed this area and the guidance note recommended and concluded that the location where the pipeline infrastructure is to be located is not common land but the land which the common land rights are attached to, i.e. it will be the owner of this land that can exercise the rights on the common land. Therefore, as the land is not common land there is no requirement or necessity to make any application pursuant to the Commons Act 2006 to undertake any works or development on that land.
General comments raised by FCC (same as 1.18?)	The specialist consultants commissioned for each respective section of the Environmental Statement should therefore be made aware that regard will need to be made for the development plan in Flintshire for the elements of the project that lie within Wales and any relevant legislation or guidance which should be considered.	Noted, the ES has considered the development plan in Flintshire for the section of the DCO Proposed Development that lies within Wales and each Technical Chapter 6-19 (Volume II) of the ES includes a list of relevant Welsh legislation and guidance that has been considered in the EIA.

	There should be careful consideration of what comprises the 'project' for the purposes of the EIA to ensure compliance with the EIA Regulations. It would not be an advisable approach to disaggregate what is substantively a single project. NRW is concerned at present that the development in the proposed DCO application is dependent, and to an extent predicated on, further infrastructure which will not be covered by the DCO and subject to a separate future application. Further, the applicant has indicated that the project entails a wider set of related works for which additional future consents will be required. As a result, NRW is not presently in a position to advise on whether the applicant has correctly addressed the scope of the project. We note that the applicant is proposing that an 'intra-project' assessment will be carried out for the proposed development with consideration of other aspects of the wider project by way of cumulative assessment. NRW advise that the applicant's general approach of assessing the 'proposed development' for which the DCO is being sought as a distinct project could be acceptable in principle if the applicant can demonstrate that the proposed development can be justified on its own merits, and is not dependent on the other parts of the project. Whether this approach is correct is a judgment for the planning decision maker (Secretary of State for the DCO). Furthermore, if the applicant's approach is accepted by the SoS we advise that works subject to other consents would need to be considered cumulatively within the EIA and should not be scoped out because they do not fall within the DCO.	The Applicant has engaged with NRW, Welsh Government, the respective Local Authorities and legal advice has been sought on the strategy to the EIA to ensure that the approach taken is legally robust and will assist decision makers, consultees and the public understand the environmental effects of the various components of this strategically important development. Due to the complex nature of the development it is not possible to obtain consent for all of the elements associated with the carbon dioxide transportation and storage element of the Project under a single consenting regime. This is further complicated by the fact that the Planning Act 2008 enables a DCO in England to authorise construction of associated development but it does not allow this in Wales. Furthermore, the definition of what constitutes associated development is not explicit within the Act. The consenting strategy proposed is designed to align with the legal inability to include associated development within a DCO in Wales. The delineation drawn on what is and is not part of the NSIP and what forms associated development has therefore been undertaken to ensure that the consenting strategy respects the devolution settlement and does not inappropriately seek to include matters in the DCO which are properly associated development. Consent will be sought from the Welsh local planning authority for those elements which should be consented under the Town and Country Planning (Environmental Impact Assessment) Regulations 2017, while the other aspects of the Project will comply with their respective regulations, such as the ES for the TCPA Proposed Development complying with the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017. The EIA regulations have their origin in EU law through the Environmental Impact Assessment Directive (the Directive). The case law on interpretation of the regulations have their origin in EU law through the Environmental Impact Assessment Directive (the Directive). The case law on int
Design	Searches based on your enquiry have identified that there is apparatus in the vicinity of your enquiry which may be affected by the activities specified. Please let us know whether Plant Protection can provide you with technical or other information that may be of assistance to you in the determination of the application. The apparatus that has been identified as being in the vicinity of your proposed works is: - National Gas Transmission Pipelines and associated equipment - Electricity Transmission overhead lines - Above ground electricity sites and installations	During the design development process, existing utilities and infrastructure was considered and avoided wherever practicable. The Applicant consulted with Cadent in relation to their assets and has avoided these wherever practicable. Where the DCO Proposed Development would cross existing utilities, works would be undertaken in such a way that both assets are protected and further engagement during detailed design and/or construction would be undertaken. No diversions of existing utilities are proposed.
Design	A number of construction / operational constraints highlighted by NG in vicinity of their assets / cabling / crossings / health and safety.	During the design development process, existing utilities and infrastructure was considered and avoided, wherever practicable. The Applicant consulted with the National Grid in relation to their assets and has avoided these wherever practicable. Where the DCO Proposed Development would cross existing utilities, works would be undertaken in such a way that both assets are protected and further engagement during detailed design and/or construction would be undertaken. No diversions of existing utilities are proposed.
Design	The applicant should take due cognizance of the nearby Capenhurst nuclear licensed site, operated by Urenco UK Ltd. Capenhurst is situated within the applicant's "5 km Buffer of Scoping Boundary" defined in "Appendix A – Supporting Figures (Part 3 of 3)" of the Scoping Report (the site centre point for Capenhurst for land use planning purposes is SJ365745); and The applicant should liaise with Urenco UK Ltd as appropriate.	During the statutory consultation process, the Applicant consulted with ONR in relation to their assets. The DCO Proposed Development is not anticipated to directly or indirectly impact the site.
Consultation	Royal Mail and its advisor BNP Paribas Real Estate have reviewed the EIA Scoping consultation document (Revision 03) dated June 2021. This infrastructure proposal has been identified as having potential for impact on Royal Mail operational interests. However, at this time Royal Mail is not able to provide a consultation response due to insufficient information being available to adequately assess the level of risk to its operation and the available mitigations for any risk. Therefore, Royal Mail wishes to reserve its position to submit a consultation response/s at a later stage in the consenting process and to give evidence at any future Public Examination, if required.	During the design process, the Applicant consulted with Network Rail. No direct impacts upon Royal Mail assets has been identified in the EIA.
	Having reviewed the EIA Scoping Report, it is noted that there is no reference to acknowledging the need to avoid impacts on SPM network. There is a section Special Crossings in Chapter 3 where para 3.6.22 refers to road and railway crossings. It is suggested that this para also makes reference to other critical services including the electricity network that will be crossed and what measures there will be to avoid such infrastructure.	During design development, data on the presence and location of existing utilities including the electricity network was obtained and mapped and the DCO Proposed Development has avoided these wherever reasonably practicable. Where crossing existing utilities including the electricity network was unavoidable, the construction method will ensure that impacts upon the existing asset are avoided. This includes using trenchless crossing techniques, where practicable. The Applicant has undertaken consultation with SP Energy Networks to discuss crossing locations and provide typical crossing plans and methods. Crossings will be undertaken in consultation with Electricity district network operators following industry and HSE guidance (i.e. HSE publication GS6, 'Avoiding danger from overhead power lines' or and HSG47 'Avoiding danger from underground services').
Design Safety	Network Rail's comments on the EIA scoping option in the Flintshire CC consultation referred to the impact of the working proposals on the security of railway infrastructure with specific reference to level crossings. From a review of the DCO application, Network Rail records the identified scoping area south of the River Dee, between Queensferry and Sandycroft, is within a coal mining area and accordingly due consideration should be given on the potential for interaction between the proposed pipeline works, the coal mine workings, and the railway line. In addition, NR has record of two shafts (or wells) located south of Aston, near Shotton, that are located in close proximity to the railway line and the proposed pipeline development area. In the planning document it states that the design for the proposed development and temporary works are not complete which as and when they are, would need to be reviewed by Network Rail to ensure there is no impact to any earthwork assets. Consideration should be given to ensure that the construction and subsequent maintenance can be carried out without adversely affecting the safety of, or encroaching upon Network Rail's adjacent land. In addition security of the railway boundary will require to be maintained at all times. In any event you must contact Network Rail's Asset Protection Engineers as soon as possible in relation to this scheme on the following e-mail address	During the design process, the Applicant consulted with Network Rail in relation to the safety of the construction and operation of the DCO Proposed

Trenchless installations	The relevant geotechnical reporting stages will need to demonstrate as a minimum (although not limited to): a) An understanding of the attendant geotechnical risks to the road infrastructure with respect to the selection of appropriate method(s) of installation (e.g. consideration of cover: diameter ratio, existing underground service utilities and structures, impact of works, etc). The geotechnical risks are to be captured in a risk register in tabulated format, with a demonstration of how each of the risks are being eliminated or mitigated. b) An understanding of the ground conditions, with a realistic ground model presented. Provide drawings showing the details of the design alignments (vertical and horizontal) of the proposed service route, the affected HE assets and the interpreted geological boundaries. c) An assessment of the likely magnitude of settlement (including differential settlement) or heave and its implication on the affected asset. d) An assessment of the stability of launch / reception pits and stability of the bore itself – in as much as they affect the stability and integrity of the SRN and Highways England assets. e) Options and selection of an appropriate trenchless installation technique with justification and recognition by the installation contractor that the method of installation and means of monitoring and control (warning / trigger thresholds) detailed in the GDR can be achieved. f) Means of monitoring slurry pressures and returns to demonstrate how the risk of blow-out and / or slurry loss is being managed. g) A contingency plan for recovery of any problems related to the trenchless operation, such as might occur from excessive ground movement, slurry escapes into road drainage, drill becoming stuck, etc. h) Provide as-built records comprising vertical and horizontal profiles of the service crossing and construction notes in the GFR including details of any problems encountered during the works and procedures used to resolve the problems.	Noted by the Applicant. This level of geotechnical design will be developed during Detailed Design, which will be advanced pursuant to the Requirements of the Draft Development Consent Order. All currently available geotechnical information has been taken into account, where appropriate, in the development of the design and the assessment of likely effects upon the environment as reported in the ES. Chapter 3: DCO Proposed Development (Volume II) describes all aspects of geotechnical related design. The Register of Environmental Actions and Commitments (REAC) (Document Reference: D.6.5.1) contains all requirement mitigation required to avoid or reduce the potential effects relevant to geotechnical considerations, based upon the current design and geotechnical information available.
General Safety Concerns		The pipeline will transport CO2 which is non-flammable and consequently there is no risk of a fire or explosion occurring. A safety evaluation has been performed in accordance with the UK standard covering the design of onshore steel pipelines (PD8010-1). This safety evaluation confirmed that the risk to the public is as low as reasonably practicable. All infrastructure will be subject to safety cases as required by HSE legislation (for example, the Pipeline Safety Regulations), which also requires periodic inspection. Oil and gas operators are used to ensuring the highest safety standards in their operations and the safety of the CCS infrastructure will continue to be a primary focus. The Applicant has operated the existing pipeline infrastructure associated with the Point of Ayr terminal and the offshore reservoirs for many years. The infrastructure is in good condition following regular inspection and maintenance activities and the storage reservoirs are well understood. The CO2 pipeline and storage infrastructure will be designed, constructed, operated and maintained and regularly inspected in compliance with all relevant engineering codes and standards, and all current and any future developments of UK safety / major accident and environmental regulations (including the Pipeline Safety Regulations, The Storage of Carbon Dioxide Regulations, and EIA Regulations). This will ensure and demonstrate that the highest standards of safety and integrity continue to be achieved and that the risk of any potential leaks has been fully assessed and demonstrated to be acceptable. This approach will be subject to the ongoing process of review and acceptance by the relevant Regulators and Authorities.
Air Quality Construction and Operation – Air quality impacts arising from the TCPA Proposed Development (excluding Block Valve Stations (BVSs)).	The Scoping Report proposed to scope this matter out of the assessment on the basis that the TCPA Proposed Development are not included in the DCO for the DCO Proposed Development. PINS agreed that this matter could be scoped out of the ES on the basis that likely significant effects of the TCPA Proposed Development s will be considered in the EIAs supporting separate TCPA applications. PINS noted that the Applicant should ensure that the potential impacts of the TCPA Proposed Development are considered in the assessment of cumulative effects where significant effects are likely to occur.	Effects associated with the construction and operation phase of the TCPA Proposed Development are considered and reported in Chapter 19: Combined and Cumulative Effects (Volume II) of the ES.
Operation - Air quality impacts arising from the operation of the DCO Proposed Development.	quality pollutants during operation of the DCO Proposed Development. Paragraph 5.5.4 of the Scoping Report states that, based on the information currently	Air quality impacts arising from the operational traffic elements of the DCO Proposed Development have been scoped out of the assessment for the ES on the basis that the DCO Proposed Development will not result in significantly increased traffic flow or changes to traffic composition, and consequently will have no likely significant effect on air quality.
Operation – Air Quality impacts arising from venting operations.	Paragraph 3.7.8 of the Scoping Report indicated that potential effects of venting operations include the creation of an asphyxiating atmosphere and odour effects due to the presence of hydrogen sulphide (H2S) in the CO2 stream. The Scoping Report proposed to scope these matters out of the assessment on the basis that venting operations will be infrequent and controlled via operating procedures. PINS noted however that the location of some elements of the DCO Proposed Development have not been defined in the Scoping Report so the proximity of the DCO Proposed Development to potential human and/or ecological receptors remains uncertain. In addition, the operating procedures required to control emissions have not been described in the Scoping Report. Therefore, PINS did not agree that air quality effects as a result of venting operations could be scoped out of the ES. Accordingly, the ES should include an assessment of these matters or demonstrate agreement with the relevant stakeholders and the absence of a likely significant environmental effect.	A screening assessment of the air quality impacts from the venting of the CO2 pipeline and associated trace components (primarily hydrogen sulphide (H2S)) from the DCO Proposed Development has been undertaken and is presented in Appendix 6-2 - Impurities Venting (Volume III) of the ES. A quantitative assessment of effects from the following planned CO2 venting scenarios have been assessed as part of Chapter 6: Air Quality (Volume II): • Planned maintenance of the Carbon Dioxide Pipeline using Pipeline Inspection Gauges (PIGs) • Manifold venting during planned maintenance of the Above Ground Installations (AGIs)
Non-statutory sites designated for nature conservation protected species	Paragraph 5.5.1 of the Scoping Report only lists statutory sites designated for nature conservation as sensitive receptors that will be considered in the assessment of air quality. The Applicant should also provide an assessment of air quality impacts on non-statutory sites for nature conservation, including Local Wildlife Sites (LWS), Ancient Woodland and protected species where significant effects are likely to occur and cross-reference the ecology chapter (and vice-versa) where relevant.	Chapter 6: Air Quality (Volume II) of the ES has taken into account non-statutory sites for nature conservation and protected species as appropriate.
General comments raised by CRT.	The assessment should consider the waterway and its users (boaters and towpath users) as sensitive receptors to construction dust and in terms of emissions from construction traffic, plant and machinery. Such users do not appear to have been considered at this stage.	All locations of potential exposure (both short and long term) to dust are considered in the construction dust assessment. This includes the waterway and users of it, who would be assessed as 'short-term receptors' in Chapter 6: Air Quality (Volume II) in the ES. As per Section 6.5, Chapter 6: Air Quality (Volume II) of the ES, the construction dust assessment was undertaken on a worst-case location basis to help outline the appropriate level of mitigation required. The users of the canal are considered "short-term" receptors and these are assigned a low sensitivity to construction dust. However, some of the construction (e.g. trenchless digging) occurs in the vicinity of "long-term" receptors (e.g. residential properties) which are considered to be of high sensitivity to construction dust. Therefore, the results for the worst-case receptor sensitivity is presented in the ES, and the mitigation recommended will be relevant to the users of the canal.

General comments raised by CWCC.	The likely significant effects of CO2 release from emergency venting at Block Valve Stations (BVS) or Above Ground installations (AGI) on air quality has not been addressed within the Scoping Reports air quality considerations. Given that the pipeline route is not clear, it cannot at this stage be excluded, from the assessment, that a BVS would not be adjacent to residential properties and it is not clear how emergency venting would protect residents from acute levels of CO2 ingress into their property in such a scenario. The detail within Paragraphs 3.7.8 – 3.7.10 of the Scoping Report do not provide adequate information in this respect and it is advised that further detail is needed, including the number of BVS and their location in relation to residential uses, and detail of any temporary stacks at the AGIs and the protocol surrounding their use. For the above reasons it is advised that there is insufficient detail provided within the Scoping Report to be able to confidently scope out the need for air quality impacts during the developments operational phase. With the above exception the Council's Environmental Protection Unit (EPU) concur with the other detail as set out within Section 5 of the Scoping Report, on Air Quality.	A screening assessment of the air quality impacts from the venting of the CO2 pipeline and associated trace components (primarily hydrogen sulphide (H2S)) from the DCO Proposed Development has been undertaken and is presented in Appendix 6-2 - Impurities Venting (Volume III) of the ES. Assessment of effects from the following CO2 venting scenarios have been assessed as part of Chapter 6: Air Quality (Volume II): • Planned maintenance of the Carbon Dioxide Pipeline using Pipeline Inspection Gauges (PIGs) • Manifold venting during planned maintenance of the Above Ground Installations (AGIs)
General comments raised by FCC.	The Flintshire County Council Environmental Health Officer (EHO) has reviewed the Scoping Report. He would like to support the ambitions of this project. The FCC EHO is satisfied that the scoping has identified those aspects of the proposal that would be of most concern for air quality and noise during both the construction and operational phases, and as a result the most appropriate mitigation measures can be incorporated into the project design as it progresses. The FCC EHO is happy to endorse the Scoping Report.	Agreement noted.
		A Construction Dust Assessment, including ecological receptors is provided in Appendix 6.1 - Construction Dust Assessment (Volume III). This assessed that impacts on dust soiling, human health and deposition of dust on ecological sites during trenchless installation techniques. Construction stage mitigation, including measures to mitigate dust soiling and deposition of dust on ecological sites, is set out in Section 6.10, Chapter 6: Air Quality (Volume II) of the ES and the Register of Environmental Actions and Commitments (REAC), Document reference: D.6.5.1). This includes the production of a Dust Management Plan (DMP) that will be produced as part of the detailed Construction Environmental Management Plan. NRW will be consulted on the draft DMP when it is produced.
	Block Valve Stations: The only reasons for scoping these out appear to be whether they fall outside of the screening criteria already used e.g. for construction dust (para. 5.2.2) and traffic assessment (para's 5.2.3 and 5.7.10). The ES should include robust justification to explain why these have been scoped out.	The BVSs are included in the scope of the air quality assessment and are considered in Chapter 6: Air Quality (Volume III).
Screeing Distances	Any designated sites that fall within the relevant screening distances of the various construction activities should be scoped in. We agree that Connah's Quay Ponds and Woodland SSSI should be scoped in.	A Construction Dust Assessment, including ecological receptors, is provided in Appendix 6.1 - Construction Dust Assessment (Volume III). The assessment as been undertaken in accordance with the Institute of Air Quality Management (2016) Guidance which includes ecological receptors within 50m of the site boundary; or within 50m of the route(s) used by construction vehicles on the public highway, up to 500m from the site entrance(s).
Public health		The air quality assessment undertaken for the DCO Proposed Development includes mitigation set out for the construction, operational and decommissioning stages to minimise impacts to the public. The mitigation is set out in Section 6.10, Chapter 6: Air Quality (Volume II) of the ES and the REAC (Document reference: D.6.5.1). Such mitigation includes the monitoring of particulates during construction and an Odour Management Plan to minimise odours from planned operational venting.
Emmissions	demonstrate that standards, guideline values or health-based values will not be exceeded due to emissions from the installation, as described above. This should include consideration of any emitted pollutants for which there are no set emission limits. When assessing the potential impact of a proposed installation on environmental quality, predicted environmental concentrations should be compared to the permitted concentrations in the affected media; this should include both standards for short and long-term exposure. Further to assessments of compliance with limit values, for non-threshold pollutants (ie, those that have no 10 https://www.gov.uk/government/publications/cancer-risk-characterisation-methods threshold below which health effects do not	Section 6.4, Chapter 6: Air Quality (Volume II) of the ES includes elements scoped in and out of the air quality assessment. Assessment of fugitive emissions from the Carbon Dioxide Pipeline has been scoped out of the assessment as they will be negligible, due to the very low volumes of gas emitted and their immediate dispersion on release to the atmosphere. Construction traffic associated with the DCO Proposed Development is too low to trigger the need for a quantitative assessment as per EPUK/IAQM Guidance, therefore a quantitative assessment of construction traffic impacts has been scoped out. A quantitative assessment of operational traffic impacts has been scoped out as the operation of the DCO Proposed Development will not result in significantly increased traffic flow or changes to traffic composition, and consequently will have no likely significant effect on air quality. A qualitative construction dust and associated plant emissions assessment has been undertaken and is reported in Chapter 6: Air Quality (Volume II) of the ES. A quantitative assessment of effects from the following planned CO2 venting scenarios have been assessed as part of Chapter 6: Air Quality (Volume II): • Planned maintenance of the Carbon Dioxide Pipeline using Pipeline Inspection Gauges (PIGs) • Manifold venting during planned maintenance of the Above Ground Installations (AGIs)

emissions	When considering baseline conditions (of existing air quality) and the assessment and future monitoring of impacts, these should include: • consideration of impacts on existing areas of poor air quality e.g. existing or proposed local authority Air Quality Management Areas (AQMAs) or Clean Air Zones (CAZ). The applicant should demonstrate close working/consultation with the appropriate local authorities • modelling using appropriate meteorological data (i.e. from the nearest suitable meteorological station and include a range of years and worst-case conditions) • modelling taking into account local topography, congestion and acceleration	Section 6.6, Chapter 6: Air Quality (Volume II) of the ES includes the air quality baseline conditions for the DCO Proposed Development which included consideration of AQMAs. Section 6.3, Chapter 6: Air Quality (Volume II) of the ES sets out consultations undertaken to date. Construction traffic associated with the DCO Proposed Development is too low to trigger the need for a quantitative assessment as per EPUK/IAQM Guidance, therefore a quantitative assessment, and associated modelling, of construction traffic impacts has been scoped out. A quantitative assessment, and associated modelling, of operational traffic impacts has been scoped out as the operation of the DCO Proposed Development will not result in significantly increased traffic flow or changes to traffic composition, and consequently will have no likely significant effect on air quality. Appendix 6.2: Impurities Venting (Volume III) presents a screening assessment undertaken to assess impacts of hydrogen sulphide during planned operational venting. The modelling used a range of meteorological data (Pasquill Stability Classes A to G) to show the range of concentrations (including worst case) that could occur during the various venting scenarios. Further details are provided in Appendix 6.2: Impurities Venting (Volume III).
Climate Resilience Construction – Vulnerability of construction site and workers to climate change	The Scoping Report proposed to scope this matter out of the assessment on the basis that climate resilience measures included within a Construction Environmental Plan (CEMP) will result in a low vulnerability of the construction site and workers to climate change. PINS agreed that this matter could be scoped out of the EIA on the basis that the construction phase remains 18 months and climate resilience measures will be described in the ES.	Noted by the Applicant.
Operation – Vulnerability of Carbon Dioxide Pipeline to change in rainfall, temperature, drought, wind, humidity, storm surge and storm tide	The Scoping Report proposed to scope this matter out of the assessment on the basis that the CO2 pipeline exhibits low vulnerability to change in rainfall, temperature, drought, wind, humidity, storm surge and storm tide due to climate change. PINS agreed that these matters can be scoped out of the EIA.	Noted by the Applicant.
Operation – Vulnerability of AGIs and BVSs to changes in humidity, drought, storm surge and storm tide.	The Scoping Report proposed to scope this matter out of the assessment on the basis that Above Ground Installations (AGI) and Block Valve Systems (BVS) exhibit low vulnerability to change in humidity, drought, storm surge and storm tide due to climate change. PINS noted that flood risk will be assessed in another section of the ES and therefore agreed that these matters can be scoped out further assessment in this section of the ES.	Noted by the Applicant.
General comments raised by Natural England	The England Biodiversity Strategy published by Defra establishes principles for the consideration of biodiversity and the effects of climate change. The ES should reflect these principles and identify how the development's effects on the natural environment will be influenced by climate change, and how ecological networks will be maintained. The Applicant may also want to have regard to the Institute of Environmental Management & Assessment (IEMA) EIA Guide to: Climate Change Resilience and Adaptation (2020) The NPPF requires that the planning system should contribute to the enhancement of the natural environment 'by establishing coherent ecological networks that are more resilient to current and future pressures' (NPPF Para 174), which should be demonstrated through the ES.	Natural England's comment is noted. This is considered within Chapter 9 - Biodiversity (Volume II).
Cultural Heritage		
Construction and Operation - Cultural heritage impacts arising from TCPA Proposed Development (excluding Block Valve Stations (BVS))	The Scoping Report proposed to scope this matter out of the assessment on the basis that the TCPA Proposed Development are not included in the DCO for the Newbuild Infrastructure Boundary. PINS agreed that this matter can be scoped out of the ES on the basis that likely significant effects of the TCPA Proposed Development will be considered in EIAs supporting separate TCPA Applications. PINS did note that the Applicant should ensure that potential impacts of the TCPA Proposed Development are considered in the assessment of cumulative effects where significant effects are likely to occur.	The TCPA Proposed Development is assessed within a separate ES, submitted as part of Planning Applications submitted to Flintshire County Council. Cumulative effects resulting from a combination of the TCPA and DCO Proposed Developments have been considered as part of the EIA. Please refer to Chapter 19 - Combined and Cumulative Effects of the ES for further information.
Construction and Operation – Direct physical impacts and impacts on the setting of World Heritage Sites, Registered Parks and Gardens and Registered Battlefields.	The Scoping Report proposed to scope this matter out of the assessment on the basis that there are no World Heritage Sites, Registered Parks and Gardens or Registered Battlefields located inside, or within 2km of the Newbuild Infrastructure Boundary. PINS agreed that this matter can be scoped out of the ES. PINS did note however, that the Applicant should ensure that the study area distances reported in the ES are consistent with those used in the baseline assessment (for example, 1km study area).	Chapter 8: Cultural Heritage (Volume II) of the ES states the Study Area for designated heritage assets consists of a 1 km buffer around the Newbuild Infrastructure Boundary. The Study Area for non-designated heritage assets and previous archaeological investigations consists of a 500 m buffer around the Newbuild Infrastructure Boundary. These have been consistently applied.
Operation - Direct physical impacts and impacts on the setting of Grade II Listed Building Ferry Bank Farm (Record Number 85249)	The Scoping Report proposes to scope this matter out of the assessment on the basis that all direct physical impacts would only be incurred during construction and there would be no change in setting during operation as the CO2 pipeline is located underground. The Inspectorate agrees that this matter can be scoped out of the ES on the basis that AGI, BVS and the CP System are not located within 1km of the Grade II Listed Building Ferry Bank Farm.	Noted by the Applicant.
	The Scoping Report proposes to scope this matter out of the assessment on the basis that direct physical impacts would only be incurred during construction and there would be no change in setting during operation as the CO2 pipeline is located underground. The Inspectorate agrees that this matter can be scoped out of the ES on the basis that AGI, BVS and CP Systems are not located within 1km of the Chester Canal CA.	Impacts to the setting of the Chester Canal Conservation Area during operation have been assessed in Chapter 8: Cultural Heritage (Volume II) as the Conservation Area is within 1km of Rock Bank BVS.
Operation – Impacts on the setting of designated heritage assets within 500m of the CO2 pipeline	The Scoping Report proposed to scope this matter out of the assessment on the basis that the CO2 pipeline would be located underground and there would be no change in setting during operation of the Newbuild Infrastructure Boundary. However, PINS noted that it was not clear from the Scoping Report how much screening vegetation would be lost and not replaced and to what extent effects would persist into operation. Therefore, PINS did not agree that this matter could be scoped out of assessment. Accordingly, the ES should include an assessment of this matter or information demonstrating agreement with the relevant stakeholders and the absence of a likely significant environmental effect.	The potential operational impacts on the setting of designated heritage assets within 500m of the DCO Proposed Development has been scoped into the assessment, and has been assessed in full in Chapter 8 - Cultural Heritage (Volume II). The potential impacts of vegetation removal on the setting of any impacted designated assets has been considered as part of the assessment. For most assets that are beyond 100m of the DCO Proposed Development and out of line of sight, the potential impacts are considered negligible and have not been considered further within the assessment.
Operation – Direct physical impacts on non-designated below ground heritage assets and paleoenvironmental deposits within the Newbuild Infrastructure Boundary (excluding BVS)	The Scoping Report proposed to scope this matter out of the assessment on the basis that direct physical impacts would only be incurred during construction of the Newbuild Infrastructure Boundary. PINS agreed that this matter can be scoped out of the ES.	Noted by the Applicant.

Construction and Operation – Direct physical impacts on non-designated below ground heritage assets and paleoenvironmental deposits at BVS.	The Scoping Report proposed to scope this matter out of the assessment on the basis that below ground heritage assets and paleoenvironmental deposits would have been removed during the installation of the Flint Connection to PoA Terminal pipeline. PINS noted that it was unclear if the easement of the Flint Connection to PoA Terminal pipeline covers the full extent of the proposed BVS. In addition, the Newbuild Infrastructure Boundary includes BVS situated along the Stanlow AGI to Flint AGI Pipeline beyond the extent of the existing pipeline between Flint Connection and the PoA Terminal. PINS therefore did not agree that direct physical impacts on non-designated heritage assets and paleoenvironmental deposits at BVS during construction of the Newbuild Infrastructure Boundary can be scoped out of the ES. Accordingly, the ES should include an assessment of this matter or information demonstrating agreement with the relevant stakeholders and the absence of a likely significant environmental effect. With regards to operation, PINS agreed that this matter can be scoped out of the ES on the basis that direct physical impacts to below ground heritage assets and paleoenvironmental deposits would only be incurred during construction of the Newbuild Infrastructure Boundary.	Direct physical impacts on non-designated below ground heritage assets and paleoenvironmental deposits at BVSs during construction has been scoped in and assessed in Chapter 8 - Cultural Heritage (Volume II). Direct physical impacts on non-designated below ground heritage assets and paleoenvironmental deposits at BVSs during operation has been scoped out.
Study Areas	PINS noted that the study area for the assessment of effects on settings should be informed using an agreed ZTV. PINS noted that the Applicant should seek agreement with the relevant consultation bodies regarding the study areas used to inform the assessment and evidence this in the ES.	Chapter 8: Cultural Heritage (Volume II) of the ES states the Study Area for designated heritage assets consists of a 1 km buffer around the Newbuild Infrastructure Boundary. The Study Area for non-designated heritage assets and previous archaeological investigations consists of a 500 m buffer around the Newbuild Infrastructure Boundary. The Study Areas were determined using professional judgement and through consultation and agreement with Historic England, Cadw, Cheshire West and Chester Council (CWCC) and Flintshire County Council's (FCC) archaeological advisors.
Temporary Construction Compounds	Paragraph 7.2.4 of the Scoping Report stated that the 1km study area used to assess the potential impacts of the Newbuild Infrastructure Boundary on the setting of above ground heritage assets was not applied to Construction Compounds due to their temporary nature. However, the Scoping Report does not specify if an alternative study area distance was adopted for temporary Construction Compounds. The Applicant should ensure that all study areas used in the assessment are clearly described and suitably justified in the ES.	Chapter 8 - Cultural Heritage (Volume II) details the study areas used for the assessment of the proposed development. The temporary construction compounds have been included within the Newbuild Infrastructure Boundary and the 500m Study Area was buffered from the Newbuild Infrastructure Boundary in order to establish both the potential for below ground remains and to identify any short-term significant effects on the setting of heritage assets during the construction phase. The proposed Study Area has been determined and confirmed through consultation with relevant stakeholders/statutory consultees.
Baseline assessment	PINs noted that the Applicant should seek agreement with the relevant consultation bodies regarding the data sources and heritage assets to be included in the assessment and evidence this in the ES.	The Applicant has engaged with all relevant consultation bodies to seek agreement on the scope, methods, and key heritage assets. Details on consultation activities is provided in Section 8.3 of Chapter 8 - Cultural Heritage (Volume II).
Impacts arising from drainage on below ground heritage assets		Chapter 8 - Cultural Heritage (Volume II) assesses the impact of alteration to drainage patterns on archaeological remains.
BVS located along Stanlow AGI to Flint AGI Pipeline	PINS noted that the Scoping Report appears to focus on the potential cultural heritage effects of BVS located along the existing pipeline between Flint Connection and the PoA Terminal. However, the Applicant should ensure that the ES also considers potential effects arising from all the BVS, including those located along the Stanlow AGI to Flint AGI Pipeline.	Chapter 8 - Cultural Heritage (Volume II) has assessed the potential impacts on below ground heritage assets and on the setting for all six BVSs within the Newbuild Infrastructure Boundary.
Technical Guidance	PINS noted that the assessment of cultural heritage should also consider technical guidance set out in Technical Advice Note (TAN) 24: The Historic Environment (Wales) where relevant in the ES. The Applicant's attention is drawn to FCC's consultation response in this regard (see Appendix 2 of the Scoping Report).	Chapter 8 - Cultural Heritage (Volume II) has considered the technical guidance set out in Technical Advice Note (TAN) 24: The Historic Environment.
Methodology - Baseline assessment	Paragraph 7.7.2 of the Scoping Report states that the baseline assessment will be informed using a Historic Environment Desk Based Assessment, site walkove survey and geophysical survey. The geophysical survey should be informed by a geomorphological survey of the study area, in the form of a desk-based geoarchaeological assessment and deposit model. The ES should include an assessment of the heritage value of hedgerows. The Applicant should seek agreement with the relevant consultation bodies regarding the approach to the baseline assessment and evidence this in the ES. The Applicant's attention is drawn to consultation responses from Historic England (HE) and FCC in this regard (see Appendix 2 of the Scoping Report).	The baseline assessment within Chapter 8 - Cultural Heritage (Volume II) has be informed by the following studies: Appendix 8.1 - Heritage Environment Desk Based Assessment (HEDBA) (Volume III); Appendix 8.2 - Gazetteer of Heritage Assets (Volume III); Appendix 8.3 - Aerial Photo and LiDAR review (Volume III); Appendix 8.4 - Geophysical Survey Report (Volume III); and Appendix 8.5 - Geoarchaeological Deposit Model (Volume III). Chapter 8 - Cultural Heritage (Volume II) has assessed the presence of hedgerows of potential heritage value. The Applicant has engaged with all relevant consultation bodies to seek agreement on the scope, methods, and key heritage assets. Details on consultation activities is provided in Section 8.3 of Chapter 8 - Cultural Heritage (Volume II).
Methodology – Impacts on the setting of heritage asset	Paragraph 7.7.2 of the Scoping Report states that the qualitative assessment of the potential effects of the Proposed Development on the setting of above ground heritage assets will be undertaken in accordance with The Setting of Heritage Assets, Historic England (HE) (2017) and Setting of Historic Assets in Wales, Cadw (2017). The application of different assessment methodologies (depending on the location of the heritage asset in question) may result in comparable impacts being assessed differently in the ES. Therefore, as advised by Cadw (see Appendix 2 of this report) it is considered that the Applicant should conduct the assessment of this matter in accordance with the methodology set out in 'The Setting of Heritage Assets', HE (2017).	As advised by CADW, Chapter 8 - Cultural Heritage (Volume II) has assessed of the potential effects of the DCO Proposed Development on the setting of above ground heritage assets in accordance with The Setting of Heritage Assets, Historic England (2017).
Methodology for setting	Cadw noted that the scoping report suggests that impacts of the Proposed Development on settings of the designated historic assets in Wales will be assessed using the methodology outlined in the Welsh Government document "Setting of Historic Assets in Wales" (2017) whilst the impact of the Newbuild Infrastructure Boundary on the settings of the designated heritage assets in Wales will be assessed using the methodology outlined in the Historic England document "The Setting of Heritage Assets" (2017). The use of similar but different methodologies to assess this impact could lead to comparable historic assets being assessed differently. As such, Cadw recommended that the impact of the Newbuild Infrastructure Boundary on the setting of all designated historic assets should be assessed using one methodology and, as the application will be determined by the UK Government, the assessment should follow the methodology outlined in the Historic England document "The Setting of Heritage Assets" (2017).	As advised by CADW, Chapter 8 - Cultural Heritage (Volume II) has assessed of the potential effects of the DCO Proposed Development on the setting of above ground heritage assets in accordance with The Setting of Heritage Assets, Historic England (2017).
Cheshire West	APAS highlighted the need for paleoenvironmental work, the archaeological potential of the land either side of the Gowy valley, the sensitivity of the land around Shotwick medieval deer park and the Scheduled Castle (the latter possibly just within the 500m buffer around the potential pipeline easement), and issues concerning the reliability of geophysical survey on the regions drift geology.	A geoarchaeological desk-based assessment has been produced (Appendix 8.5 - Geoarchaeological Deposit Model (Volume III)) to support Chapter 8-Cultural Heritage (Volume II). It draws on information obtained during the Ground Investigation works (Appendix 11.6: Phase II Geoenvironmental Ground Investigation Report (Volume III)) and historic borehole records held by the British Geological Survey. The baseline within Chapter 8 - Cultural Heritage (Volume II) has identified all heritage assets which could be impacted by the Newbuild Infrastructure Boundary (direct physical impacts and through a change in setting). The geophysical survey (Appendix 8.4 - Geophysical Survey Report (Volume III)) has considered the recorded superficial geologies and areas unsuitable for survey based on the geological conditions have be removed.
Cheshire West	Section Seven (Pages 98-111) of the Scoping Report considers Cultural Heritage issues, including archaeology and the historic built environment. APASs advice is limited to archaeological matters as responsibility for comment on the historic built environment lies with the authoritys conservation officers. With regard to archaeology, the report provides a summary of the currently available information on both designated and undesignated Heritage Assets (7.3) and outlines a methodology for the further desk-based studies that will inform the production of the report (7.7). In this section it is noted that, where access can be gained, geophysical survey and walk-over survey are likely to be utilised to identify potential areas of interest (7.7.2). It is advised that this represents an appropriate approach which will assist in defining, where necessary, a full programme of archaeological mitigation.	Noted by the Applicant.
Consultees	Para 4.2.1; it would be advisable to add Clwyd-Powys Archaeological Trust and Cheshire Archaeology to be added to the list of consultees. Para 4.2.3; although CPAT are non-statutory organisation (although they do maintain the statutory HER on behalf of Welsh Ministers), CPAT should also be consulted on the PEIR to support the statutory consultation anticipated for Q1 in 2022.	The Applicant has engaged with all relevant consultation bodies including Historic England, Cadw, the Archaeology Planning and Advisory Service (APAS) for Cheshire West and Chester, and Clwyd-Powys Archaeological Trust (CPAT) to seek agreement on the scope, methods, and key heritage assets. Details on consultation activities is provided in Section 8.3 of Chapter 8 - Cultural Heritage (Volume II) of the ES.
Study Areas	Para 7.2.2 Cadw may require a 3km setting assessment buffer for the AGI (currently 1km). This would be worth confirming directly with Cadw.	The Study Area for designated heritage assets consists of a 1 km buffer around the Newbuild Infrastructure Boundary. The Study Areas were determined through consultation and agreement with Historic England, Cadw, Cheshire West and Chester Council (CWCC) and Flintshire County Council's (FCC) archaeological advisors.
	Para 7.3.1; The National Monuments Record (NMR) should also be listed here as an additional data source.	Chapter 8 - Cultural Heritage (Volume II) of the ES has reviewed the NMR as a data source.

Scoped in/out	Table 7.1 CDAT cares with the suggestions for which parts of the development are seemed in faut of the FIA for the constructional and encretional phases	Noted by the Applicant
Scoped III/ Out	Table 7-1. CPAT agree with the suggestions for which parts of the development are scoped in/out of the EIA for the constructional and operational phases Para 7.7.1; the legislation listed in this section should also include Technical advice note (TAN) 24: The Historic Environment (May 2017) as the detailed	Noted by the Applicant. Chapter 8 - Cultural Heritage (Volume II) of the ES has considered the technical guidance set out in Technical Advice Note (TAN) 24: The Historic
Legislation	guidance for PPW and the Historic Environment (Wales) Act 2016.	Environment as the detailed guidance for PPW and the Historic Environment (Wales) Act 2016.
HEBDA methodology	Para 7.7.2; The HEBDA methodology for assessment should also include the following sources for consultation as a minimum; HER, NMR, National Library of Wales (cartographic and documentary sections + online tithe maps at https://places.library.wales/), relevant County Archives (Flintshire, Wrexham), NRW Lidar data and historic aerial photographic archives.	The Heritage Environment Desk Based Assessment (HEDBA) (Appendix 8.1, Volume III of the ES) has collated baseline evidence including data held by HER, NMR, National Library of Wales, relevant County Archives (Flintshire, Wrexham), NRW Lidar data and historic aerial photographic archives. The equivalent sources for England and Cheshire has also been consulted.
Historic Hedgerows	As part of the walkover survey a historic hedgerows survey should be completed to determine if hedgerows/field boundaries are classed as historic in accordance with the Hedgerow Regulations 1997 criteria or are otherwise important.	Chapter 8 - Cultural Heritage (Volume II) of the ES has assessed the presence of hedgerows of potential heritage value.
historic environment	Cadw, as the Welsh Government's historic environment service, has assessed the characteristics of this proposed development and its location within the historic environment. In particular, the likely impact on designated or registered historic assets of national importance. In assessing if the likely impact of the development is significant Cadw has considered the extent to which the proposals affect those nationally important historic assets that form the historic environment, including scheduled ancient monuments, listed buildings, registered historic parks, gardens and landscapes.	Noted by the Applicant.
	Cadw have also provided a response on this consultation and have provided a list of historic assets that are potentially affected by the proposal including Listed Buildings, Scheduled Ancient Monuments, and registered Historic Landscapes (letter enclosed and forwarded directly to the applicant for their information). Cadw have also noted that the Scoping Report produced by WSP has identified that whilst there will be no direct impact on any designated historic asset in Wales there is a potential impact on the settings of the above. It is therefore proposed to assess the scale of these impacts as part of the ES. Cadw concur that with this assessment	Noted by the Applicant.
General comments raised by HE.	The submitted Scoping Report proposes an appropriate study area, in our view, with a 500m buffer around the route of the buried pipeline, and a 1km buffer around the confirmed locations of above-ground installations. Within this area the applicants appear to have identified all known designated heritage assets, as well as known undesignated heritage assets. In identifying these assets, they appear to have consulted appropriate sources of information, including the National Heritage List for England and the Cheshire Historic Environment Record. In this connection, it is important that Cheshire West and Chester's Conservation staff and the Cheshire Archaeology Planning Advisory Service are involved in the development of the assessment. They are best placed to advise on local historic environment issues and priorities, how the policy or proposal can be tailored to minimise potential adverse impacts on the historic environment, and the nature and design of any required mitigation measures, together with opportunities for securing wider benefits for the future conservation and management of heritage assets. It appears from the information contained in the Scoping Report that they have been fully consulted on the work that has taken place to date, and we would expect them to continue to be so as the work proceeds.	
General comments raised by HE.	The assessment should also take account of the potential impact which associated activities (such as construction activity, servicing and maintenance, and associated traffic) might have upon perceptions, understanding and appreciation of the heritage assets in the area. Assessment should also consider, where appropriate, the likelihood of alterations to drainage patterns that might lead to in situ decomposition or destruction of below ground archaeological remains and deposits, and can also lead to subsidence of buildings and monuments.	Chapter 8 - Cultural Heritage (Volume II) of the ES has assessed temporary impacts from construction related activities and long-term and permanen impacts during operation. Chapter 8 - Cultural Heritage (Volume II) of the ES assesses the impacts on paleoenvironmental deposits within the Study Area, which includes the impact of alteration to drainage patterns on archaeological remains. This has been supported by Appendix 8.5 - Geoarchaeological Deposit Model (Volume III) which has identified the locations of paleoenvironmental deposits of value.
Approach to assessment - geophysical survey	Historic England strongly recommended that a geophysical survey should not be carried out without first carrying out a geomorphological survey of the study area. This should take the form of a desk-based geoarchaeological assessment and deposit model. This is vital in order to understand the nature of the geology and deposits in the area, which will inform the choice of the correct geophysical survey method. This area of Cheshire is low-lying and has the potential for deep deposits of peat and organic-rich alluvium, which could potentially seal former ground surfaces and archaeology which standard geophysical survey methods might not pick up, especially deposits deeper than 1 metre. That is why it is vital to carry out a geomorphological survey of the study area in order to inform the choice of geophysical technique. This may also mean that coring or test pitting may be required in advance of any geophysical work.	A review of the superficial and solid geology has been completed during the assessment of land suitable for geophysical survey across the entire Newbuild Infrastructure Boundary. This represents part of the process of identifying suitable areas for survey, including an examination of the HER data to identify areas previously assessed. A geoarchaeological desk-based assessment has been produced (Appendix 8.5 - Geoarchaeological Deposit Model (Volume III)) to support Chapter 8 - Cultural Heritage (Volume II). It draws on information obtained during the Ground Investigation works (Appendix 11.6: Phase II Geoenvironmental Ground Investigation Report (Volume III)) and historic borehole records held by the British Geological Survey. Due to time constraints for surveys, the geoarchaeological desk-based assessment was unable to be completed before the commencement of the geophysical survey. The survey was constrained due to crop rotations which limits the opportunity.
Approach to assessment - Geoarchaeological/paleoenvironmental	Peat and organic-rich alluvium are valuable historic environment resources due to their potential to contain paleoenvironmental information (plant remains, pollen, insects etc.). Such burial environments are susceptible to degradation and geochemical changes including the dewatering of surrounding areas (mentioned in section 3.6.7). A preservation and paleoenvironmental assessment should be carried out on any such deposits to assess their potential before any dewatering in the study area.	A geoarchaeological desk-based assessment has been produced (Appendix 8.5 - Geoarchaeological Deposit Model (Volume III)) to support Chapter 8 Cultural Heritage (Volume II). It draws on information obtained during the Ground Investigation works (Appendix 11.6: Phase II Geoenvironmental Ground Investigation Report (Volume III)) and historic borehole records held by the British Geological Survey.
Heritage landscapes	You should consider whether there is land in the area affected by the development which qualifies for conditional exemption from capital taxes on the grounds of outstanding scenic, scientific or historic interest. An up-to-date list may be obtained at www.hmrc.gov.uk/heritage/lbsearch.htm.	The list has been checked and none of the properties are close enough to be impacted by the DCO Proposed Development.
Cheshire Canal	The canal corridor is over 200 years old infrastructure and within the designated Cheshire Canal Conservation Area. The canal itself should also be considered as a non-designated heritage asset in its own right. Canal Bridge 135 Croughton Bridge is also a listed structure (not Trust owned) as well as listed Backford Railway Bridge No.131A (not Trust owned). There is also the Scheduled Ancient Monument of the Chapel at Chapel House Farm in the vicinity of the canal. The EIA will need to include an assessment of these heritage assets and archaeology impacts associated with the excavation works and the impact of the proposed works on the heritage designations and their setting. The EIA will need to set out how the proposals would impact these in terms of physical and visual impacts on views, setting and appearance. Any impacts would need to be mitigated accordingly to avoid harm to the significance of the assets	assessment has examined direct physical impacts on assets and impacts as a result in changes in setting. The assessment has also included an assessment on the setting of each designated heritage asset during the operational phase.
General comments raised by CWCC.	The Council's Conservation and Design Unit and Archaeologist are in general agreement with the scope and assessment of Cultural Heritage matters, including archaeology and the historic built environment as set out within Section 7 of the Scoping Report.	Noted by the Applicant.
General comments raised by CWCC.	It is noted that locations including both above ground installations are currently indicative, and design is at an early stage. As such, based on the indicative location map submitted (Appendix 3-2), it is advised that there is unlikely to be any direct harm to designated heritage assets. Siting and design will however need careful consideration and it is advised that the environmental impact assessment include and take in to account long range views across the landscape, including those from Helsby Hill.	Long range views from elevated assets across the landscape, including Helsby Hill located south-east of the eastern end of the scheme, have been considered within the assessment. The impact of the DCO Proposed Development on the views was considered to be negligible given the distance and the siting of the proposed Stanlow and Ince installations near large manufacturing complexes and infrastructure. As a result the impacts were no considered further.

General comments raised by CWCC.	The Council's Archaeologist advises that the approach proposed taken including the methodology for the further desk-based studies and scope of the geophysical survey and walk over surveys that will inform the production of the report would be an acceptable approach.	Noted by the Applicant.
Biodiversity Ecological impacts arising from the existing pipeline works (excluding BVS	The Inspectorate notes that the dDCO would not seek consent for any works on the existing pipeline works other than the BVS. The Inspectorate therefore agrees that these matters can be scoped out of the ES. However, the Applicant should ensure that the potential impacts of the Existing Pipeline Works are considered in the assessment of cumulative effects where significant effects are likely to occur.	PINS comments are noted; cumulative effects have been considered as part of the EIA. Please refer to Chapter 19 - Combined and Cumulative Effects of the Final ES for further information.
Operation - Effects on international and national designated sites, habitats of conservation importance, watercourses and waterbodies, amphibians, reptiles, terrestrial invertebrates, aquatic macroinvertebrates, macrophytes, hazel dormouse and other mammals not subject to legal protection.	The level of information in the Scoping Report on activities during operation/maintenance of the Proposed Development is limited. The mitigation measures likely to relied on to avoid significant effects have not been described. In the absence of such information the Inspectorate is not in a position to agree to scope these matters from the assessment. Accordingly, the ES should include an assessment of these matters or the information referred to demonstrating agreement with the relevant stakeholders and the absence of a likely significant environmental effect.	Chapter 9: Biodiversity (Volume II) has included an assessment of operational / maintenance effects of the DCO Proposed Development.
Study Area size	This section presents a range of study areas for the desk and survey area. However, it is not clear what the justification is for the extents listed. The ES must provide an explanation as to why the extent of the various study areas is sufficient to capture the zone of influence of the Proposed Development. Where professional judgement has been relied on, some explanation of the reasoning behind that judgement should be provided.	Chapter 9: Biodiversity (Volume II) provides justification for the various Study Areas applied to receptors, ensuring that sufficient data is collected across the zone of influence of the DCO Proposed Development. Where professional judgement has been applied this has been explained and justified within Chapter 9: Biodiversity (Volume II) and / or its associated appendices (Appendices 9-1 to 9-11 (Volume III).
List of sites covered in the desk study	As identified by the Canal and River Trust, PINS noted that the ES should include non-statutory sites as receptors in assessment of ecological effects.	A full assessment of the potential impacts to non-statutory sites is included within Chapter 9: Biodiversity (Volume II) of the ES.
List of sites covered in the desk study	The Canal and River Trust advised that the marginal green corridor could be affected by the DCO Proposed Development. Invasive Non-Native Species (INNS) should not be spread. New planting along canal corridor needs to be agreed with the Trust.	The Applicant notes the Canals and River Trust's request to be engaged where planting along the canal corridor is to take place to allow for agreement between the Applicant and the Trust. The prevention of spread of INNS will be detailed within a Biosecurity Method Statement to be prepared at detailed design, with a commitment to the production of the document captured within the REAC (Document Reference: D.6.5.1).
List of sites covered in the desk study	CWCC noted that Table 8.4 of the Scoping Report, which details elements scoped in or out of further assessments, does not consider the Dee Estuary or Mersey Estuary international designations and it is not clear why this is, when the project covers the Dee Estuary area and is adjacent to the Mersey Estuary. Birds associated with these designations regularly use farmland and meadows nearby eg. Ince and Gowy Meadows, Lache Meadows and even sites with hard-standing on which replicate shingle beach conditions. The project red line encompasses some of these areas.	An assessment of potential impacts to these sites and other international designated sites has been included within Chapter 9: Biodiversity (Volume II) of the ES and within the Habitats Regulations Assessment (HRA) (Document reference: D.6.5.6) for the DCO Proposed Development.
List of sites covered in the desk study	It has not been stated with the Scoping Report that a Habitat Regulations Assessment (HRA) will be carried out and this should be included for clarity. This should include any potentially functionally linked land, as birds using the Mersey and Dee Estuaries can use sites quite far inland. Air quality impacts on designated sites should also be considered, during construction and operation. A HRA will need to be done for the overall project and also for different sections and phases, depending on how the project is taken forward.	A HRA (Document reference: D.6.5.6) has been prepared and accompanies the DCO Application, detailing any potential Likely Significant Effects upon international designated sites as a result of the DCO Proposed Development and cumulatively with the wider Project. Where necessary, the assessment includes requirements for mitigation to ensure qualifying features of internationally designated sites are protected.
Bird Surveys	Table 8-1 states that surveys would be carried out in specifically selected transects but does not explain how these transects would be selected. The advice from Natural Resources Wales (NRW), Natural England (NE), CWCC and FCC identify potential effects on functionally linked land used by birds associated with the Dee Estuary Special Protection Area (SPA)/Ramsar site/Site of Special Scientific Interest (SSSI) and the Mersey Estuary SPA/Ramsar site/SSSI. The baseline data in the ES should include bird surveys for the affected land; the Applicant is advised to seek agreement from the relevant stakeholders on the extent, location and methodology of any bird surveys.	The Applicant has provided justification and reasoning for the selection of bird transect locations within Chapter 9: Biodiversity (Volume II) of the ES. Broadly, transect locations have been chosen on the basis of known, or considered, areas of bird activity/concentration and areas that will be impacted by the DCO Proposed Development. Transect locations have been discussed with relevant stakeholders, of which, details will be captured within the SoCG. The results of bird surveys have been included within Chapter 9: Biodiversity (Volume II) of the ES alongside details of consultation with relevant stakeholders on the extent, location, and methodology of bird surveys.
Best practice guidelines	The Chartered Institute of Ecology and Environmental Management (CIEEM) has recently published an updated list of good practice guidance. The Applicant is encouraged to derive their methodologies from the documents included on this list.	The Applicant confirms that the good practice guidance list has been reviewed and reference to best practice guidance and methodologies from that list have been provided within Chapter 9: Biodiversity (Volume II) of the ES and enacted through Site survey works. Any deviations from such methodologies have been fully detailed and justified within Chapter 9: Biodiversity (Volume II) of the ES.
BNG	PINS noted that an assessment of net gain in the ES should be based on an appropriate metric that allows clear understanding of how gains and losses have been calculated. CWCC advised that all habitats should be included within the BNG calculations.	A Biodiversity Net Gain (BNG) Assessment (Document reference: D.6.5.12) based on Defra BNG Metric 3.0, has been used to inform and quantify the change in biodiversity value of land within the Newbuild Infrastructure Boundary before and after the construction of the DCO Proposed Development. The Applicant notes CWCC's comment regarding inclusion of all habitats within the BNG assessment. All habitats have been assessed as part of the BNG assessment for the DCO Proposed Development.

Likely significant effects	PINS noted that a number of potentially significant effects from DCO Proposed Development do not appear to have been addressed. The ES must either address them or demonstrate that their exclusion has been agreed with relevant stakeholders. -Section 16 of the Scoping Report refers to potential effects on groundwater as a result of de-watering during construction, but this is not identified as a potential effect on ecological receptors. -Impacts associated with the potential introduction or spread of invasive non-native species. -Impacts associated with the potential introduction or spread of invasive non-native species. -Impacts associated with the potential introduction or spread of invasive non-native species. -Vibration caused by the drilling of the cable route under the River Dee which could affect migratory fish species which are features of the Dee Estuary SAC. -Potential run off from spoil from the trench excavations which could affect the Dee Estuary SAC/Ramsar site/SPA/SSSI. The Applicant is advised to seek agreement with Natural Resources Wales (NRW), Natural England (NE), CWCC and FCC on the appropriate receptors and effects to be included in the assessment of the effects of the DCO Proposed Development.	The Applicant confirms that a full list of potential effects has been assessed within Chapter 9: Biodiversity (Volume II) of the ES for the DCO Proposed Development, which developed as details of the DCO Proposed Development were refined and the design and construction methods progressed. Chapter 9: Biodiversity (Volume II) of the ES provides clarity over those items included within the assessment and include where any effects have been scoped out, the justifications for being scoped out, and agreement from stakeholders, where applicable. Consideration of habitats functionally linked to internationally designated sites have been addressed within Chapter 9: Biodiversity (Volume II) as well as the HRA (Document reference: D. 6.5.6) for the DCO Proposed Development. This had been considered at an early stage as part of the scoping of surveys and the Zones of Influence of the DCO Proposed Development. The Applicant has commenced and will continue to proceed with liaison and discussions with key stakeholders including NE, NRW, FCC and CWCC. To date all parties have been advised of the scope of survey works and assessment proposed to inform the preparation of the EIA and HRA. These discussions will continue throughout the project lifecycle. Discussions with stakeholders are captured within the appropriate SoCGs. The Dee Estuary SSSI/SPA/Ramsar and floodplain fields have been subjected to wintering and breeding bird surveys, and any potential impacts to species of relevance have been addressed within Chapter 9: Biodiversity (Volume II) and the HRA for the DCO Proposed Development. The Applicant recognises the importance of the Deeside and Buckley Newt Sites SAC. Efforts have been made, and will continue to be made, to reduce the impact on terrestrial and aquatic habitats, particularly in respect of great crested newt, through micro siting and habitat avoidance exercises as well as the use of District Level Licensing in England. Ecological surveys and historical records have been be used to inform Chapter 9: Biodiversi
Likely significant effects	Mollington parish Council noted concerns in relation to local wildlife and GCN.	
Effect of access restrictions on baseline assessment	PINS noted that the Scoping Report states that where access restrictions prevent a full ecological baseline assessment "The precautionary principle will assume a 'reasonable worst-case scenario' informed by professional experience and knowledge, desk-based information and field-based evidence (where available) for any feature/receptor unable to be accessed or fully surveyed." PINS noted they were concerned that the proposed approach appears to pose a risk that the ES would not provide a robust baseline or an informed assessment of effects and likely mitigation requirements. Mechanisms are available to the Applicant to obtain access to land should this be refused. The baseline in the ES must be based on up-to-date baseline survey unless otherwise agreed with the relevant stakeholders	The Applicant confirms that every effort has been made to provide a relevant and up to date baseline to inform the EIA. This has included the use of appropriate land access powers, where required, in order to provide the most robust information and data with which to inform the EIA. However, areas of land were unable to be accessed for completion of field surveys, due to physical inaccessibility (e.g. physical barriers) of land through continued refusal of access by landowners as well as concerns for surveyor health and safety. As such it has been necessary to apply a precautionary approach to assessment and mitigation in the absence of field survey data (in line with CIEEM guidance). Where a precautionary approach has been applied this has been identified within Chapter 9: Biodiversity (Volume II) and its supporting appendices. In such cases, the employment of a reasonable worst-case scenario (for example, assumed presence) has been applied and is considered sufficient to inform this impact assessment. Limitations are clearly presented within Chapter 9: Biodiversity (Volume II) and have been discussed with relevant stakeholders including Flintshire County Council, Natural Resources Wales, Natural England and Chester and Cheshire West Council. The details of any liaison and agreements made with relevant stakeholders will be captured within the SoCG.
General comments raised by CRT.	Page 122 Table 8-4 includes the water courses and water bodies as a receptor to be scoped into the report, we would agree that the Shropshire Union Canal should be assessed accordingly. The canal corridor is designated as a County Wildlife site. There needs to be consideration of potential impact on this designation. As the pipeline would be going underneath the canal we consider that any potential impacts on canal habitats would be on marginal canal corridor habitats (trees, hedgelines etc). It is important that this green corridor is protected and not severed by the works	The Applicant can confirm trenchless installation techniques will be utilised to cross the Shropshire Union canal. Habitat and species surveys have been conducted along the canal corridor and its associated bankside habitats. Impacts to habitats and species identified within the Newbuild Infrastructure Boundary will be avoided and reduced as far as practicably possible. Where any impacts occur these will be mitigated and/or compensated for including minimising, as far as is reasonably practicable, the loss of mature trees – in particular around the Shropshire Union Canal (noting this is also a Conservation Area). Mitigation measures are provided within Chapter 9: Biodiversity (Volume II). Any requirement for reinstatement of habitats will be done so on the basis of achieving, as a minimum, a like-for-like basis to that lost.
General comments raised by CRT.	The canal corridor is also likely to be used for bat foraging, commuting and roosting along the waterway corridor. Canal corridors often form dark havens for bats where they can forage and roost without disturbance from light, which should be protected.	Noted by the Applicant.
General comments raised by CRT.	Regard would also need to be given to nesting birds and other protected species which may be present, either on any existing structures within the vicinity of the canal that may be disturbed and within construction compounds or where tree or vegetation removal is required.	Noted by the Applicant. The Applicant has conducted a suite of habitat and species surveys which have been used to inform of any specific mitigation requirements to ensure the protection of protected and/or notable species within and beyond the Newbuild Infrastructure Boundary.
Local Non-Statutory Sites	Local Wildlife Sites do not seem to be considered, although it is assumed this will be done at the local level. It is advised that they should be included in Table 8.4.	Local Wildlife Sites has been received from relevant consultees, and are fully considered within Chapter 9: Biodiversity (Volume II).
Protected Species	Reptile and Invertebrate surveys are not included in Table 8.1, which details the surveys to be carried out, but it may be that the decision to carry these out will be site specific. Nevertheless, they should be included in the table. They are however, detailed in Table 8.4 and are scoped in here?	Surveys for reptiles and invertebrates were not included within the suite of surveys undertaken for the DCO Proposed Development. However, these species have been considered during preparation of Chapter 9: Biodiversity (Volume II). Appropriate mitigation measures are required for these receptors, for example, construction works will be undertaken following a Precautionary Working Method Statement (PWMS) to ensure the protection of any reptiles present.
River Dee SSSI/SAC	There needs to be enough information in the ES to demonstrate that the River Dee crossing will not have impact on the SAC features principally migratory fish but also otter during construction and operation. Migratory fish can be sensitive to drilling/ piling vibrations. Ecological Surveys have been undertaken for the new Queensferry Bridge which may also be relevant to this project particularly as background information	Surveys have been undertaken to determine the fish species using the River Dee as a migratory pathway. Impacts upon migratory fish species have been considered and assessed within Chapter 9: Biodiversity (Volume II), with appropriate mitigation recommended. Additionally, potential impacts and effects upon fish species have also been detailed and considered within the Habitats Regulations Assessment (HRA) (Document reference: D.6.5.6).

Diver Dee Cleadylein fields in and ground Cooland can be used by Dee Catuary bird accompliance of the white is quite variable often depending on the ground	Noted by the Applicant A quite of hird aurique base permissed to inform Chapter Q. Diedisersity (Volume II) and support the proposition of the
	Noted by the Applicant. A suite of bird surveys have been completed to inform Chapter 9: Biodiversity (Volume II) and support the preparation of the Habitats Regulations Assessment (HRA) (Document reference: D.6.5.6) which assesses potential for Likely Significant Effects upon internationally designated sites and associated qualifying features and functionally linked land.
Talacre Dunes are noted for the presence of Natterjack Toad and its habitat. While proposals in relation to the Eni gas terminal and pipeline amendments will involve a separate planning application that will be made to Flintshire, a commitment to the continued dune management would be useful to be referenced for inclusion in the HRA and ES.	The Talacre Dunes will be considered as part of the TCPA Proposed Development, which is the subject of a separate planning application, and are therefore not included as part of the DCO Proposed Development.
The Conservation Objectives for the site reference that "Habitats located between SAC compartments are important for migration, dispersal and genetic exchange of the species, which in turn is of key importance to maintain the range and population of Great Crested Newt (GCN) in this locality". While the SAC would not be directly affected, habitats between SAC compartments would be and there needs to be reference to this within the assessment especially where GCN are recorded.	The Applicant acknowledges the potential for functionally linked land and criticality of land between SAC compartments for dispersal/movement of GCN. As the DCO Proposed Development directly and indirectly impacts habitat that may support GCN this has been assessed within Chapter 9: Biodiversity (Volume II) and the Habitats Regulations Assessment (HRA) (Document reference: D.6.5.6). Appropriate mitigation is recommended in Chapter 9: Biodiversity (Volume II).
Non-statutory Wildlife Sites are not referenced in Table 8-1; in Flintshire these are predominantly the ancient woodlands, already listed on the constraints, but wildlife sites do include other habitats as listed in Section 7 Environment (Wales) Act 2016. Section 7 – list of the habitats of principal importance for the purpose of maintaining and enhancing biodiversity. Wildlife Site information is available from Cofnod.	Non-statutory designated sites (inclusive of wildlife sites) have been considered within 1km from the Newbuild Infrastructure Boundary. The assessment of non-statutory designated sites, including relevant survey findings, is reported within Chapter 9: Biodiversity (Volume II).
In Wales, Planning Policy Wales (PPW) 11, sets out that "planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. This means that development should not cause any significant loss of habitats or populations of species, locally or nationally and must provide a net benefit for biodiversity" (para 6.4.5 refers). This policy and subsequent policies in Chapter 6 of PPW 11 respond to the Section 6 Duty of the Environment (Wales) Act 2016. WG Guidance on Biodiversity enhancement measures is due for consultation later this year. Technical Advice Note (TAN) 5: Nature Conservation and Planning as the detailed guidance for PPW (edition 11, 2021) should be added to the list of references and Flintshire UDP Policies	Noted by the Applicant.
The methodology for the field assessment of trees is in accordance with BS5837:2012 Trees in relation to Design, Demolition and Construction – Recommendations is considered satisfactory	Noted by the Applicant.
It is noted that Oakenholt Wood to the south of Flint is one the county's larger tracts of ancient woodland. The location for the proposed pipe intersects a	Where possible, Ancient Woodland has been excluded from the Newbuild Infrastructure Boundary, and the DCO Proposed Development includes the use of trenchless installation techniques to avoid and reduce adverse effects on Ancient Woodland present within the Newbuild Infrastructure Boundary. With the application of appropriate mitigation measures, there would be no residual significant effects upon Ancient Woodland as a result of the DCO Proposed Development, as reported within Chapter 9: Biodiversity (Volume II).
Natural England advises that the potential impact of the proposal upon features of nature conservation interest and opportunities for habitat creation/enhancement should be included within this assessment in accordance with appropriate guidance on such matters. Guidelines for Ecological Impact Assessment (EcIA) have been developed by the Chartered Institute of Ecology and Environmental Management (CIEEM) and are available on their website. EcIA may be carried out as part of the EIA process or to support other forms of environmental assessment or appraisal.	Noted by the Applicant. The EcIA reported in Chapter 9: Biodiversity (Volume II) has been prepared in accordance with standard guidance as provided by CIEEM, as well as other best practice documentation for surveys and assessments (as also detailed within relevant CIEEM guidelines).
The ES should thoroughly assess the potential for the proposal to affect designated sites. European sites (e.g. designated Special Areas of Conservation and Special Protection Areas) fall within the scope of the Conservation of Habitats and Species Regulations 2017 (as amended). In addition paragraph 176 of the National Planning Policy Framework requires that potential Special Protection Areas, possible Special Areas of Conservation, listed or proposed Ramsar sites, and any site identified as being necessary to compensate for adverse impacts on classified, potential or possible SPAs, SACs and Ramsar sites be treated in the same way as classified sites. Additionally land functionally linked to European sites should be assessed under a Habitats Regulation Assessment. Taking a landscape-scale approach to the consideration of impacts on the features of protected sites, including any effects on functionally linked land, aligns well with not only the National Planning Policy Framework but also Natural England's own emerging Conservation Strategy. Should a Likely Significant Effect on a European/Internationally designated site be identified or be uncertain, the competent authority (in this case the Local Planning Authority) may need to prepare an Appropriate Assessment, in addition to consideration of impacts through the EIA process.	A Habitats Regulations Assessment Appropriate Assessment has been prepared to accompany the DCO Application for the DCO Proposed Development. The HRA has assessed the potential for Likely Significant Effects upon internationally designated sites and functionally linked land, providing recommendations for mitigation where appropriate. With mitigation, the findings of the HRA conclude that the DCO Proposed Development would not adversely affect the integrity of the European Sites.
The Environmental Statement should include a full assessment of the direct and indirect effects of the development on the features of special interest within these sites (SSSI, SPA, SAC, Ramsar sites) and should identify such mitigation measures as may be required in order to avoid, minimise or reduce any adverse significant effects.	The Applicant can confirm that a full assessment of direct and indirect effects upon all relevant receptors with potential to be impacted by the DCO Proposed Development has been provided within Chapter 9: Biodiversity (Volume II).
Special Protection Areas (SPAs) are classified for rare and vulnerable birds, and for regularly occurring migratory species. The birds for which SPAs are designated may also rely on areas outside of the SPA boundary (known as functionally linked land). These supporting habitats may be used by SPA populations or come individuals of the population for some or all of the time. These supporting habitats can play an essential role in maintaining SPA bird populations, and proposals affecting them may therefore have the potential to affect the SPA	Noted by the Applicant. A suite of bird surveys have been completed to inform Chapter 9: Biodiversity (Volume II) and support the preparation of the Habitats Regulations Assessment (HRA) (Document reference: D.6.5.6) which assesses potential for Likely Significant Effects upon internationally designated sites and associated qualifying features, including bird species, and takes into account the potential for functionally linked land/habitats.
It should be noted that the proposed development may impact habitats functionally linked to the Mersey Estuary SPA/Ramsar and the Dee Estuary SPA/Ramsar. It is advised a comprehensive desk based study and bird surveys are undertaken to identify and map the locations of functionally linked habitats likely to be affected by the proposed development. It is advised that the direct loss of functionally linked habitats and/or potential offsite impacts are considered in assessing what, if any, potential impacts the proposal may have on European sites.	A suite of bird surveys have been completed to inform Chapter 9: Biodiversity (Volume II) and support the preparation of the Habitats Regulations Assessment (HRA) (Document reference: D.6.5.6) which assesses potential for Likely Significant Effects upon internationally designated sites and associated qualifying features, including bird species, and takes into account the potential for functionally linked land/habitats.
Our concerns regarding potential impacts to functionally linked habitats also apply to the mobile features of the Dee Estuary SAC and the River Dee and Bala Lake SAC. The ES should assess impacts to functionally linked habitats including an assessment on potential impacts to migratory routes and spawning habitats for the SAC mobile features and potential impacts to air and water quality.	The Applicant can confirm that Chapter 9: Biodiversity (Volume II) and the Habitats Regulations Assessment (HRA) (Document reference: D.6.5.6) for the DCO Proposed Development have considered potential impacts to mobile features and habitats, including functionally linked habitats. Appropriate mitigation is detailed within Chapter 9: Biodiversity (Volume II).
Based on the information provided in the EIA Scoping report, there is not enough information to scope out impacts during the Operational phase at this stage. As the development will be located within 600m of the Mersey Estuary SPA/Ramsar and 700m of the Dee Estuary SPA/Ramsar it is unknown if the development will be located within or close proximity to functionally linked SPA habitats. Further information is required in order to assess potential disturbance to the SPA birds during the operational phase. The proposed development will be located within 600m of the Mersey Estuary SSSI and 700m of the Dee Estuary SSSI. Our concerns regarding the potential impacts upon the SSSI's coincides with our concerns regarding the potential impacts upon the Mersey Estuary SPA/Ramsar and Dee Estuary SPA/Ramsar as detailed above. Furthermore, our concerns regarding impacts to the mobile species for the Dee Estuary SAC also apply to the features of the River Dee SSSI.	An assessment of operational impacts upon receptors is included within Chapter 9: Biodiversity (Volume II) and addressed within the Habitats Regulations Assessment (HRA) (Document reference: D.6.5.6) for the DCO Proposed Development. The majority of the DCO Proposed Development will be located below ground with minimal Above Ground Infrastructure (AGI) required (including block valves). The DCO Proposed Development ties into existing industrial infrastructure associated with the Stanlow Refinery, a longstanding industrial complex sited south of SPA/Ramsar designated habitats, tying into existing infrastructure along the southern edge of the industrial complex. In respect of the River Dee, trenchless crossing techniques are proposed to avoid direct impacts to the SAC/SSSI and avoid impacts to possible migratory fish species. In both respects, a full assessment of potential direct and indirect impacts to protected sites, habitats and species, together with required mitigation, is provided within Chapter 9: Biodiversity (Volume II) and the Habitats Regulations Assessment (HRA) (Document reference: D.6.5.6).
The EIA will need to consider any impacts upon local wildlife and geological sites. Local Sites are identified by the local wildlife trust, geoconservation group or a local forum established for the purposes of identifying and selecting local sites. They are of county importance for wildlife or geodiversity. The Environmental Statement should therefore include an assessment of the likely impacts on the wildlife and geodiversity interests of such sites. The assessment should include proposals for mitigation of any impacts and if appropriate, compensation measures. Contact the local wildlife trust, geoconservation group or local sites body in this area for further information	The Applicant can confirm that an assessment of local wildlife and geological sites has been included within Chapter 9: Biodiversity (Volume II) and Chapter 12: Land and Soils (Volume II), with pertinent information and records sought from relevant third parties including local wildlife trusts and records centres. Mitigation and/or compensation requirements are detailed within Chapter 9: Biodiversity (Volume II) accordingly.
	Features. Flaster Dunes are noted for the presence of Natterjock Tool and its babitat. While proposals in relation to the Eni gas terminal and pipeline amendments will involve a superaist planning application that will be made to Plainshire, a commitment to the continued dune management would be useful to be referenced for includent in the HRA and ES. The Consequention Objectives for the six reference that "Habitats Located between SVL compartments are important for migration, dispersal and genetic occhange of the species, which in turn is of key importance to maintain the range and pupulation of Great Orside News (CCI) in this biotality. While the SAC condition the directly affectly, a thistochemics will be considered to the while the accessment registally where a control of the process

Protected Species	conservation organisations, groups and individuals; and consideration should be given to the wider context of the steer of example in terms of maintain inkages and protected species populations in the wider area, to assist in the impact assessment. The conservation of species protected by law is explained in Part IV and Appending Organizations, and their impact within the Planning System.	The Applicant can confirm that relevant records centres and relevant interest groups have been engaged for historical biological records and information. This has been used, alongside site surveys, to assess the need for targeted species surveys to inform Chapter 9: Biodiversity (Volume II). A suite of protected and/or notable species surveys have been undertaken by experienced and competent ecologists in line with relevant survey guidelines and methodologies. The results of surveys have been assessed against the DCO Proposed Development and appropriate mitigation measures recommended within Chapter 9: Biodiversity (Volume II) where required. Any requirements for protected species licensing are also cited.
Important species and habitats	The ES should thoroughly assess the impact of the proposals on habitats and/or species listed as 'Habitats and Species of Principal Importance' within the England Biodiversity List, published under the requirements of S41 of the Natural Environment and Rural Communities (NERC) Act 2006. Government Circular 06/2005 states that Biodiversity Action Plan (BAP) species and habitats, 'are capable of being a material considerationin the making of planning decisions'. Natural England therefore advises that survey, impact assessment and mitigation proposals for Habitats and Species of Principal Importance should be included in the ES. Consideration should also be given to those species and habitats included in the relevant Local BAP.	The Applicant can confirm that Chapter 9: Biodiversity (Volume II) has been prepared in cognisance of, and providing reference to, Habitats and Species of Principal Importance and those cited of relevant LBAPs, with assessment of any such features taken into account accordingly as part of the impact assessment.
Important species and habitats	 Additional surveys carried out as part of this proposal; The habitats and species present; The status of these habitats and species (e.g. whether priority species or habitat); The direct and indirect effects of the development upon those habitats and species: 	The Applicant confirms that a suite of surveys appropriate to assess the potential impacts of the DCO Proposed Development have been undertaken to inform Chapter 9: Biodiversity (Volume II). Additionally, Chapter 9: Biodiversity (Volume II) provides detail of historical records relevant to the DCO Proposed Development and Newbuild Infrastructure Boundary. All results have been presented within Chapter 9: Biodiversity (Volume II) and associated appendices, alongside appropriate mitigation measures where these are required for individual species or receptors. Measures have been taken during the progressing design of the DCO Proposed Development to reduce potential impacts to habitats and species are far as reasonably practical.
Important species and habitats	We note paragraph 8.3.10. refers to the information sources included in the desk-based study, we advise local bird clubs are also contacted, for example the	Noted by the Applicant. The Applicant has confirmed that comprehensive records supported by survey data has been obtained to inform the
BNG	biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat'. Biodiversity 2020: A strategy for England's wildlife and ecosystem services and Making Space for Nature (2010) also provide strong drivers for the inclusion of biodiversity enhancements	The Applicant has sought to incorporate opportunities to enhance or benefit biodiversity where possible. A landscaping scheme accompanies the ES (Landscape Layouts (Document Reference: D.2.14) and Landscape and Ecological Mitigation Plan (Document Reference: D.6.5.10.1)), which detail locations of proposed new planting with emphasis placed on the incorporation of native species. A Biodiversity Net Gain (BNG) Assessment (Document reference: D.6.5.12) has been prepared for the DCO Proposed Scheme. Opportunities to achieve BNG have been explored through the BNG assessment process. Both on site and off site compensation scenarios have been considered as part of the BNG assessment.
General comments raised by NRW.	In general the EIA for this development should include sufficient information to enable the decision makers to determine the extent of any environmental impacts arising from the proposed scheme on legally protected species, including those which may also comprise notified features of designated sites affected by the proposals. Evaluation of the impacts of the scheme should include: direct and indirect; secondary; cumulative; short, medium and long-term; permanent and temporary; positive and negative, and construction, operation and decommissioning phase and long-term site security impacts on the nature conservation resource, landscape and public access.	The Applicant confirms that Chapter 9: Biodiversity (Volume II) provides impact assessment against a range of factors at various stages of the DCO Proposed Development lifecycle for individual receptors/species/features, including those cited by NRW.
	Within the EIA, the proposed scheme should be described in detail in its entirety. This description should cover construction, operation and decommissioning phases as appropriate and include detailed, scaled maps and drawings as appropriate.	The Applicant confirms that a full description of the DCO Proposed Development is provided within Chapter 3: Description of the DCO Proposed Development, accompanied by appropriate drawings and figures.
Illustrations with the FS	Any many drawings and illustrations that are produced to describe the project should be designed in such a way that they can be overlaid with drawings and	Noted by the Applicant.
Significance and favourable conservation		Noted by the Applicant. Refer to Chapter 9: Biodiversity (Volume II) for the assessment of potential effects as a result of the DCO Proposed Development. In combination effects have been considered within Chapter 19: Combined and Cumulative Effects (Volume II) and the Habitats Regulations Assessment (Document reference: D.6.5.6).
Key habitats		The Applicant can confirm that Phase 1 habitat survey aligning with the NCC Phase 1 survey guidelines has been completed for the DCO Proposed Development. Assessment of the presence of Annex 1 habitats is reported within Chapter 9: Biodiversity (Volume II). Given the volume of surveys and project programme, it has not been possible to undertake all Phase 1 survey during the summer period. This is not considered to have negatively impact the assessment, conclusions or mitigation recommendations.
Protected Species	is identified, we advocate that a Conservation Plan is prepared for the relevant species and included as an Annex to the EIA. Where a European Protected Species is identified and the development proposal is predicted to likely contravene the legal protection they are afforded, a licence should be sought from	The Applicant has completed a suite of protected and/or notable species surveys utilising best practice guidelines and methodologies. All methods and guidelines are referenced accordingly within Chapter 9: Biodiversity (Volume II) and its supporting appendices. Where deviations from best/standard practice have taken place during the assessment these are clearly documented within the ES with justification provided. Receptors have been assessed individually against potential impacts as result of the DCO Proposed Development across construction, operation and decommissioning, in essence short-, medium-, and long-term scenarios. Where required, mitigation and/or compensation is detailed within Chapter 9: Biodiversity (Volume II) specific to receptors requiring such in order to safeguard species/features. Protected species licenses will be applied for where required to facilitate the construction of the DCO Proposed Development, with draft protected species licenses to accompany the DCO application.
Local Biodiversity Interests	We recommend that the developer consults the local authority ecologists on the scope of the work to ensure that regional and local biodiversity issues are adequately considered, particularly those habitats and species listed in the relevant Local Biodiversity Action Plan, and areas that are considered important for the conservation of biological diversity in Wales. 20. NRW would expect the developer to contact other relevant people/organisations for biological information/records relevant to the site and its surrounds. These include the relevant Local Records Centre and any local ecological interest groups (e.g. bat groups, mammal groups).	The Applicant can confirm that relevant local authority ecologists have been consulted, and biological records have been received from Local Records Centres to include with Chapter 9: Biodiversity (Volume II). Where required, the Applicant has engaged with local interest groups for information.
Legislation	We advise that provisions of the EIA audit compliance in respect of relevant nature conservation legislation (UK and Wales) together with relevant local and national policies including BS 42020:2013	Noted by the Applicant.

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Designated sites	We advise that the scope of the ES considers: i. The conservation objectives of the Deeside and Buckley Newt Sites SAC and Halkyn Mountain SAC; ii. The citations and site management statements for Halkyn Mountain and Holywell Common SSSI and Connah's Quay Ponds and Woodlands SSSI (and any other relevant SSSI's).	Noted by the Applicant. These are considered within Chapter 9: Biodiversity (Volume II).
Designated sites	We have concerns that Figure 3-12 (Appendix 2 of 3) showing the indicative route of the proposed pipeline appears to pass through Mynydd y Fflint / Flint Mountain SSSI. We advise that there would need to be clear justification for this and an explanation of how the proposed development would avoid any damage to the features of the SSSI. We advise that the proposed pipeline should avoid the SSSI boundary as much as possible. The potential impact of the works may be larger than the area of works due to the footprint of machinery etc. on sensitive grasslands, woodlands and wet ground, in addition to future maintenance works etc. after installation. The site is additionally sensitive as it has a stream running through it, within a valley below steep slopes, so is at risk of receiving construction-related pollution and runoff.	The Applicant can confirm that the corridor of the DCO Proposed Development does not encroach, nor is adjacent to, the boundary of the Mynydd y Fflint/Flint Mountain SSSI, and that no impacts to the designated site are anticipated as a result of the DCO Proposed Development.
Designated sites	if it is agreed by the SoS that the aspects of the wider project are to be considered outside the scope of the EIA, the potential impacts to the designated sites should be considered cumulatively within the EIA. The existing pipeline runs through the Halkyn Mountain SAC/SSSI (in an area where calcareous heathland exists). Regarding the Dee Estuary SPA/Ramsar/SAC/SSSI at Point of Ayr, we are aware that the current Eni pipeline is www.naturalresourceswales.gov.uk www.cyfoethnaturiolcymru.gov.uk Page 7 of 14 undergrounded at this general location. However, modifications to that pipework and the ecological consequences would need to be clearly established. Should the Competent Authority consider that there would be a Likely Significant Effect on the above National Site Network sites, in the first instance the applicant would need to demonstrate that there would be no Adverse Effect on Site Integrity	The Applicant has produced a Habitats Regulations Assessment (HRA) (Document reference: D.6.5.6), which assesses the potential for Likely Significant Effects upon features of internationally designated sites as well as an assessment of the DCO Proposed Development on maintenance of site integrity. This includes both individual site assessment as well as cumulative assessment.
Designated sites	We advise at least two consecutive years of wintering bird surveys to account for interannual variation in use by features of the Dee Estuary SSSI, SPA and Ramsar site. This should include surveys during the high tide periods (i.e. two hours either side of high tide). We also advise that this should include nocturnal surveys to account for use of the area outside of daylight hours. The timing of these surveys should be September to March inclusive.	The Applicant has completed a suite of bird surveys to support preparation of Chapter 9: Biodiversity (Volume II) and the Habitats Regulations Assessment (HRA) (Document reference: D.6.5.6). Nocturnal surveys have not been included within the survey suite given the short term, temporary and localised nature of construction, that construction will predominantly be completed during daylight hours, the efficacy and effectiveness of nocturnal bird surveys (in the absence of clear best practice guidelines) and proportionality when considering the DCO Proposed Development construction and operation. The survey programme had a broad temporal span and was undertaken during various stages of the tide. A broad review of other existing survey data for the Dee Estuary has also been undertaken so it is the Applicant's position that the scope of bird survey works was appropriate to assess any potential impacts to relevant bird species and the need for mitigation, where required.
Designated sites	We note that section 8.3.10 on page 120 of the Scoping Report details organisations contacted for existing data. This may help to inform the survey requirements.	Noted by the Applicant.
Designated sites		Noted by the Applicant. This has been rectified in Chapter 9: Biodiversity (Volume II).
Designated sites	Table 8.4, page 112: "Designated sites – national and international". We advise that mobile species from nearby designated sites are relevant to consider here	Noted by the Applicant. This has been considered in Chapter 9: Biodiversity (Volume II).
Marine Biology	We advise that the main issues that need addressing in the EIA (and HRA) for the marine sites, some of which are not covered in the Scoping Report, are as follows: i. Any possible run off from the trench excavation and subsequent storage of the topsoil and subsoil. Possible pathways into watercourses from the storage areas which could leach into the Dee estuary Ramsar site/SAC/SPA/SSSI should be considered, as well as an associated impacts and mitigation to be used if the material is contaminated. ii. There is reference to a Construction Environmental Management Plan (CEMP), a sediment management plan and silt screening in the Scoping Report. These should be addressed in the EIA/HRA/WFD compliance assessment. iii. The Scoping Report states that when the pipeline is completed, hydrostatic testing will be undertaken. However, there is no information about how and where the water will be discharged after the testing. This should be addressed in the EIA/HRA/WFD compliance assessment. iv. The Scoping Report states that samples of the hydrostatic test water will be taken prior to and after use. However, there is no information about which contaminants will be analysed and, if located at the Point of Ayr, whether this will be released onto the saltmarsh or intertidal habitats. This should be addressed in the EIA/HRA/WFD compliance assessment. v. Potential impacts from the introduction and/or spread of invasive non-native species (INNS) should be considered in the EIA and HRA and biosecurity measures should be implemented (including the production of a biosecurity risk assessment) to ensure that there is no possibility of any machinery transporting non-native species from previous work sites to the Dee sites. Note that Mitten crabs are present in the Dee and possibly the Mersey and if water is going to be abstracted from these water bodies for the hydrostatic testing, the risk of transferring Mitten crab to other areas will need to be considered. vi. The oystercatchers and other bird species that are features of the De	Noted, these issues are considered within Chapter 9: Biodiversity (Volume II), the Habitats Regulations Assessment (HRA) (Document reference: D.6.5.6), Chapter 18: Water Resources and Flood Risk (Volume II) and the Water Framework Directive Assessment (WFDa) (Appendix 18.3 – WFDa, Volume III).
Construction – GHG emissions arising from the disposal of waste	The Scoping Report proposed to scope this matter out of the assessment on the basis that large quantities of waste are not anticipated during construction of the DCO Proposed Development. However, the estimated type and quantity of waste produced during the construction of the DCO Proposed Development was not specified in the Scoping Report. Therefore, PINS did not agree that GHG emissions arising from the disposal of construction waste could be scoped out of the EIA. PINS noted that the ES should include an assessment of this matter or information demonstrating agreement with the relevant stakeholders and the absence of a likely significant environmental effect.	Chapter 10: Greenhouse Gases (Volume II) of the ES has assessed the transport of waste and disposal of waste during the construction stage of the DCO Proposed Development.
Construction – GHG emissions arising from the disposal of biomass	The Scoping Report proposed to scope this matter out of the assessment on the basis that large quantities of biomass are not anticipated during construction of the DCO Proposed Development. However, the estimated quantity of biomass produced during the construction of the DCO Proposed Development was not specified in the Scoping Report. Therefore, PINS did not agree that GHG emissions arising from the disposal of biomass could be scoped out of the EIA. PINS noted that the ES should include an assessment of this matter or information demonstrating agreement with the relevant stakeholders and the absence of a likely significant environmental effect.	Chapter 10: Greenhouse Gases (Volume II) of the ES has assessed the disposal of biomass during the construction stage of the DCO Proposed Development as part of the Construction land use, land use change and forestry (LULUCF) assessment.
Operation – GHG emissions arising from the replacement of elements of the DCO Proposed Development during operational maintenance	The Scoping Report proposed to scope this matter out of the assessment on the basis that no major replacements are expected during the operational lifetime of the DCO Proposed Development. PINS noted that emissions associated with routine maintenance and refurbishment have been scoped into further assessment and is therefore satisfied that this matter can be scoped out.	Noted by the Applicant.
Operation – GHG emissions arising from the reduction in carbon sequestration	The Scoping Report proposed to scope this matter out of the assessment on the basis that the reduction in carbon sequestration is not considered to be large and the predominant land type is grassland, which has minimal carbon sequestration potential. However, the quantity and carbon sequestration potential of land to be permanently lost during operation of the DCO Proposed Development was not specified in the Scoping Report. Therefore, PINS did not agree that GHG emissions arising from the reduction in carbon sequestration can be scoped out. PINS noted that the ES should include an assessment of this matter or information demonstrating agreement with the relevant stakeholders and the absence of a likely significant environmental effect.	Chapter 10: Greenhouse Gases (Volume II) of the ES has assessed emissions from the change in carbon sequestration of habitats within the Newbuild Infrastructure Boundary as well as reduction in the sequestration potential of peat during the operational stage of the DCO Proposed Development as part of the Operational land use, land use change and forestry (LULUCF) assessment.

Decommissioning – GHG emissions arising from the decommissioning phase including the transport and disposal of materials.	The Scoping Report proposed to scope this matter out of the assessment on the basis that the Carbon Dioxide Pipeline and Block Valve Stations (BVSs) would be left in situ and the Above Ground Installations (AGIs) would be dismantled. PINS noted that the effects of decommissioning should be considered within the ES. Accordingly, the ES should include an assessment of this matter or information demonstrating agreement with the relevant stakeholders and the absence of a likely significant environmental effect.	Chapter 10: Greenhouse Gases (Volume II) of the ES has assessed the decommissioning stage of the DCO Proposed Development.
GHG emissions arising from BVS	Paragraph 6.5.1 of the Scoping Report states the Proposed Development, including BVS located along the existing Flint AGI to PoA CO2 pipeline have been identified as potential sources of GHG emissions. However, the Scoping Report does not state if GHG emissions arising from BVS located along the Alcohols Site AGI to Flint AGI CO2 Pipeline will be considered in the assessment. The Applicant should provide an assessment of GHG emissions arising from all BVS during operation, including those derived from the venting operations referred to in the Air Quality chapter of the ES.	Chapter 10: Greenhouse Gases (Volume II) of the ES has assessed the operational stage of the DCO Proposed Development which includes the above ground infrastructure such as the proposed BVSs and the AGIs.
GHG emissions arising from disturbance of historic landfill sites	The Inspectorate notes that Paragraph 9.3.12 of the Scoping Report states that historic landfill sites are present within the study area for the land and soil aspect. In the event that the pipeline route cannot avoid all these sites, the GHG emissions from these sites during construction should be included in the assessment.	Noted by the Applicant. It is not anticipated that emissions arising from the disturbance of historic landfill sites will be large as the construction of the DCO Proposed Development is not expected to disturb large areas of historic landfill sites. Emissions from the disturbance of historic landfill sites have therefore not be considered in Chapter 10: Greenhouse Gases (Volume II) of the ES.
Carbon budget	Paragraph 6.7.4 of the Scoping Report states requirements set out in the Sixth Carbon Budget issued by the Climate Change Committee (CCC) are considered to be advice/ guidance. The Inspectorate notes that these are now statutory requirements under the Carbon Budget Order 2021.	The statutory requirements of the Carbon Budget Order 2021 has been incorporated into Chapter 10: Greenhouse Gases (Volume II) of the ES and assessments within.
Small emissions sources	Paragraph 6.8.1 of the Scoping Report states that small sources of GHG emissions have been excluded from further assessment. The Applicant should ensure that these are clearly described in the ES, including a suitable justification for why these potential sources of GHG emissions have been excluded from the assessment.	Chapter 10: Greenhouse Gases (Volume II) of the ES has provided justification for each emission source scoped out of the assessment.
Avoided emissions	Paragraph 6.8.1 of the Scoping Report states that avoided GHG emissions will be calculated from the Wider Scheme on the basis that the Proposed Development cannot function in isolation. The Applicant should clearly describe which elements of the Wider Scheme have been included in the calculation of avoided GHG emissions and provide suitable justification for why these are considered integral to the effective operation of the Proposed Development.	Chapter 10: Greenhouse Gases (Volume II) of the ES provides justification for assessing avoided emissions including all emissions associated with the Project. Chapter 2: The Project (Volume II) of the ES describes the key components of the Project which cannot function in isolation to provide the benefit of avoided GHG emissions.
General comments raised by CWCC.	The Council's Climate Change Officer is in general agreement with the scope of proposed Climate Change considerations. It is however advised that further consideration be made in respect the reasons for scoping out of Land Use Change and Forestry (A5) and Land Use Change and Forestry (B8) matters within Table 6-3. It is suggested that the team preparing the EIA make contact with the Local Enterprise Partnership (LEP) to consider utilising the Natural Capital Audit that has been commissioned for the Cheshire and Warrington sub-region, to understand if the proposed development intersects with any areas with multi-layered natural capital benefits.	Chapter 10: Greenhouse Gases (Volume II) of the ES has assessed the disposal of biomass during the construction stage of the DCO Proposed Development as part of the Construction land use, land use change and forestry (LULUCF) assessment. In addition Chapter 10: Greenhouse Gases (Volume II) of the ES has also assessed emissions from the change in carbon sequestration of habitats within the Newbuild Infrastructure Boundary as well as reduction in the sequestration potential of peat during the operational stage of the DCO Proposed Development as part of the Operational land use, land use change and forestry (LULUCF) assessment
Land and Soils		
Operation - Contaminated soil leading to effects on human health	The Scoping Report seeks to scope out effects during operation on the grounds that any potential effect pathways would be addressed through a Remediation Strategy to be implemented during the construction phase. The Inspectorate notes that issues relating to contamination would be addressed during construction and therefore agrees that this matter can be scoped out of further assessment in the ES.	Noted by the Applicant.
Operation - Contaminants reaching controlled water receptors	PINS noted that Table 9-1 in the Scoping Report sets out the potential for contaminants to be mobilised during construction but states that there is no effect pathway to receptors which could lead to effects during operation. PINS noted that it was not clear from the information presented in the Scoping Report what evidence supports this conclusion. PINS therefore did not agree to scope these matters from the assessment. Accordingly, the ES should include an assessment of this matter or information demonstrating agreement with the relevant stakeholders and the absence of a likely significant environmental effect.	A Geoenvironmental Ground Investigation Report (Appendix 11.6, Volume III) has been included in Chapter 11: Land Soils (Volume II) which provides site specific investigation results to inform an updated conceptual site model discussing all pathway to receptor linkages, including controlled waters. Significant contamination has not been identified which precludes the production of a remediation strategy. However a watching brief will be undertaken during the construction process and detailed in the CEMP which will detail the removal or mitigation of any contamination identified at this time.
Construction - Effects on pipes and cables from aggressive ground contaminants	The Scoping Report seeks to scope out effects as there would be insufficient time in the construction phase for contaminants to affect pipes and cables. The Inspectorate notes that effects during operation would be subject to further assessment so is content that construction effects can be scoped out of further consideration	Noted by the Applicant.
Study Area for impacts on lands and soils	The Scoping Report states that the Study Area will cover the red line boundary shown in Figures 3-1 to 3-7 for the Carbon Dioxide Pipeline plus a 50m buffer. The Scoping Report does not provide any justification as to why this extent is deemed sufficient to capture the effects of the DCO Proposed Development. Section 9.7 of the Scoping Report states that the assessment methodology will follow the guidance in LA 109 Geology and Soils. The use of a standard buffer does not appear to reflect the approach described in paragraph 3.5 of LA 109. The ES must clearly explain how the extent of the Study Area captures the effects from the DCO Proposed Development.	Section 11.5, Chapter 11: Land and Soils (Volume II) of the ES considers the Study Area which includes specific reference to the boundary extent and justification aligned to paragraph 3.2 of LA 109.
Possible old coal mining works	The Scoping Report notes that a section of the Carbon Dioxide Pipeline in Wales is located within a Coal Mining Reporting Area and that coal mining related stability issues will be assessed in line with best practice guidance. The Applicant's attention is drawn to the comments from the Coal Authority (CA) contained in Appendix 2 of this report. The ES should include an assessment of any risks associated with coal mining structures/voids that would be affected by the DCO Proposed Development.	
Remediation strategy	The Scoping Report states that a suitable remediation strategy will be agreed with the relevant local authorities. If this strategy is going to be relied on to avoid significant environmental effects the ES must include an outline of the proposed strategy as a minimum to demonstrate that delivery of the remediation would be feasible.	Further GI information has been included in Chapter 11: Land Soils (Volume II) utilising site specific investigation results to inform an updated conceptual site model discussing all pathway to receptor linkages. Significant contamination has not been identified which precludes the production of a remediation strategy. However a watching brief will be undertaken during the construction as set out in the REAC which also sets out robust mitigation protocols to address unexpected contamination identified during construction works.
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baseline data gathering	The Scoping Report provides a brief outline of the methods that would be used to collect baseline data. A targeted Agricultural Land Classification (ALC) survey is proposed along with an intrusive ground investigation. The ES must explain the rationale behind any targeting of surveys; where surveys do not cover the whole area affected by the DCO Proposed Development the ES should explain why the baseline information is adequate to capture the existing situation.	The methodologies for the ALC survey and Ground Investigation (GI) are included in Section 11.5, Chapter 11: Land Soils (Volume II) and associated appendices. The ALC survey was based on observations made at a density of approximately one observation per hectare in any areas that would be permanently sealed and one observation per 2 hectares in any areas that would be temporarily disturbed. This approach and plans of the proposed borehole locations was agreed with Natural England and the Welsh Government prior to the commencement of surveys. For the GI the locations of the exploratory holes along the new proposed pipeline routes were placed at approximately 500m centres to provide a good overview of the site conditions along the route. The ALC survey report is included in Appendices 11.4 and 11.5 (Volume III) and GI report is included in Appendix 11.6 (Volume III) of the ES.
Mineral safeguarding areas	Table 9-1 identifies potential effects on sand and gravel extraction sites in the CWCC Local Plan. FCC have advised that Sites in Flintshire may also be affected (see Appendix 2 of the Scoping Report), particularly in the vicinity of the Flint Above Ground Installation (AGI). The ES should identify and assess effects on all the Mineral Safeguarding Areas (MSA) affected by the DCO Proposed Development.	A standalone Mineral Resource Assessment has been undertaken for the MSA's in line with the various Councils' policies and can be viewed in Appendix 11.3 (Volume III) of the ES.
Disposal of excavated materials	The Scoping Report does not explain how material excavated during the construction of the DCO Proposed Development would be handled or if off-site disposal would be required. This matter must be addressed in the ES and any significant environmental effects assessed.	Material removal or re-use would be undertaken using a CL:AIRE (Contaminated Land: Applications in Real Environments) declared Materials Management Plan produced by the Construction Contractor, with the EA and NRW contacted to confirm they have no objections. Material Assets and Waste are assessed in Chapter 14: Materials and Waste (Volume II) and a Waste Management Plan, which will be produced by the Construction Contractor as part of the detailed CEMP, will adhere to the highest tiers of the Waste Hierarchy.
Construction and Operation - Impacts on human health and controlled waters as a result of contaminated Site arisings	The Scoping Report proposes to scope this matter out of the assessment on the basis that impacts arising from the transportation of materials and waste to and from the DCO Proposed Development Site will be considered in the assessment of geology and soils. The Inspectorate assumes the Applicant is referring to the assessment of Land and Soil. The Inspectorate agrees that this matter can be scoped out of the ES on the basis that likely significant effects are considered in the relevant aspect chapters of the ES, including the assessment of Land and Soil referred to in the Scoping Report. The Applicant should seek agreement with the relevant consultation bodies regarding the transport and disposal of contaminated materials during construction of the DCO DCO Proposed Development. The Applicant's attention is drawn to the NRW consultation response in this regard (see Appendix 2 of this report).	Impacts on human health and controlled waters as a result of contaminated site arisings is presented in Chapter 11 Land and Soils (Volume II) of the ES.
Canal as a sensitive receptor	Contamination and pollution would have a negative impact on the canal corridor. We ask that any contaminated land assessment and especially any mitigation considers the canal as sensitive receptor and considered in any conceptual models. Page 133 para 9.3.14 list potential contamination pathways. We consider this list could be extended to include potential contamination of waterways from wind blow and the creation of dust and debris from construction activity.	All controlled surface water receptors (including the canal) have been considered in Chapter 11: Land and Soils (Volume II) of the ES.
Ground conditions	This chapter within the EIA should also consider ground conditions in terms of the construction work in close proximity to the waterway infrastructure which could potentially adversely affect the structural integrity of the waterway. The proposed pipe undergrounding of the canal would likely be either where the canal is in a cutting or carried on an embankment. It is therefore essential that the structural integrity of the canal is not put at risk as part of any of the works, including excavation, earthmoving, drilling, boring, vibrations or the tracking of plant and machinery which could, in the worst case scenario result in the failure of the canal. Depending on the exact location of the route the exact depth of the pipeline under the canal would need to be agreed with the Trust to ensure the works do not undermine the structural integrity of the canal infrastructure. The construction technique and method of works would also need to be agreed with the Trust and carried out in accordance with the Canal & River Trust Code of Practice. https://canalrivertrust.org.uk/business-and-trade/undertaking-works-on our-property-and-our-code-of-practice.	Land stability is not considered within Chapter 11: Land and Soils (Volume 11) of the ES and is excluded from DMRB LA 109 guidance.
Land stability	Land stability and the consideration of the suitability of development with regards to ground conditions are material planning considerations as set out in paragraphs 170(e) and (f) of the National Planning Policy Framework (NPPF) and that the responsibility for securing a safe development in terms of land stability rests with the developer (para 179). This is the subject of more detailed discussion in the National Planning Practice Guidance (PPG). The submitted details although making reference to the NPPF policy on land stability does not appear to consider the risk to land stability on existing infrastructure, especially the canal, resulting from the construction activities and works. This would need to be assessed and addressed within the EIA as set out above.	Land stability is not considered within Chapter 11: Land and Soils (Volume 11) of the ES and is excluded from DMRB LA 109 guidance.
General comments raised by CWCC.	It is noted that significant sections of the pipeline will be through natural soils. Where sections pass through industrial areas with previously developed land and made ground, contamination would be of concern and an assessment of any risks should be undertaken. The critical aim of any assessment is to ensure that no preferential pathways for contamination are created as a result of the development. It is noted that detail of how excavated materials are to be handled and disposed of, as part of the construction phase has not been identified within the Scoping Report, and it is advised that this be included. Whilst noting the above the Councils Environmental Protection Unit (EPU) is satisfied with the information provided and can agree, in respect ground contamination, the elements scoped out within Table 9-1.	A targeted ground investigation has been undertaken (Appendix 11.6: Phase II Geoenvironmental Ground Investigation Report (Volume III)) and the results of this has been used to inform the ES. It is acknowledged that unexpected areas of made ground and/or soil contamination could be encountered during the construction phase. A watching brief will be undertaken during the construction phase and actions and mitigation should unexpected areas of made ground / soil contamination be encountered will be detailed within the REAC (Document reference: D.6.5.1). The handling and disposal of excavated materials during the construction phase will be detailed in the soil, peat or materials management plans. An Outline Soil Management Plan and Outline Peat Management Plan has been produced and included as an appendix to the Outline CEMP (Document reference: D.6.5.4). A Materials Management Plan and Waste Management Plan will be produced by the Construction Contractor in accordance with CL:AIRE (Contaminated Land: Applications in Real Environments) and in accordance with the REAC (Document reference: D.6.5.1).
Model procedures and good practice	Due to the former land use(s), soil and /or groundwater contamination may exist at the site and the associated risks to controlled waters should be addressed. We recommend that developers should: • Follow the risk management framework provided in Guidance on Land contamination risk management (LCRM), when dealing with land affected by contamination • Refer to our Guiding principles for land contamination for the type of information that we require in order to assess risks to controlled waters from the site - the local authority can advise on risk to other receptors, such as human health • Consider using the National Quality Mark Scheme for Land Contamination Management which involves the use of competent persons to ensure that land contamination risks are appropriately managed • Refer to the contaminated land pages on gov.uk for more information All investigations of land potentially affected by contamination should be carried out by or under the direction of a suitably qualified competent person and in accordance with BS 10175 (2001) Code of practice for the investigation of potentially contaminated sites	The methodology included in Chapter 11: Land and Soils (Volume II) adheres to LCRM, the EA guiding principles for land contamination and the contaminated land pages on gov.uk. Chapter 11: Land and Soils (Volume II) has been produced by competent persons and the overall technical sign off has been undertaken by a Chartered and SiLC Associate Director (Appendix 5-1: Relevant Expertise and Competency (Volume III)). All investigations have been carried out by experienced contractors with reference to BS 10175 (2001) Code of practice for the investigation of potentially contaminated sites.

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Scoping out - Receptors beyond 2km	The Scoping Report looked to scope out an assessment of effects on receptors over 2km from the DCO Proposed Development, based on the results of the initial desktop review and site visit. PINS agreed that this matter could be scoped out of the assessment. PINS did note however that if the height or locations of the AGI or BVS alter as the project design evolves then the ES should either include an assessment of effects on receptors beyond 2km or a justification as to why significant effects on these receptors would not arise.	A review of any potential changes to locations and / or heights of the AGI and BVS has been carried out to ensure significant effects will not arise beyond the Study Area. Receptors beyond a 2km Study Area remain scoped out based on the design of the DCO Proposed Development with justification provided in Table 12-2 of Chapter 12: Landscape and Visual (Volume II).
Scoping out - Receptors beyond 500m of the BVS along the Flint Connection to PoA Terminal Pipeline	The Scoping Report looked to scope out an assessment of effects on receptors beyond 500m of the BVS on the basis of the initial desktop review and due to the limited height of these structures. PINS agreed that this matter can be scoped out of the assessment. PINS did note however that if the height or locations of the BVS alter as the design evolves then the ES should either include an assessment of effects on receptors beyond 500m of the BVS or a justification as to why significant effects on these receptors would not arise.	A review of any potential changes to locations and / or heights of the BVS has been carried out to ensure significant effects will not arise beyond the Study Area. Receptors beyond a 500m Study Area remain scoped out based on the design of the DCO Proposed Development with justification provided in Table 12-2 of Chapter 12: Landscape and Visual (Volume II).
Other points - Visual amenity receptors	PINS noted that it was not clear from the Scoping Report if canal users have been identified as receptors in addition to residents and footpath users. PINS noted that the ES should either include effects on canal users or provide a justification as to why they would not experience significant effects.	Canal users of the Shropshire Union Canal are included in addition to those using the towpath. See Appendix 12.4 - Visual Analysis (Volume III), specifically P13 and P14 for the Shropshire Union Canal. Viewpoints are representative and are taken from accessible land. In this case, they are taken on the towpath but represent both towpath users and the canal users.
Other points - Viewpoint locations	PINS noted that the Applicant is advised to finalise the list of viewpoint locations in conjunction with relevant stakeholders including the local authorities and NRW.	Consultations undertaken on the proposed list of viewpoints is outlined in Table 12-1 of Chapter 12: Landscape and Visual (Volume II) of the ES.
Other points - Assessment of effects from lighting	PINS noted that the Scoping Report states the need for the assessment of lighting effects on visual amenity during the construction phase would be considered when 'further details become available at a later date'. PINS therefore advised that the ES should contain an assessment of lighting effects on visual amenity and landscape character during construction and operation or a justification as to why significant effects would not arise.	It is not anticipated that there will be significant effects on landscape or visual receptors as a result of lighting owing to its temporary nature during construction and non permanent use during operation. Assessment of night-time effects from lighting is scoped out based on the design of the DCO Proposed Development with justification provided in Table 12-2 of Chapter 12: Landscape and Visual (Volume II).
Canal Corridor AGI	The proposed route would result in at least one crossing (underground) of the canal and it is likely that the route would be visible from along the canal within the vicinity of the route corridor. It is understood that as the pipe would be underground and land restored that the long term permanent visual impact would be limited. We would however have concerns in terms of the amount of permanent above ground infrastructure that would be required within the vicinity of the canal corridor. For example the proximity of the inspection chambers and permanent maintenance facilities and associated fencing. The proposed works could have a significant temporary impact on the views, character, environment and tranquillity that the users of the waterways currently enjoy. The crossing and invention along the waterway should be subject to careful individual assessment and consideration to establish the suitability of the works and the likely temporary and permanent impacts and mitigation required.	It is not anticipated that there will be any BVS or AGI visible from the Canal Corridor owing to distance and topography. Effects are therefore mainly temporary and relating to construction. There will however, be some operational effects as a result of associated vegetation loss during construction which is reported in Chapter 12: Landscape and Visual (Volume II) of the ES. Mitigation measures are also reported within the chapter and set out within the D.6.5.1 REAC and D.6.5.10 OLEMP. Consultations undertaken on the proposed viewpoints with the CRT is outlined in Table 12-1 of Chapter 12: Landscape and Visual (Volume II) of the ES.
Consultation	We note that the Trust have been listed as among the bodies that would be consulted on the viewpoints and photomontages that would be assessed via the LVIA. At this stage we note page 153, figure 10-1 lists the points of key viewpoints where visual receptors will be located two of these receptors are to be located on crossings of the canal. We would welcome further discussion on this with the applicant depending on the final route.	Consultations undertaken on the proposed viewpoints with the CRT is outlined in Table 12-1 of Chapter 12: Landscape and Visual (Volume II) of the ES.
General comments raised by CWCC.	The Councils Landscape Officer is in general agreement with the scope of the methodology for the Landscape and Visual Impact Assessment (LVIA). In principle there is agreement with the locations of the proposed viewpoints, which make reference to visual receptors such as nearby settlements and Public Rights of Way.	Noted by the Applicant.
General comments raised by CWCC.	It is advised that proposed heights are for the Grinsome Road and Alcohols Site Above Ground Installations be provided in any assessments.	The proposed heights for all AGIs and BVSs is provided in Chapter 3: Description of the DCO Proposed Development and has been assessed in the ES.
General comments raised by CWCC.	With regards to design and mitigation, it is advised that the LVIA should clearly demonstrate an iterative design process whereby potential impacts are considered at an early stage so as to avoid any adverse negative impacts	Design development, impact avoidance and embedded mitigation is included in Section 12.10 of Chapter 12: Landscape and Visual (Volume II) of the
General comments raised by CWCC.	It is advised that the following information be provided within the ES: • Viewpoints and supporting Map; • Confirmation of the Zone of Theoretical Visibility (ZTV) Mapping - in principle the submitted information appears to capture ZTV visibility. Please include information on proposed building heights for AGI • A selection of proposed viewpoints for a photomontages as indicated as per scoping report • Sections Drawings - to include ground levels • Detailed Landscape Layout Plan. To include for existing and proposed features • Proposed Landscape Strategy and Landscape Mitigation. • Information on Public Footpaths. • Boundary Treatment and Access information. • Provide information on working operations / methodology to minimise disturbance and impact on existing features such as trees and hedges. • Management and maintenance Plan	The requested information has been provided within the ES and DCO documents including Chapter 12: Landscape and Visual (Volume II) and it associated appendices (Volume III) and Figures (Volume IV), Outline Landscape and Ecological Management Plan (OLEMP) (Document Reference: D.6.5.10), Landscape Layout plans (Document reference: D.2.14) and the Outline Construction Environmental Management Plan (OCEMP) (Document reference: D.6.5.4).
General comments raised by FCC.	It would be expected that an underground pipeline would have a much greater impact during the installation phase compared to the operational stage when only Above Ground Installations will be visible. The existing gas installation at Talacre is quite intrusive in the landscape because of the hillside to the south, the development's size and its contrast with the surrounding landscape. It will be interesting to see whether the gas installation at Talacre will be smaller as a result of its repurposing and consequently whether LVIA assesses the impact of the development as positive, negative or no change to the landscape?	Chapter 12: Landscape and Visual assesses the likely significant effects of the DCO Proposed Development during the Construction, Operational and Decommissioning Stage. The existing gas installation at Talacre is referred to as the Point of Ayr Terminal. Works associated with the existing PoA Terminal are included in the Town and Country Planning Act (TCPA) Proposed Development and therefore not part of the DCO Proposed Development.
Landscaping	If a landscaping scheme is proposed as part of the proposal, we request that only slow and low growing species of trees and shrubs are planted beneath and adjacent to the existing overhead line to reduce the risk of growth to a height which compromises statutory safety clearances	National Grid's Notes for guidance –Tree Planting Restrictions on Pipelines has been followed where mitigation planting is required within proximity to overhead line equipment. Proposed mitigation designs are set out on –EN070007-D.2.14-LAY-Sheets 0-10 Landscape Layouts
Landscape character	Natural England would wish to see details of local landscape character areas mapped at a scale appropriate to the development site as well as any relevant management plans or strategies pertaining to the area. The EIA should include assessments of visual effects on the surrounding area and landscape together with any physical effects of the development, such as changes in topography.	These details are included in Chapter 12: Landscape and Visual (Volume II) of the ES.
Landscape character	The EIA should include a full assessment of the potential impacts of the development on local landscape character using landscape assessment methodologies. We encourage the use of Landscape Character Assessment (LCA), based on the good practice guidelines produced jointly by the Landscape Institute and Institute of Environmental Assessment in 2013. LCA provides a sound basis for guiding, informing and understanding the ability of any location to accommodate change and to make positive proposals for conserving, enhancing or regenerating character, as detailed proposals are developed.	This assessment is included in Chapter 12: Landscape and Visual (Volume II) of the ES.
	Natural England supports the publication Guidelines for Landscape and Visual Impact Assessment, produced by the Landscape Institute and the Institute of Environmental Assessment and Management in 2013 (3rd edition). The methodology set out is almost universally used for landscape and visual impact assessment. In order to foster high quality development that respects, maintains, or enhances, local landscape character and distinctiveness, Natural England encourages all new development to consider the character and distinctiveness of the area, with the siting and design of the proposed development reflecting local design characteristics and, wherever possible, using local materials. The Environmental Impact Assessment process should detail the measures to be taken to ensure the building design will be of a high standard, as well as detail of layout alternatives together with justification of the selected option in terms of landscape impact and benefit.	Chapter 4: Consideration of Alternatives (Volume II) of the ES sets out the alternatives that have been considered during the evolution of the DCO Proposed Development and design process. Design development, impact avoidance and embedded mitigation is included in Section 12.10 of Chapter 12: Landscape and Visual (Volume II) of the ES.

National Character Areas	The assessment should refer to the relevant National Character Areas which can be found on our website. Links for Landscape Character Assessment at a local level are also available on the same page.	These details are included in Chapter 12: Landscape and Visual (Volume II) of the ES.
General comments raised by NRW.	We consider the approach outlined in Section 10.2 (Study Area), para. 10.2.2 to be appropriate for considering the visual effects of the scale of development proposed.	Noted by the Applicant.
	Table 10-2: Elements Scoped In or Out of Further Assessment, 6th row - Clwydian Range and Dee Valley AONB states: "Upon initial desktop review, the 2km study area is proportionate to the type of Proposed Development. The proposed Flint AGI (Northrop Road) is located approximately 5.8km away from the nearest AONB and 2therefore outside the study area of the main proposed features. Following a review of the Google Viewshed Tool based on a maximum 9m height Proposed Development described above, it is clear there is no inter-visibility between the nearby AONB and the Proposed Development. In addition, the BVS are 3km away from the nearest AONB with a maximum height of 3m height (for fencing). The AONB is therefore scoped out of the assessment". We agree with this analysis. We consider that the scale of development and distance from the AONB would avoid significant visual effects being experienced from within this Designated Landscape. However, we advise that the scope of the landscape and visual impact assessment and location of viewpoints are discussed with the relevant Local Planning Authority's Landscape Officer/representative	Consultations undertaken with the LPAs is outlined in Table 12-1 of Chapter 12: Landscape and Visual (Volume II) of the ES.
MA&D		
Scoping out the following matters: Earthquakes Volcanic activity Landslides Sinkholes Tsunamis Avalanches Thunderstorms Wave surges Droughts Solar flares Solar energetic particles Coronal mass ejections Fog Wildfires Disease enidemics	PINS is satisfied, based on the reasoning and evidence presented in the Scoping Report that risks to or from the DCO Proposed Development can be excluded from these matters.	Noted by the Applicant.
Scoping out the following matters •Cyclones, hurricanes, typhoons, storms, and gales •Extreme temperatures	The Scoping Report sought to scope out effects from these events on the grounds that cyclones, hurricanes, and typhoons do not occur in the UK. Damage from storms and gales to the Above Ground Installations (AGIs) and Block Valve Stations (BVSs) is possible but the design of these structures takes the UK climate into account. The risk is stated not to be significantly different to other infrastructure in the locality. A similar statement is made about the vulnerability of the DCO Proposed Development to extreme temperatures. PINS noted that the Scoping Report did not provide evidence to support the statements about the design of the DCO Proposed Development. PINS confirmed it was not in a position to agree to scope out these matters from the assessment. Accordingly, the ES should include an assessment of these matters or information demonstrating agreement with the relevant stakeholders and the absence of a likely significant environmental effect.	According to the UK Met Office - cyclones, hurricanes and typhoons do not occur in the UK and therefore should be scoped out on this basis. Storms and gales and extreme temperatures can be scoped out from further assessment as at the detailed design stage, existing legislation, namely the Health and Safety at Work etc. Act 1974 (Ref. 13.1) legally requires that plant and equipment must be designed to minimise the risk of harm to workers, visitors, and members of the public. Similarly, the Supply of Machinery (Safety) Regulations 2008 (Ref. 13.5) and Provision and Use of Work Equipment Regulations 1998 (Ref.13.19) have legal requirements which will apply to the design of machinery and equipment used for the AGIs and BVSs. In addition, the only likely receptors associated with extreme temperatures are workers who are out of scope of the MA&D assessment.
	The Scoping Report sought to scope out these matters on the grounds that construction effects would be temporary and would be subject to mitigation. No significant effects on local air quality are predicted during the operational phase. PINS noted that the effects on air quality will be considered elsewhere in the ES and are unlikely to lead to risk to or from the DCO Proposed Development in terms of major accidents or disasters. Accordingly, PINS agrees this matter can be scoped out of further consideration in this section of the ES.	Noted by the Applicant.
	The Scoping Report sought to scope out risks to the DCO Proposed Development on the grounds that nuclear sites in the UK operate to a very high safety standard and there are no nuclear sites within a 5km corridor along the DCO Proposed Development. However, the response from the Office of Nuclear Regulation (see Appendix 2 of the Scoping Opinion) identifies the Capenhurst nuclear licensed site which is within 5km of the DCO Proposed Development. PINS therefore did not agree to scope out this matter from the assessment. Accordingly, the ES should include an assessment of this matter or information demonstrating agreement with the relevant stakeholders and the absence of a likely significant environmental effect.	For nuclear installations, the 5km corridor is along the Carbon Dioxide Pipeline route (2.5 km either side of the Carbon Dioxide Pipeline), not from the Newbuild Infrastructure Boundary. The Capenhurst site at 3km from the DCO Proposed Development is outside the Study Area for nuclear installations. That aside, the distance between the closest AGI, being the most likely CO2 release point, to Capenhurst is over 7km away and the nearest part of the Carbon Dioxide Pipeline is 3km and buried. At this distance, a realistic CO2 release would be dispersed and very unlikely to have a significant impact on the Capenhurst site. In terms of Capenhurst impacting the DCO Proposed Development, the siting, design, construction, operation and decommissioning of all civil nuclear sites require a nuclear site licence granted by the Office for Nuclear Regulation (ONR). A nuclear site licence is granted only after ONR has fully satisfied itself that the licensee has an adequate safety case and has made adequate arrangements to manage the site safely. The implementation of these arrangements is aimed at reducing to an acceptably low level both the chance of an accident or emergency that might lead to the release of radioactivity, and the subsequent size of any release. Therefore, Capenhurst as an external MA&D event type can be scoped out of further assessment in the ES considering that: *The Land Use Planning Outer Consultation Zone (OCZ) for Capenhurst is 3 km from the centre point of the site (OS reference SJ365745). *The Outline Planning Zone is 5km radius from centre of the site. *The Detailed Emergency Planning Zone (DEPZ) has a 1km radius around the centre of the site. The ONR give as one example of an industrial developments (including those requiring either Hazardous Substances Consent and / or have to be notified under the Pipeline Safety Regulations 1996 (Ref. 13.20)) in the vicinity of the nuclear site which have the potential to constitute an external hazard, in which in which asphyxiant materials are stored, pr
Mines and storage caverns	The Scoping Report stated that part of the DCO Proposed Development is located in a Coal Mining Reporting area because of the history of mining in the area. The risk of stability issues associated with the possible presence of shallow workings has been excluded on the grounds that any potential problems would be addressed in line with Coal Authority guidance. PINS noted that the effects from historic mine workings should be addressed elsewhere in the ES. Accordingly, PINS agreed this matter can be scoped out of further consideration in this section of the ES.	Noted by the Applicant.

Road traffic accidents	The Scoping Report sought to scope out risks from transport accidents on the grounds that construction traffic would be managed and where necessary effects would be mitigated to minimise the risk of causing accidents. Traffic levels during operation are not predicted to be significant. The Carbon Dioxide Pipeline would be buried to a depth that would make it unlikely that it would be affected by road traffic accidents. The AGI and BVS would be located at least 100m from major roads and are within a fenced compound so are unlikely to be affected during a major accident. PINS noted that the effects on road safety will be considered elsewhere in the ES and are unlikely to lead to risk to or from the DCO Proposed Development in terms of major accidents or disasters. Accordingly, PINS agreed this matter can be scoped out of further consideration in the ES.	Noted by the Applicant.
Road traffic accidents	The Scoping Report sought to scope out increased risk of rail accidents because trenchless rail crossing techniques would be used to avoid affecting railway operation. There would also be close liaison with the rail operator during works close to or under rail lines. Risks of long-term impacts on the Carbon Dioxide Pipeline from subsidence and vibration would be addressed through the design of the Carbon Dioxide Pipeline. As the Carbon Dioxide Pipeline would be buried and the AGI and BVS would be a long distance from the railway lines, rail accidents are not expected to pose a significant risk to the DCO Proposed Development. PINS agreed this matter can be scoped out of further consideration in the ES.	Noted by the Applicant.
Accidents on the Shropshire Union Canal	PINS noted that the Canal and River Trust do not agree that, based on the information presently available, effects on the canal should be scoped out (see Appendix 2 of this report). Accordingly, the ES should include an assessment of these matters or information demonstrating agreement with the relevant stakeholders and the absence of a likely significant environmental effect. The ES should also assess impacts on the safety of canal users and the structural integrity of the canal unless otherwise agreed with the Canal and River Trust.	The Canal and River Trust's comments are noted. Potential significant impacts on bridges over the canal are addressed as part of Chapter 17: Traffic and Transport of the ES. In addition, an assessment of the suitability of traffic routes for the construction traffic, and associated loads carried, will be required under other existing health and safety legislation, namely the Construction Design and Management Regulations 2015. These regulations require the preparation of a design risk register and H&S plan to manage significant risks to as low as reasonably practicable. Therefore, further assessment of the vulnerability to MA&D events can be scoped out in the case of potential overloading of bridges over the canal as allowed under the DCO EIA Regulations. During the detailed design stage, there will be consultation with the Canals & Rivers Trust on proposed crossings, as well as liaison during the planned works. Additionally, under other existing health and safety legislation, namely the Construction Design and Management Regulations 2015 (Ref. 13.2), there is the requirement to prepare a design risk register and health and safety plan, including emergency arrangements, to manage significant risks to as low as reasonably practicable. Therefore, further assessment of the vulnerability to MA&D events can be scoped out in the case of works breaching the canal as allowed under the DCO EIA Regulations (Ref. 13.21). In respect to a pollution response emergency procedure, this will be included with the CEMP. The Canal and River Trust will be consulted on relevant mitigation proposals included within the CEMP.
Aviation	The Scoping Report noted that Hawarden Airport is located 530m south east of the DCO Proposed Development. It stated that as the Carbon Dioxide Pipeline would be buried during operation the DCO Proposed Development would be protected against ground aviation incidents and is unlikely to contribute to aviation accidents. PINS agreed that effects on or from aviation can be scoped out of further assessment.	Noted by the Applicant.
Accidental pollution releases to air	The Scoping Report sought to scope out effects during construction as dust and other emissions would be temporary and either controlled under relevant legislation or subject to mitigation. PINS noted that this matter would be considered in other parts of the ES and is unlikely to lead to significant environmental effects so are satisfied that this matter can be scoped out of this section of the ES.	Noted by the Applicant.
Accidental pollution releases to land or water	The Scoping Report sought to scope these matters out on the grounds that standard control measures would be implemented to manage risks of spills or leaks. PINS noted that these matters will be considered elsewhere in the ES and are satisfied that these matters can be scoped out of this section of the ES.	Noted by the Applicant.
Flood defence failure	The Scoping Report sought to scope out effects from flood defence failure on the grounds that the DCO Proposed Development would be designed to include allowances for further climate change predictions. The risks to the Ince and Stanlow AGIs would benefit from the existing flood defences. The risk to these structures would be no greater than that for similar major hazard installations protected by the same defences. PINS noted that flood risk will be considered elsewhere in the ES so agrees that this matter can be scoped out of this section of the ES.	Noted by the Applicant.
Study Area	The Scoping Report defined the study area on the basis of man-made or natural features which could pose a risk to the DCO Proposed Development. These were stated to be based on information held by the Applicant and their consultant but there is no further explanation or justification. The ES must explain the reasoning and/or evidence used to determine these distances – a simple reference to professional judgement will not be adequate.	Currently, the only published guidance on the approach to MA&D assessment within EIA is "Major Accidents and Disasters in EIA: An IEMA Primer, IEMA 2020". Within this document there is no formulae, rule of thumb of other guidance on the setting of the distance of the Study Area or any event type. Justifications on distances used for the study area is provided in Chapter 13: Major Accidents and Disasters (Volume II) of the ES.
Design, mitigation, and enhancement measures	CEMP, then as a minimum an outline CEMP should be provided which contains details of any measures referred to in the ES.	The measures outlined Section 13.10 of Chapter 13: Major Accidents and Disasters (Volume II) and the specific mitigation measures which are detailed in Appendix 13.2 – ES Risk Record (Volume III) are considered to be embedded mitigation measures which will be in place for the construction and operation of the DCO Proposed Development to ensure that any potential MA&D events are managed to be as low as reasonably practicable (ALARP). These measures are also set out in the REAC (Document reference: D.6.5.1).
General comments raised by CRT.	Page 175 Table 11-3 lists the various elements to be scoped in or out of the further assessment. Transport accidents as part of the canal crossing are scoped out of further assessment. This will depend on the final construction routes as the proposed works as these may require the crossing of the waterway corridor. We consider the potential impact on these bridges should be assessed as part of the environmental assessment. This should also include the safety of waterway users under the bridges. As set out above, the potential impact on the structural integrity of the canal would need to be considered including the potential for a breach of the canal associated with the works and how this would be mitigated. A robust pollution response emergency procedure would also be required, and the Trust would wish to be notified in the event of any such incident which may impact our waterways.	The Canal and River Trust's comments are noted. Potential significant impacts on bridges over the canal are addressed as part of Chapter 17: Traffic and Transport of the ES. In addition, an assessment of the suitability of traffic routes for the construction traffic, and associated loads carried, will be required under other existing health and safety legislation, namely the Construction Design and Management Regulations 2015. These regulations require the preparation of a design risk register and H&S plan to manage significant risks to as low as reasonably practicable. Therefore, further assessment of the vulnerability to MA&D events can be scoped out in the case of potential overloading of bridges over the canal as allowed under the DCO EIA Regulations. During the detailed design stage, there will be consultation with the Canals & Rivers Trust on proposed crossings, as well as liaison during the planned works. Additionally, under other existing health and safety legislation, namely the Construction Design and Management Regulations 2015 (Ref. 13.2), there is the requirement to prepare a design risk register and health and safety plan, including emergency arrangements, to manage significant risks to as low as reasonably practicable. Therefore, further assessment of the vulnerability to MA&D events can be scoped out in the case of works breaching the canal as allowed under the DCO EIA Regulations (Ref. 13.21). In respect to a pollution response emergency procedure, this will be included with the CEMP. The Canal and River Trust will be consulted on relevant mitigation proposals included within the CEMP.

Capenhurst nuclear site	The applicant should take due cognizance of the nearby Capenhurst nuclear licensed site, operated by Urenco UK Ltd. Capenhurst is situated within the applicant's "5 km Buffer of Scoping Boundary" defined in "Appendix A – Supporting Figures (Part 3 of 3)" of the Scoping Report (the site centre point for Capenhurst for land use planning purposes is SJ365745)	For nuclear installations, the 5km corridor is along the Carbon Dioxide Pipeline route (2.5 km either side of the Carbon Dioxide Pipeline), not from the Newbuild Infrastructure Boundary. The Capenhurst site at 3km from the DCO Proposed Development is outside the Study Area for nuclear installations. That aside, the distance between the closest AGI, being the most likely CO2 release point, to Capenhurst is over 7km away and the nearest part of the Carbon Dioxide Pipeline is 3km and buried. At this distance, a realistic CO2 release would be dispersed and very unlikely to have a significant impact on the Capenhurst site. In terms of Capenhurst impacting the DCO Proposed Development, the siting, design, construction, operation and decommissioning of all civil nuclea sites require a nuclear site licence granted by the Office for Nuclear Regulation (ONR). A nuclear site licence is granted only after ONR has fully satisfied itself that the licensee has an adequate safety case and has made adequate arrangements to manage the site safely. The implementation of these arrangements is aimed at reducing to an acceptably low level both the chance of an accident or emergency that might lead to the release of radioactivity, and the subsequent size of any release. Therefore, Capenhurst as an external MA&D event type can be scoped out of further assessment in the ES considering that: *The Land Use Planning Outer Consultation Zone (OCZ) for Capenhurst is 3 km from the centre point of the site (OS reference SJ365745). *The Outline Planning Zone is 5km radius from centre of the site. The Dotalled Emergency Planning Zone (DEPZ) has a 1km radius around the centre of the site. The ONR give as one example of an industrial developments (including those requiring either Hazardous Substances Consent and / or have to be notified under the Pipeline Safety Regulations 1996 (Ref. 13.20)) in the vicinity of the nuclear site which have the potential to constitute an external hazard, in which in which asphyxiant materials are stored, proce
	to these Regulations. There is evidence that, in some cases, perception of risk may have a greater impact on health than the hazard itself. A 2009 report12, jointly published by Liverpool John Moores University and the Health Protection Agency (HPA), examined health risk perception and environmental problems	Pollution accidents with off-site impacts have been considered, where appropriate, in the ES. As described in Appendix 13.1: Major Accidents and Disasters Long List (Volume II) of the ES pollution accidents to air, land and water during the construction and decommissioning phases have been scoped out as the construction and decommissioning stages of the DCO Proposed Development will be managed through the implementation of the CEMP and a Decommissioning Environmental Management Plan. Pollution accidents to air during the operational phase have been assessed in Chapter 13: Major Accidents and Disasters (Volume II) of the ES. Chapter 13: Major Accidents and Disasters (Volume III) of the ES. Chapter 13: Major Accidents and Disasters (Volume III) of the ES has not considered leaks or spills to land or water during the operational phase as it is considered that these would only be minor associated with maintenance activities and as such do not meet the definition of a major accident and / or disaster. The Applicant will implement an Environmental, Health and Safety Management system, which will include emergency plans and procedures, prior to the operation of the DCO Proposed Development. In addition, the design, installation, commissioning, operation and maintenance of plant, drainage systems, equipment and machinery, including associated systems, will take into account Good Engineering Practice in order to minimise the likelihood of accidents which may lead to off-site impacts. Neither the Major Accident Off-Site Emergency Plan (Management of Waste from Extractive Industries) (England and Wales) Regulations 2009 nor the Control of Major Accident Hazards Regulations 2015 (COMAH) are relevant to the DCO Proposed Development. CO ₂ is not currently defined as a dangerous substance under the COMAH Regulations or as a dangerous fluid under the Pipelines Safety Regulations 1996 and therefore the CO ₂ cross-country pipeline itself is not classified as a Major Accident Pipeline. The Chapter 13: Major Accidents and Dis
	The Scoping Report proposed to scope this matter out of the assessment on the basis that the works consented under the TCPA Proposed Development are not included in the DCO for the DCO Proposed Development. PINS agreed that this matter could be scoped out of the EIA on the basis that likely significant effects of TCPA Proposed Development will be considered in EIAs supporting separate TCPA applications. However, PINS did note that the Applicant should ensure that potential impacts of the TCPA Proposed Development are considered in the assessment of cumulative effects where significant effects are likely to occur.	Cumulative effects associated with the TCPA Proposed Development have been considered as part of Chapter 19: Combined and Cumulative Effects (Volume II) of the ES.
resources and the manufacture of	basis for scoping matters out of the assessment. Notwithstanding this, PINS agreed that this matter could be scoped out on the basis that the nature and quantity of materials and resources required to facilitate construction and operation of the DCO Proposed Development will be reported in the ES.	A description of the type and quantity of the materials and natural resources to be consumed during the construction phase of the DCO Proposed Development are included within Chapter 14: Materials and Waste (Volume II) of the ES.
Operation - Impacts arising from the consumption of material resources Operation - Impacts arising from the	The Scoping Report proposed to scope this matter out of the assessment on the basis that impacts associated with routine repair and maintenance activities are considered to be minimal. PINS agreed that this matter could be scoped out of the EIA. The Scoping Report proposed to scope this matter out of the assessment on the basis that material assets and waste impacts associated with routine repair	Noted by the Applicant.
disposal and recovery of waste	and maintenance activities are considered to be minimal. PINS agreed that this matter can be scoped out of the ES.	Noted by the Applicant.

Requirement for a lifecycle assessment (including embodied carbon and water) of materials, site arisings and waste.	The Scoping Report proposed to scope this matter out of the assessment on the basis that the effort and resources required to undertake a lifecycle assessment of these elements is deemed disproportionate and offers little benefit to the assessment of significance. PINS did not consider the effort and resources required to undertake environmental assessment to be an appropriate basis for scoping matters out of the assessment. However, the need for proportionate EIA was acknowledged. It was noted by PINS that Table 6-3 of the Scoping Report stated that embodied emissions arising from the manufacture and transport of raw materials to suppliers during construction of the DCO Proposed Development had been scoped into the assessment. On this basis, PINS agreed that the requirement for a lifecycle assessment of materials, site arisings and waste can be scoped out. With regards to operational effects, given that potential effects will be limited to inspections and maintenance activities, PINS agreed that this matter can be scoped out of the ES.	Noted by the Applicant. Impacts of embodied carbon are assessed in Chapter 10: Greenhouse Gases (Volume II) of the ES.
Construction and Operation – Impacts arising from the transportation of materials and waste to and from the DCO Proposed Development Site	The Scoping Report proposed to scope this matter out of the assessment on the basis that impacts arising from the transportation of material assets and waste to and from the DCO Proposed Development Site will be considered in the assessment of air quality, climate, traffic and transport and noise and vibration. PINS agreed that this matter can be scoped out of the EIA on the basis that likely significant effects are considered in the relevant aspect chapters of the ES.	Noted by the Applicant. Refer to Chapter 6: Air Quality, Chapter 10: Greenhouse Gases, Chapter 17: Traffic and Transport, and Chapter 15: Noise and Vibration (Volume II) for the topic specific assessment relevant to transportation of materials and waste to and from the DCO Proposed Development Site.
Construction and Operation - Impacts on human health and controlled waters as a result of contaminated site arisings	The Scoping Report proposed to scope this matter out of the assessment on the basis that impacts arising from the transportation of materials and waste to and from the DCO Proposed Development Site will be considered in the assessment of geology and soils. PINS agreed that this matter can be scoped out of the ES on the basis that likely significant effects are considered in the relevant aspect chapters of the ES, including the assessment of Land and Soil referred to in the Scoping Report. PINS also noted that the Applicant should seek agreement with the relevant consultation bodies regarding the transport and disposal of contaminated materials during construction of the DCO Proposed Development.	Noted by the Applicant. Refer to Chapter 11: Land and Soils (Volume II) of the ES for assessment of contaminated site arisings. Movement and disposal of any contaminated material would be managed by the Construction Contractor.
Waste stockpiling/storage	PINS noted that Table 12-7 of the Scoping Report stated that the Applicant may identify areas for stockpiling and storing of waste during construction of the DCO Proposed Development. PINS noted that the Applicant should ensure that the location and extent of waste stockpiles/ storage areas are clearly described in the ES and provide an assessment of this matter where significant effects are likely to occur.	Noted by the Applicant. The Applicant can confirm that the assessment of the impacts of stockpiling and storing waste has been incorporated into the ES. At the current design stage, the exact location of stockpiles are unconfirmed, however assessment of impacts has been incorporated into construction phase works within Chapter 6: Air Quality (Volume II); Chapter 12: Landscape and Visual (Volume II), Chapter 18: Water Resources and Flood Risk (Volume II); and mitigation included within the REAC (Document reference: D.6.5.1)
	The CL:AIRE Definition of Waste: Development Industry Code of Practice (version 2) provides operators with a framework for determining whether or not excavated material arising from site during remediation and/or land development works is waste or has ceased to be waste. Under the Code of Practice: • excavated materials that are recovered via a treatment operation can be reused on-site providing they are treated to a standard such that they are fit for	The methodology for the assessment of risks in relation to potentially contaminated land is included in Chapter 11: Land and Soils (Volume II) of the
Waste on-site		ES and adheres to LCRM, the EA guiding principles for land contamination and the contaminated land pages on gov.uk. Chapter 14: Materials and Waste (Volume II) of the ES states that the Construction Contractor is to) produce and implement a Materials Management Plan (MMP) in accordance with the CL:AIRE Definition of Waste: Code of Practice.
	Developers should ensure that all contaminated materials are adequately characterised both chemically and physically, and that the permitting status of any proposed on-site operations are clear. If in doubt, the Environment Agency should be contacted for advice at an early stage to avoid any delays	
Waste to be taken off-site	Contaminated soil that is (or must be) disposed of is waste. Therefore, its handling, transport, treatment and disposal are subject to waste management legislation, which includes: • Duty of Care Regulations 1991 • Hazardous Waste (England and Wales) Regulations 2005 • Environmental Permitting (England and Wales) Regulations 2016 • The Waste (England and Wales) Regulations 2011 Developers should ensure that all contaminated materials are adequately characterised both chemically and physically in line with British Standard BS EN 14899:2005 'Characterization of Waste - Sampling of Waste Materials - Framework for the Preparation and Application of a Sampling Plan' and that the permitting status of any proposed treatment or disposal activity is clear. If in doubt, the Environment Agency should be contacted for advice at an early stage to avoid any delays	A targeted ground investigation has been undertaken (Appendix 11.6: Phase II Geoenvironmental Ground Investigation Report (Volume III)) and the results of this has been used to inform the ES. It is acknowledged that unexpected areas of made ground and/or soil contamination could be encountered during the construction phase. A watching brief will be undertaken during the construction phase and actions and mitigation should unexpected areas of made ground / soil contamination be encountered will be detailed within the REAC (Document reference: D.6.5.1). The handling and disposal of excavated materials during the construction phase will be detailed in the soil, peat or materials management plans. An Outline Soil Management Plan and Outline Peat Management Plan has been produced and included as an appendix to the Outline CEMP (Document reference: D.6.5.4). A Materials Management Plan and Waste Management Plan will be produced by the Construction Contractor in accordance with CL:AIRE (Contaminated Land: Applications in Real Environments) and in accordance with the REAC (Document reference: D.6.5.1).
Waste	• Consider issues associated with waste delivery and acceptance procedures (including delivery of prohibited wastes) and should assess potential off-site impacts and describe their mitigation.	Chapter 14: Materials and Waste (Volume II) of the ES provides the anticipated waste types and quantities generated by the DCO Proposed Development. Any waste materials generated during the proposed development will be disposed of in accordance with the Waste Hierarchy set out in the Waste Management Plan which will be produced by the appointed Construction Contractor as set out in the REAC (Document reference: D.6.5.1). Chapter 17: Traffic and Transport (Volume II) of the ES considers the environmental effects of additional construction traffic. The OCTMP (Document Reference: D.6.5.3) and Access Principles Note (within Annex D of the OCTMP) consider the measures required to mitigate the effects of increases in construction traffic. All effects would be temporary and not significant. The air quality assessment undertaken for the DCO Proposed Development includes mitigation set out for the construction stage to minimise impacts to the public. The mitigation is set out in Section 6.10, Chapter 6: Air Quality (Volume II) of the ES and the REAC. Such mitigation includes the monitoring of particulates during construction.
Noise and Vibration Construction and Operation – Noise and	The Scoping Report proposes to scope this matter out of the assessment on the basis that the TCPA Proposed Development are not included in the DCO	Effects consists dutils the construction and constitute the TODA Construction of the Toda Constr
vibration impacts arising from the TCPA Proposed Development (excluding BVS)	Proposed Development. The Inspectorate agrees that this matter can be scoped out of the ES on the basis that likely significant effects of the TCPA Proposed Development will be considered in EIAs supporting separate TCPA Applications. However, the Applicant should ensure that potential impacts of the TCPA Proposed Development are considered in the assessment of cumulative effects where significant effects are likely to occur.	Effects associated with the construction and operation phase of the TCPA Proposed Development are considered and reported in Chapter 19: Combined and Cumulative Effects (Volume II) of the ES.
	The Scoping Report proposed to scope this matter out of the assessment on the basis that road traffic movements during operation of the DCO Proposed Development are not expected to adversely affect noise sensitive receptors. PINS agreed that the level of traffic associated with the operation and maintenance of the DCO Proposed Development is unlikely to give rise to significant effects and agrees this matter can be scoped out of further assessment.	Noted by the Applicant.
Operation – Vibration impacts arising from operation of the DCO Proposed Development	The Scoping Report proposed to scope this matter out of the assessment on the basis that operation of the DCO Proposed Development is not expected to generate significant levels of vibration. PINS did not agree that this matter could be scoped out of the EIA given the uncertainty around the potential sources / magnitude of vibration produced during operation of the DCO Proposed development. In addition, the uncertainty regarding the location and design of some elements of the DCO Proposed Development (for example, AGI and BVS) and their proximity to sensitive receptors. Accordingly, the ES should include an assessment of this matter or information demonstrating agreement with the relevant stakeholders and the absence of a likely significant environmental effect.	A review of the design and locations of the AGI and BVS has been carried out to ensure significant effects will not arise. Operation vibration remains scoped out based on the design of the DCO Proposed Development with justification provided in Table 15-3 of Chapter 15: Noise and Vibration (Volume II).

Mitigation Technical Guidance General comments raised by CRT.	Paragraph 13.4.3 of the Scoping Report describes mitigation measures that may be implemented during construction and operation of the Proposed Development, including the installation of acoustic screening. The ES should address the potential adverse effects of mitigation measures in the relevant aspect chapters of the ES (e.g. Landscape and Visual) where significant effects are likely to occur. PINS noted that that the assessment of noise and vibration should also consider technical guidance set out in Technical Advice Note (TAN) 11: Noise (Wales) where relevant in the ES. The Applicant's attention is drawn to Flintshire County Council's consultation response in this regard. In terms of vibrations the canal infrastructure is over 200 years old, and depending on either of the routes of the pipeline the canal is either within a cutting or carried on an embankment. Regardless of the final route option the canal should be considered as a receptor susceptible to vibration. The canal corridor is a tranquil space and contributes to the health and wellbeing of the nearby residents and users (boaters, commuters, leisure and recreational users on the towpath). These spaces need to be protected from intrusive forms of development and any potential impacts such as noise during construction should be kept to a minimum. We would ask that the canal and its users are included as noise sensitive receptors in this assessment.	Chapter 15: Noise and Vibration (Volume II) of the ES has identified that there will be a need for temporary noise barriers during the construction stage and that it will be further developed within the Noise and Vibration Management Plan secured via the REAC (Document reference: D.6.5.1). Where required, temporary acoustic barriers will be considered around significant noise producing plant that are in close proximity to sensitive receptors. The locations of these screens will be optimised for acoustic mitigation whilst considering other potential impacts. The location and design of the temporary acoustic barriers will be detailed in conjunction with the Landscape Architect to ensure impacts upon landscape character and visual amenity are avoided and do not give rise to increased levels of effect as reported in Chapter 12: Landscape and Visual (Volume II) of the ES. Particular consideration will be given to PRoW and residential receptors. Technical guidance set out in Technical Advice Note (TAN) 11: Noise (Wales) has been taken into account in Chapter 15: Noise and Vibration (Volume II) of the ES. Chapter 15: Noise and Vibration (Volume II) of the ES assesses the potential adverse effects on buildings due to construction activities. The Canal has not been included as a specific receptor at this stage and it is expected that this will be incorporated during the preparation of the Noise and Vibration Management Plan and CEMP once more details on construction noise and vibration generating activities are available.
General comments raised by CWCC.	The Councils Environmental Protection Unit (EPU) would advise that it would be expected that construction to be restricted to daytime periods and have fixed start and finish times i.e. 08.00 to 18.00 hours Monday to Friday, and 08.00 to 18.00 hours on Saturdays, with no works being permitted on Sundays or Bank Holidays, (in accordance with Policy DM30 of the Local Plan (Part Two)). Considering the likely duration documented in 13.5.2 it is advised that the most significant noise will likely arise from the construction of the AGIs and BVSs. Similarly operational noise will be limited to AGIs and BVSs in most reasonable scenarios. It is advised that the location of construction yards/depots will be critical in ensuring construction noise impacts are minimised, as these along with above ground infrastructure are where prolonged exposure to noise is likely to occur, and in the case of the compounds, potentially at the most sensitive times of the day. Delivery, storage and movement of construction material will need to considered in detail. Otherwise the EPU note and agree the content of Table 13-1.	Construction working hours are set out in Section 3.6 of Chapter 3: Description of the DCO Proposed Development (Volume II). Chapter 15: Noise and Vibration (Volume II) of the ES has assessed airborne noise effects arising from construction traffic, noise and vibration effects arising from the construction of the DCO Proposed Development including effects from compounds and noise effects arising from the operation of the AGIs and BVSs.
General comments raised by FCC.	Technical Advice Note (TAN) 11: Noise should be added to the list of references and regard should be made to this Welsh Government guidance note as the detailed guidance for PPW (edition 11, 2021) when the noise impact is considered as part of the Environmental Statement.	Technical guidance set out in Technical Advice Note (TAN) 11: Noise (Wales) has been taken into account in Chapter 15: Noise and Vibration (Volume II) of the ES.
Noise exposure data	PHE encourages the applicant to present noise exposure data in terms of the Lden metric (in addition to Leq and L10), to facilitate interpretation by a broad range of stakeholders.	The construction noise assessment has been based on likely noise levels LAeq,T predicted for daytime evening and night-time, in accordance with BS 5228 ABC method. The operational assessment has been based on rating level in accordance with BS4142. This approach has been agreed with Cheshire and Cheshire West County Council and Flintshire County Council.
Population and Human Health		onednice and oneshine west obtainly obtained and ministrate obtainly obtained.
Construction - Effects arising from TCPA Proposed Development	PINS noted that the DCO would not seek consent for the TCPA Proposed Development other than the Block Valve Stations (BVSs). PINS agreed that these matters could be scoped out of the ES. However, the Applicant should ensure that the potential impacts of the TCPA Proposed Development are considered in the assessment of cumulative effects where significant effects are likely to occur.	Cumulative effects associated with the TCPA Proposed Development have been considered as part of Chapter 19: Combined and Cumulative Effects (Volume II) of the ES.
during	PINS noted that the Scoping Report has scoped in effects during construction but does not make any reference to any potential effects during operation. Given that the location and final dimensions of the Above Ground Installations (AGIs) and BVSs have yet to be determined, PINS did not have sufficient evidence to agree to scope out this matter. Accordingly, PINS recommended that the ES should include an assessment of this matter or demonstrate agreement with the relevant stakeholders and the absence of a likely significant environmental effect.	As part of engagement with Cheshire West County Council (CWCC) and Flintshire County Council (FCC) after the location and dimensions of the AGIs and BVSs for the DCO Proposed Development were known, operational and decommissioning effects on private property and housing have been scoped out of the assessment due to the likelihood of no impacts during those phases. Further justification is provided in Chapter 16: Population and Human Health (Volume II).
Operation - Community land and assets Construction and Operation - Agricultural land holdings	PINS agreed to scope this matter from further assessment on the grounds that access to community land and assets will be permanently maintained. The Scoping Report looked to scope out this matter from further assessment on the grounds that effects during construction are likely to be minimal. However, PINS noted that the dimensions and locations of the AGI and BVS have yet to be finalised. Therefore, PINS did not have sufficient evidence to agree to scope this matter out of further assessment. Accordingly, the ES should include an assessment of this matter or demonstrate agreement with the relevant stakeholders and the absence of a likely significant environmental effect.	Noted by the Applicant. An Agricultural Land Classification (ALC) survey has been completed and is presented in Appendix 11.4 and 11.5 (Volume III). Effects associated with the construction and operation on Agricultural land holdings have been assessed and reported within Chapter 16: Population and Human Health (Volume II).
Operation - Public access for walkers, cyclists, and horse riders	The Scoping Report looked to scope out this matter from further assessment on the grounds that any affected Public Rights of Way (PRoW) would be diverted PINS agreed that this matter can be scoped out of further assessment. However, this is on the basis that the assessment of effects at the construction stage should clearly demonstrate how PRoW would be diverted, whether the diversion route would be as accessible for users as the section of PRoW to be lost, and the feasibility of delivering the diversion.	Temporary PRoW diversions during the construction stage of the DCO Proposed Development are detailed within Chapter 17: Traffic and Transport (Volume II). PRoW diversions during the operation stage of the DCO Proposed Development have been scoped out as all of the PRoWs during construction will be returned to former use at the operation stage. Details are provided in Chapter 16: Population and Human Health (Volume II).
Operation - Human health	The Scoping Report looked to scope out this matter from further assessment on the grounds that significant effects are unlikely. However, as the locations and dimensions of the AGI and BVS have yet to be finalised and the noise and air quality assessments have not been completed, PINS did not have sufficient evidence to conclude that significant effects would not arise. Accordingly, the ES should include an assessment of this matter or demonstrate agreement with the relevant stakeholders and the absence of a likely significant environmental effect.	Once operational the excavation works for the pipeline route will be reinstated, and therefore the baseline environment is not anticipated to change materially. There are likely to be some visual effects from the presence of new Block Valve Stations (BVSs) and Above Ground Installations (AGIs), however, the effects are likely to reduce over time as landscaping and planting establishes. There are likely to be some temporary disruptions (predominantly from decommissioning traffic) during decommissioning, however, these are unlikely to give rise to any significant effects. Operational and decommissioning effects on human health from landscape and visual, air quality and noise, have been assessed within Chapter 12 – Landscape and Visual, Chapter 15 - Noise and Vibration (Volume II) and Chapter 6 - Air Quality (Volume II).
Study area	The Scoping Report identified study areas based on the guidance in DMRB LA 112 Population and Human Health. The Scoping Report states that although the DMRB is guidance on the assessment of road schemes it provides the best methodology 'in the context of the Proposed Development' but does not explain why this is the case. The ES should provide a justification as to why this methodology is appropriate for the assessment of effects on the DCO Proposed Development.	Despite the DMRB being the standard for assessment of road schemes, this guidance provides the best methodology for assessing Population and Human Health (in particular for assessing the impacts on land use and accessibility) in the context of the DCO Proposed Development, due to the linear nature of the route. This approach reflects past professional experience of similar schemes and is deemed to be an appropriate methodology and approach for the DCO Application. Further details are provided regarding the suitability the suitability of the use of DMRB LA 112 guidance within Section 16.5 of Chapter 16: Population and Human Health (Volume II).

Community land and assets	PINS noted that the list of community land and assets receptors is not exhaustive. PINS note that if any healthcare facilities are located in the study area or access to such facilities would be affected then these should also be included as receptors in the assessment.	Healthcare facilities that fall within the Study Area are listed within Section 16.6 of Chapter 16: Population and Human Health (Volume II) and also within Appendix 16.1 Land use and assets
Chief Officer (Planning, Environment & Economy)	FCC noted that permanent diversions of PRoW may be required at locations affected by BVS.	The assessment has noted all proposed PRoW diversion associated with the construction of the DCO Proposed Development and that all would be temporary. The management measures associated with the diversions has been discussed with FCC who were generally happy with the proposals. Further details are provided in Chapter 16: Population and Human Health (Volume II) and Chapter 17: Traffic and Transport (Volume II).
Chief Officer (Planning, Environment & Economy)	FCC noted that the Coed y Cra BVS appears to be directly affect several PRoW and would require a permanent diversion of two of the routes to facilitate the BVS. These are Public Footpath Nos. 41 and 44 in the community of Flint (see plan).	Following engagement with stakeholders, the BVS at Coed-y-Cra has now been removed from the DCO Proposed Development so the PRoW diversion will no longer be required.
Chief Officer (Planning, Environment & Economy)	FCC noted that for any routes that would require permanent diversions, FCC would usually have to promote Public Path Diversion Orders under the Town and Country Planning Act. These would be subject to public representation / objection and if objections were received.	There are no permanent diversions required to facilitate the DCO Proposed Development but FCCs comments are noted.
Chief Officer (Planning, Environment & Economy)	FCC noted that on-site management to minimise risks to users and potentially safeguard safe passage for pedestrians while keeping PRoW open would be welcome if it is achievable, but this would depend on each site. We would require Risk Assessments and methodology of working for each specific PRoW affected if temporary closures were not to be pursued and on-site management sought. Given that temporary closures would be required anyway, the safer option at most locations would seem to be a temporary closure.	No permanent diversions have been deemed necessary for the DCO Proposed Development. The approach to temporary diversion management has been discussed with FCC and further details are provided in Chapter 17: Traffic and Transport (Volume II).
PRoW	The comments and diagram provided for Pipeline Construction Sequencing in Rural Areas indicates a minimum working area of around 28.5m. From an initial assessment of the documentation provided, the options given between the Flintshire/Cheshire County boundary to the connection in the Flint/Oakenholt area, would directly affect 40+ Public Rights of Way based on these workings. Until a route is finalised it would be premature for us to provide comments for each and every potential PROW affected as this will be subject to change but as already identified, there would be a need for many temporary closures of public rights of way, some of which will be on routes more popular than others.	All PRoWs within the Newbuild Infrastructure Boundary, rather than the working width (which considers a maximum of 32m for the assessment using a Rochdale Envelope approach to EIA as detailed within Chapter 5: EIA Methodology (Volume II).), have been identified and detailed within Appendix 16.2 Public Rights of Way (Volume III). A full assessment of the impact of the proposed is presented in Chapter 16: Population and Human Health (Volume II)
PRoW	In the case of the Flint AGI (C), it is close to Public Footpath 66 in Flint (404/66/10) but even with a site size of 99m x 72m, there would appear to be ample space for the site without directly requiring a permanent diversion of the right of way (a temporary closure may still be required for construction of course	Following engagement with stakeholders, the Flint AGI has been relocated for the Preliminary Design of the DCO Proposed Development than that presented at the scoping and PEIR stage (Options A, B or C), further details are provided in Chapter 4: Alternatives to the DCO Proposed Development. A full assessment of the impact of the proposal on PRoWs is presented in Chapter 16: Population and Human Health (Volume II).
PRoW	With regard to Flint AGI (B), it would appear likely that a diversion may be required as the land parcel is smaller at this location.	Following engagement with stakeholders, the Flint AGI has been relocated for the Preliminary Design of the DCO Proposed Development than that presented at the scoping and PEIR stage (Options A, B or C), further details are provided in Chapter 4: Alternatives to the DCO Proposed Development. A full assessment of the impact of the proposal on PRoWs is presented in Chapter 16: Population and Human Health (Volume II).
PRoW	For Flint AGI (A), the location appears to be in close proximity to 2 PRoW's but the land parcels here are much larger and as per (C) there would potentially be options to avoid any need for diversions at this point if incorporated correctly	Following engagement with stakeholders, the Flint AGI has been relocated for the Preliminary Design of the DCO Proposed Development than that presented at the scoping and PEIR stage (Options A, B or C), further details are provided in Chapter 4: Alternatives to the DCO Proposed Development. A full assessment of the impact of the proposal on PRoWs is presented in Chapter 16: Population and Human Health (Volume II).
General comments raised by CRT.	This chapter should consider the canal users both in terms of the navigation and towpath users and their enjoyment of the waterway which could be harmed by the works, including if temporary stoppages or towpath closures are required associated with the works. Any such closures would need to be agreed with the Trust well in advance of the works.	Loss of potential for people to undertake physical and recreational activities is a key determinant of health which has been assessed within the ES. The potential impacts of the DCO Proposed Development on recreational users of the canal is presented in Chapter 16: Population and Human Health (Volume II).
General comments raised by CRT.	Page 212 Paragraph 14.3.10 and 14.3.11 list out the types of PRoW and non-PRoW routes falling within the study area that are used by walkers, cyclists and horse riders. We consider that the list should be extended to include the canal towpath, especially as the towpath is part of the National Cycle Network and then assessed accordingly through the EIA.	The impact of the DCO Proposed Development on canal users and the National Cycle Network is presented in Chapter 16: Population and Human Health (Volume II).

Access and Recreation	Natural England encourages any proposal to incorporate measures to help encourage people to access the countryside for quiet enjoyment. Measures such as reinstating existing footpaths together with the creation of new footpaths and bridleways are to be encouraged. Links to other green networks and, where appropriate, urban fringe areas should also be explored to help promote the creation of wider green infrastructure. Relevant aspects of local authority green infrastructure strategies should be incorporated where appropriate	Noted by the Applicant. Wherever appropriate such measures have been incorporated into the design or mitigation wherever possible and have been reported in Chapter 16: Population and Human Health (Volume II).
Rights of Way	The EIA should consider potential impacts on access land, public open land, rights of way and coastal access routes in the vicinity of the development. Consideration should also be given to the potential impacts on the adjacent/nearby public rights of way. Appropriate mitigation measures should be incorporated for any adverse impacts. We also recommend reference to the relevant Right of Way Improvement Plans (ROWIP) to identify public rights of way within or adjacent to the proposed site that should be maintained or enhanced.	Noted by the Applicant. Wherever appropriate such measures have been incorporated into the design or mitigation wherever possible. A full assessment on the potential impact on PRoW has been undertaken and reported in Chapter 16: Population and Human Health (Volume II).
Properties	For those properties within the Northop and Sychdyn area that will be directly affected with the pipeline crossing, can the Council have the assurances that every effort will be made to work with the land owners, to ensure the minimum disruption to their land and business operations. We would be grateful if you would take these matters into consideration as part of the consultation process.	Noted by the applicant. The effects on local businesses from the DCO Proposed Development has been assessed within the ES and suitable mitigation measures have been identified. As reported in Chapter 16: Population and Human Health (Volume II).
Receptors	The applicant should clearly identify the development's location and the distance of the development to off-site receptors that may be affected by emissions from, or activities at, the development.	The location of the DCO Proposed Development is presented in Figure 3.2 - DCO Proposed Development (Volume IV). The distance to off-site receptors that may be affected by emissions from, or activities at, the DCO Proposed Development has been assessed and mitigation measures incorporated wherever possible throughout the ES and are reported in the relevant Technical Chapters 6-18 (Volume II).
Impacts arising from construction and decommissioning	Any assessment of impacts arising from emissions or activities due t construction and decommissioning should consider potential impacts on all receptors and describe monitoring and mitigation during these phases. We would expect the applicant to follow best practice guidance during all phases from construction to decommissioning to ensure appropriate measures are in place to mitigate any potential negative impact on health from emissions and activities. An effective CEMP (and DEMP, decommissioning environmental management plan) will help provide reassurance that activities are well managed. The applicant should ensure that there are robust mechanisms in place to respond to any complaints made during construction, operation and decommissioning of the facility.	All negative impacts to health from emissions and activities associated with the DCO Proposed Development have been considered in the ES and mitigation measures incorporated wherever possible. An outline construction environmental management plan (OCEMP) (Document reference: D.6.5.4) has been produced based the preliminary design assessed in the ES and a detailed CEMP will be prepared at the detailed design stage that will ensure appropriate measures are put in place to mitigate any potential negative impact on health by the DCO Proposed Development. A Decommissioning Environmental Management Plan (DEMP) will be prepared for the Decommissioning stage of the DCO Proposed Development at the end of it's useful life.
Mental Health	The scoping report does not identify a definition of health. The scoping report should accept the broad definition of health proposed by the World Health Organisation (WHO) and also include specific reference to mental health within the definition of health.	The definitions are detailed in Chapter 16: Population and Human Health (Volume II).
Assessment	Population and human health impacts should be considered explicitly within the cumulative effects assessment in order to identify any in combination effects.	Population and human health effects are considered within Chapter 19: Combined and Cumulative Effects (Volume II).
Vulnerable populations	The EIA should clearly identify the range of vulnerable populations that have been considered within the assessment. The findings should be cross referenced across the ES to ensure the comprehensive assessment of potential impacts for health and inequalities and where resulting mitigation measures are mutually supportive. The final ES should therefore include suitable and sufficient data to identify the populations at risk, vulnerable populations, baseline data, assessment of significance, mitigation measures and proposals for monitoring.	The DMRB has been followed to assess the likely effects upon population and human health in Chapter 16: Population and Human Health (Volume II). Using the baseline information it has been determined how sensitive the overall population will be to change as a result of the DCO Proposed Development. Where a specific vulnerable group may be disproportionately affected by the DCO Proposed Development, it is explicitly considered within the assessment. The assessment has identified vulnerable groups that are most likely to experience health effects due to the nature of the DCO Proposed Development, together with required mitigation measures. Chapter 16: Population and Human Health (Volume II) has considered the findings of all the chapters for the DCO Proposed Development to inform the assessment of the likely overall effects upon human health.
Physical activity	In addition to assessing the impact on walkers, cyclists and horse riders (WCH) receptors in terms of journey length, the potential for temporary diversions to create a barrier to access i.e. not accessible across the life course due to steepness, ground condition or physical barriers should also be considered.	An assessment of the effects of the DCO Proposed Development upon access, including accessibility restrictions / severance, has been considered in Chapter 16: Population and Human Health (Volume II) and Chapter 17: Traffic and Transport (Volume II).
Cross-referencing across all chapters	Whilst it is highly encouraging that Population and Human Health will have a separate chapter in the ES, human health is affected by several wider determinants of health. Although the effects on human health is considered in some other chapters (Land & Soil and Major Accidents & Disasters), this is not consistently cross referenced across the report. For example, chapters on: Air Quality, Landscape and Visual, Noise and Vibration; Traffic and Transport, Water Resources and Flood Risk, and Cumulative Effects. To ensure health and wellbeing is considered consistently through the ES, there should be cross referencing to Chapter 14: Population and Human Health in all chapters.	Noted by the Applicant. Whilst not all Technical Chapters 6-19 (Volume II) of the Environmental Statement have specifically made reference to the Chapter 16: Population and Human Health (Volume II), the consideration of potential impacts on human health is inherent within relevant assessments undertaken such as noise and air quality. Chapter 16: Population and Human Health (Volume II) has considered the findings of all the chapters for the DCO Proposed Development to inform the assessment of the likely overall effects upon human health.
Monitoring Traffic and Transport	PHE expects an assessment to include consideration of the need for monitoring and the ES should clearly state the principles on which the monitoring strategy has been established, including monitoring in response to unforeseen impacts or effects. It may be appropriate to undertake monitoring where: • Critical assumptions have been made in the absence of supporting evidence or data • There is uncertainty about whether significant negative effects are likely to occur and it would be appropriate to include planned monitoring measures to track their presence, scale and nature. • There is uncertainty about the potential success of mitigation measures • It is necessary to track the nature of the impact or effect and provide useful and timely feedback that would allow action to be taken should negative effects occur. The monitoring strategy should set out: • Monitoring methodologies • Data sources, particularly if being obtained from third parties or open access data • Assessment methods • Publication methodology • Reporting frequency • Temporal and geographic scope	

Removing Construction and Operation impacts from the TCPA Proposed Development (excluding Block Valve Stations)	The Scoping Report proposed to scope this matter out of the assessment on the basis that the TCPA Proposed Development are not included in the DCO for the Proposed Development. PINS agreed that this matter can be scoped out of the ES on the basis that likely significant effects of the TCPA Proposed Development will be considered in EIAs supporting separate TCPA applications. However, the Applicant should ensure that potential impacts of the TCPA Proposed Development are considered in the assessment of cumulative effects where significant effects are likely to occur.	Effects associated with the construction and operation phase of the TCPA Proposed Development are considered and reported in Chapter 19: Combined and Cumulative Effects (Volume II) of the ES.
Operation - Impacts arising from severance, driver delay, pedestrian delay, pedestrian amenity, fear and intimidation and highway safety	The Scoping Report proposes to scope this matter out of the assessment on the basis that operation of the Proposed Development would not be likely to result in increased traffic flow or changes to traffic composition. The Inspectorate agrees that the level and type of traffic associated with the maintenance of the Proposed Development are unlikely to lead to significant effects and agrees that this matter can be scoped out of further assessment	Noted by the Applicant.
Public Rights of Way (PRoW), Sustrans Cycle Network and Wales Coastal Path	The Applicant should describe the current usage and condition of each PRoW, Sustrans Cycle Network and Wales Coast Path identified in the baseline assessment and how these contribute to the use of community land and assets within the ZoI for the DCO Proposed Development. In addition, the Applicant should seek agreement with the relevant consultation bodies regarding the approach to the assessment and mitigation, including requirements for temporary and/or permanent diversions of existing PRoW.	PRoW, Sustrans Cycle Network and the Wales Coast Path within the ZoI are described in Chapter 17: Traffic and Transport (Volume II) of the ES and within Appendix 17-6: Section by Section Descriptions (Volume III). Public access for Walkers, Cyclists and Horse-riders (WCHs) and potential changes to accessibility and amenity value of routes used by WCHs and PROWs is assessed in Chapter 16: Population and Human Health (Volume II) of the ES. Consultations undertaken with PRoW officers at FCC and CWCC is summarised in Table 17-2 of Chapter 17: Traffic and Transport (Volume II) of the ES.
Technical guidance	The Scoping Report stated that the thresholds of magnitude have been based on the DMRB guidance (Volume 11, Section 3, Part 8). However, PINS noted that this technical guidance has been withdrawn. The Applicant should explain why this technical guidance remains suitable for the purposes of the assessment in the ES.	Justification for the use of these thresholds is presented in Chapter 17: Traffic and Transport (Volume II) of the ES. Thresholds of magnitude for a range of effects have been drawn from a range of sources, and using considered professional judgement and experience from other development assessments. The withdrawn guidance relates to some specific effects and has not been superseded by any alternative guidance, as such it is considered to remain relevant and appropriate for use in assessment.
Figures - road and rail network	PINS noted that the Scoping Report does not include a figure illustrating the road and rail networks likely to be affected during construction of the DCO Proposed Development. The Applicant should provide a figure in the ES showing the affected road and rail network, including the locations of road crossings, in-carriageway works and rail crossings in the ES.	All crossings locations are presented in Figure 17-7 Road Diversions (Volume IV) of the ES.
Construction Traffic	PINS noted that construction traffic is likely to pass through or be in close proximity to multiple residential areas, including small towns and villages. The Applicant should demonstrate that the route for construction traffic has considered the suitability of roads for HGVs, particularly those transporting Abnormal Indivisible Loads (AlLs).	Prescribed construction traffic routes have been identified to avoid constraints including sensitive receptors such as residential areas. This is documented in the Outline Construction Traffic Management Plan (OCTMP) (Document Reference: D.6.5.3).
A55 'Red Route'	PINS noted that Flintshire County Council (FCC) have advised that the proposed A55 'Red Route' relief road is located in proximity to the DCO Proposed Development. Although this application is currently on hold by the Welsh Government, the Applicant should consult with Mid Wales Trunk Road Agency regarding the potential impact of the DCO Proposed Development on the delivery of the A55 'Red Route' project. In addition, the Applicant should consider this project in the assessment of cumulative effects where significant effects are likely to occur.	Consultations undertaken with the NMWTRA on the A55 'Red Route' relief road (Flintshire Corridor) is summarised in Table 17-2 of Chapter 17: Traffic and Transport (Volume II) of the ES. The A55 'Red Route' relief road (Flintshire Corridor) scheme has been considered and reported in Chapter 19: Combined and Cumulative Effects (Volume II) of the ES.
	The proposed works, in particular the construction routes may require the crossing of the waterway corridor. The potential impact of these, with HGVs, plant and machinery potentially crossing the canal bridges should be assessed as part of the ES. This should also include the safety of waterway users under the bridges. Any haul roads in proximity to the canal corridor should be avoided.	Construction traffic would adhere to any advised weight/height restrictions. The prescribed HGV construction traffic routes avoid any weight restricted bridges that would prohibit their use by HGVs. Prescribed construction traffic routes have been identified to avoid constraints including sensitive receptors. This is documented in the OCTMP (Document Reference: D.6.5.3).
	CWCC Highways consider that the Traffic and Transport section of the EIA Scoping Report suitably flags up and covers the high-level elements and issues that will need to be addressed in detail as part of any formal application within the ES/Transport Assessment. It is expected that as part of the work to finalise the proposals that the Transport Assessment will detail the relevant areas of impact and how they will be mitigated and managed.	A Scoping Note (Appendix 17-12, Volume III) was issued to FCC and CWCC Highways Authorities to agree the scope of the assessments contained in the Traffic Assessment, Interim Worker Plan and Outline Construction Traffic Management Plan produced for the DCO Proposed Development. The Traffic Assessment for the DCO Proposed Development is included in Appendix 17-13 (Volume III) of the ES.
PRoW	Whilst the Scoping Report correctly identifies affected Public Rights of Way (PROW), no methodology for their assessment or consideration of impacts was shown to be scoped into the ES. The Council's Rights of Way officer advised that in addition to the outlined ES/Transport Assessment, an assessment should be included in respect PROW including direct and indirect impacts for both construction and operation phases. It is advised that consideration should be made into construction methods including any vibration impacts on any right of way as well as impacts upon users of the PROW network from construction traffic and accidents.	The ES (Figure 17-6: PRoW Temporary Diversions and Closures (Volume IV)) presents proposed temporary diversions and closures of PRoW. Chapter 17: Traffic and Transport (Volume II) of the ES explains that whilst all PRoW affected by the DCO Proposed Development could be temporarily diverted within the DCO Order Limits, the project would temporarily close routes where the local Highway Authority consider it appropriate. Where PRoW indirectly interact with proposed construction traffic routes, this is reflected in Appendix 17.10: Assigned Link Sensitivities (Volume III) in the ES, which informs the final reported residual effects on Pedestrian Amenity, Pedestrian Delay, Severance, Fear and Intimidation and Highway Safety within Section 17.11 or Chapter 17: Traffic and Transport (Volume II).
ТА	The Highways Authority has been consulted and has noted that it is envisaged that the construction phase of HyNet could have significant local impacts on highway operation even though the long-term operation of HyNet will not. The ES should include a Transport Assessment / Statement considering the potential degree of impact. This may include having to reinforce existing road crossings of the Flint Connection – PoA Terminal pipeline in addition to any new crossing protection on localised diversions of the Flint Connection – PoA Terminal pipeline.	A Scoping Note (Appendix 17-12, Volume III) was issued to FCC and CWCC Highways Authorities to agree the scope of the assessments contained in the Traffic Assessment, Interim Worker Plan and Outline Construction Traffic Management Plan produced for the DCO Proposed Development. The Traffic Assessment for the DCO Proposed Development is included in Appendix 17-13 (Volume III) of the ES.
PRoW	Comments were raised on the need to consider the impacts on the PRoW network and the consideration of appropriate measures to mitigate any negative effects, including the need to temporary and permanent diversions of PRoW affected by the DCO Proposed Development.	The ES (Figure 17-6: PRoW Temporary Diversions and Closures (Volume IV)) presents proposed temporary diversions and closures of PRoW. Chapter 17: Traffic and Transport (Volume II) of the ES explains that whilst all PRoW affected by the DCO Proposed Development could be temporarily diverted within the DCO Order Limits, the project would temporarily close routes where the local Highway Authority consider it appropriate. Where PRoW indirectly interact with proposed construction traffic routes, this is reflected in Appendix 17.10: Assigned Link Sensitivities (Volume III) in the ES, which informs the final reported residual effects on Pedestrian Amenity, Pedestrian Delay, Severance, Fear and Intimidation and Highway Safety within Section 17.11 or Chapter 17: Traffic and Transport (Volume II).
Strategic Road Network	Highways England's document "The strategic road network, Planning for the future - A guide to working with Highways England on planning matters" makes reference to the need for EIAs and states that "Assessment undertaken by the promoter of the development should be sufficiently comprehensive to establish the likely transport related environmental impacts, including air quality, light pollution and noise, and to identify the measures to mitigate these impacts. To avoid potential delay or challenge, transport assessments/statements and environmental statements/impact assessments should be mutually consistent and pay due regard to each other. As such we would expect the transport chapter of the EIA to reflect the information in any Transport Assessment. The overall forecast demand on the SRN and surrounding local road network should be assessed and compared to the ability of the existing network to accommodate traffic. Assessments should be carried out for: - the development and construction phase; and - the opening year, assuming full build out and occupation; and - either a date ten years after the date of registration of the associated planning application or the end of the Local Plan period (whichever is the greater). However, it is recognised in this instance that the traffic impacts will largely be generated in the development and construction phase only. Highways England are content with the proposed Traffic and Transport Study Area (Figure 15-1). However, as the siting of compounds and haul routes has not fully been identified yet, the study area may need to change to encompass these factors should their locations potentially impact beyond the study area.	The impact on the Strategic Road Network (SRN) has been scoped out of the ES based on the volume of construction traffic and temporary nature of effects. The Outline Construction Traffic Management Plan (Document Reference: D.6.5.3) outlines the location of Centralised Compounds, AGI, and BVS and the associated prescribed construction traffic routes to these locations from an SRN junction. No temporary access locations are proposed directly from the SRN.
Strategic Road Network	The EIA Scoping Document makes reference to numerous crossings of the Strategic Road Network, identifying that this would be achieved through trenchless technology. However, further detail is needed to understand exactly where these crossings are to be located. Any third party works involving trenchless installations under the Highways England road network will require geotechnical certification and would require a Section 50 Agreement.	Noted by the Applicant. A list of trenchless crossings is provided in Appendix 3.1 – Table of Trenchless Crossings (Volume III). Figure 3.2 – DCO Proposed Development (Volume IV) and provides the indicative location of the trenchless crossings including trenchless crossings under the strategic highway network.
Compounds	The EIA Scoping Note makes reference to construction compounds. Highways England are keen to understand where these compounds are likely to be located, along with the potential access/haul routes. Paragraph 15.2.3 states that construction traffic will need to access working areas and construction compounds through temporary access points and potentially bespoke haul routes that would not have public access. 15.4.1 goes on to say that careful consideration of the micro-siting of these temporary access points will be a key feature in terms of reducing the risk of adverse effects, with access points needing to incorporate appropriate visibility splays, turning radii and speed limit reductions where necessary/appropriate	The impact on the Strategic Road Network (SRN) has been scoped out of the ES based on the volume of construction traffic and temporary nature of effects. The Outline Construction Traffic Management Plan (Document Reference: D.6.5.3) outlines the location of Centralised Compounds, AGI, and BVS and the associated prescribed construction traffic routes to these locations from an SRN junction. No temporary access locations are proposed directly from the SRN.

	Highways England's guidance document Circular 02/2013 "The Strategic Road Network and the Delivery of Sustainable Development" states that "new accesses to busy high speed strategic roads lead to more weaving and turning manoeuvres, which in turn create additional risk to safety and reduce the reliability of journeys, resulting in a negative impact on overall national economic activity and performance". As such we would be unlikely to approve any temporary access for construction traffic from the Strategic Road Network. Highways England are keen to work with the developer to understand potential transport impacts associated with the location of the compounds and haul routes. Highways England are also keen to understand the anticipated timescales involved around this project, particularly in relation to potential traffic impacts on the Strategic Road Network as well as for any sub surface tunnelling at locations around the SRN. As previously stated, we are happy to liaise with the developer in relation to the proposed route of the Carbon Dioxide Pipeline around the Strategic Road Network and also to scope out the detailed elements of a Transport Assessment.	The impact on the Strategic Road Network (SRN) has been scoped out of the ES based on the volume of construction traffic and temporary nature of effects. The Outline Construction Traffic Management Plan (Document Reference: D.6.5.3) outlines the location of Centralised Compounds, AGI, and BVS and the associated prescribed construction traffic routes to these locations from an SRN junction. No temporary access locations are proposed directly from the SRN. A Scoping Note (Appendix 17-12, Volume III) was issued to relevant highways authorities to agree the scope of the assessments contained in the Traffic Assessment, Interim Worker Plan and Outline Construction Traffic Management Plan produced for the DCO Proposed Development. The Traffic Assessment for the DCO Proposed Development is included in Appendix 17-13 (Volume III) of the ES.
General comments raised by FCC (PRoW)	Current legislation allows us to temporarily close PROW for a maximum period of 6 months. Given the projects proposed length of approximately 18 months and the duration of this that would be in Flintshire, it is anticipated that a minimum of 2 temporary closures (comprising multiple site locations within those closures) would be required. There is no requirement to provide an alternative route while a route is temporarily closed but for routes of higher importance we would likely request alternatives so as to not detrimentally affect users. On-site management to minimise risks to users and potentially safeguard safe passage for pedestrians while keeping PROW open would be welcome if it is achievable but this would depend on each site. We would require Risk Assessments and methodology of working for each specific PROW affected if temporary closures were not to be pursued and on-site management sought. Given that temporary closures would be required anyway, the safer option at most locations would seem to be a temporary closure. It is anticipated that permanent diversions of PRoW may be required at locations affected by BVS and potentially in Flint/Oakenholt for the proposed AGI site. Once the final locations onsite have been decided for the BVS and AGI we can make a more informed comment on the requirements and options available.	The ES (Figure 17-6: PRoW Temporary Diversions and Closures (Volume IV)) presents proposed temporary diversions and closures of PRoW. Chapter 17: Traffic and Transport (Volume II) of the ES explains that whilst all PRoW affected by the DCO Proposed Development could be temporarily diverted within the DCO Order Limits, the project would temporarily close routes where the local Highway Authority consider it appropriate. Where PRoW indirectly interact with proposed construction traffic routes, this is reflected in Appendix 17.10: Assigned Link Sensitivities (Volume III) in the ES, which informs the final reported residual effects on Pedestrian Amenity, Pedestrian Delay, Severance, Fear and Intimidation and Highway Safety within Section 17.11 or Chapter 17: Traffic and Transport (Volume II).
Access and Traffic	Access to the village is often difficult with narrow country roads and we feel that the added disruption from the construction and laying of the pipeline, with the associated facilities needed, would be unacceptable, paying particular attention to noise and restricted access to the school and for emergency vehicles.	Chapter 17: Traffic and Transport (Volume II) considers the environmental effects of additional construction traffic. The OCTMP (Document Reference: D.6.5.3) and Access Principles Note (within Annex D of the OCTMP) consider the measures required to mitigate the effects of increases in construction traffic. All effects would be temporary and not significant.
Construction traffic	The Council would like to comment on the possible disruption that the construction traffic will cause to Northop village for the whole of the construction period. This is a concern, especially due to the fact that some roads may be unsuitable for such large construction vehicles which may be passing in very close proximity to some of the village properties. There is also the likelihood of increased the noise levels due to the movement of such large vehicles involved in the transport of construction vehicles and materials over a sustained period of time. The Community Council would also like to raise the issue of whether there will be any compensation for Northop residents as a consequence of the likely disruption to their daily lives for a lengthy period of time.	The construction traffic routes presented in the ES reflect identified constraints, including those through Northop Hall. Construction traffic routes to the Northop Hall Centralised Compound and AGI have been selected to minimise the impacts on Northop Hall. Construction traffic associated with these sites will be routed via A55 J33A and Brookside for inbound traffic and via the B5126/A5119 for outbound traffic to minimise HGV traffic through Northop Hall as set out in the OCTMP (Document Reference: D.6.5.3).
Water Resources and Flood Risk		
Construction and Operation – Water and flooding impacts arising from Existing Pipeline Works (excluding BVS)	The Scoping Report proposes to scope this matter out of the assessment on the basis that the Existing Pipeline Works are not included in the DCO for the Proposed Development. The Inspectorate agrees that this matter can be scoped out of the ES on the basis that likely significant effects of the Existing Pipeline Works will be considered in EIAs supporting separate TCPA applications. However, the Applicant should ensure that potential impacts of the Existing Pipeline Works are considered in the assessment of cumulative effects where significant effects are likely to occur.	The existing Flint to Point of Ayr (PoA) Terminal Pipeline is part of the DCO Proposed Development. However, most Technical Chapters 6-19 (Volume II) scope the existing pipeline out of the assessment as there will be no associated physical works. Where it is scoped in, for example as a result of decommissioning of the DCO Proposed Development within Chapter 18: Water Resources and Flood Risk and within Chapter 13: Major Accidents and Disasters (Volume II), it is stated within the relevant Technical Chapters 6-19 (Volume II).
Development	The Scoping Report proposes to scope this matter out of the assessment on the basis that the Proposed Development would not directly or indirectly affect these waterbodies. The Inspectorate agrees that this matter can be scoped out of the ES.	Noted by the Applicant. This has been scoped out of Chapter 18: Water Resources and Flood Risk (Volume II).
Construction and Operation – Ponds and lakes upslope of the Proposed Development	The Scoping Report proposes to scope this matter out of the assessment on the basis that the Proposed Development would not directly or indirectly affect these waterbodies. The Inspectorate agrees that this matter can be scoped out of the ES.	Noted by the Applicant. This has been scoped out of Chapter 18: Water Resources and Flood Risk (Volume II).
	The Scoping Report proposes to scope this matter out of the assessment on the basis that the Proposed Development is not anticipated to cause this effect. It is noted that impacts on Principal and Secondary A Aquifers during construction and operation would be subject to further assessment and therefore any implications for the public water supply would be considered in the ES. The Inspectorate agrees that this matter can be scoped out of the ES. With regard to operation, on the basis that the potential effects would be limited to maintenance and inspection activities, the Inspectorate agrees that this matter can be scoped out of the ES.	Noted by the Applicant. This has been scoped out of Chapter 18: Water Resources and Flood Risk (Volume II).
	The Scoping Report proposes to scope this matter out of the assessment on the basis that Manchester Ship Canal is located sufficiently downstream of the Proposed Development for potential indirect impacts to be insignificant. However, Figure 3-2 of the Scoping Report suggests that the Manchester Ship Canal runs relatively close to the indicative location of the Grinsome Road AGI. It is not possible to determine from the evidence in the Scoping Report whether any hydrological connection exists between the AGI location and the Manchester Ship Canal. The Inspectorate does not have sufficient evidence to agree to scope this matter out of further assessment. Accordingly, the ES should include an assessment of this matter or demonstrate agreement with the relevant stakeholders and the absence of a likely significant environmental effect.	The Manchester Ship Canal is assessed within Chapter 18: Water Resources and Flood Risk (Volume II).
The Applicant proposed to scope in Water Framework Directive (WFD) water bodies within the Newbuild Infrastructure Boundary and any downstream that are likely to be affected by the DCO Proposed Development.	PINS noted that the Scoping Report did not specify a study area for WFD, nor refer to an existing study area. PINS requested that the Applicant should clearly define the study area for WFD in the WFD assessment (WFDa).	The Study Area for WFD is defined in Chapter 18: Water Resources and Flood Risk (Volume II) and Appendix 18.3 – WFDa (Volume III).
Strategic Flood Risk Assessment (SFRA) and Strategic Flood Consequence Assessment (SFCA)	In addition to CWCC's SFRA, the Applicant should also consider the conclusions reached in Flintshire SFCA where relevant in the ES	Flintshire SFRA has been used as a source of information to inform Appendix 18.5 – Flood Consequences Assessment (Volume III).
The Scoping Report set out that the assessment of impacts on the water environment will follow the guidance in DMRB LA 113 (Ref. 18-22).	PINS noted that the Scoping Report states that the assessment of impacts on the water environment will follow the guidance in DMRB LA 113. PINS noted that this guidance includes a requirement for groundwater assessment methods to be agreed with the relevant consultation body. Accordingly, the ES should demonstrate that the methods used to assess effects on groundwater have been agreed as far as possible with relevant stakeholders.	Consultation has been undertaken with relevant bodies including Cheshire West and Chester Council Lead Local Flood Authority, Flintshire County Council, Natural Resources Wales and the Environment Agency, as reported in Chapter 18: Water Resources and Flood Risk (Volume II).

Flood Risk Assessment (FRA) / Flood Consequence Assessment (FCA)	FRA/FCA should include an assessment of the potential impacts of breach and overtopping events on the DCO Proposed Development where significant effects are likely to occur.	Appendix 18.4 - Flood Risk Assessment Appendix 18.4 (Volume III), Appendix 18.5 – Flood Consequences Assessment (Volume III) and Chapter 18: Water Resources and Flood Risk (Volume II) consider existing flood defences and report the assessment of flood risk as a result of the DCO Proposed Development.
Flood Zones	Paragraph 3.5.15 of the Scoping Report states that Grinsome Road AGI is located in Flood Zone 3. However, the Scoping Report does not state if this area is high probability (Flood Zone 3a) or functional floodplain (Flood Zone 3b). In addition, Paragraph 16.3.17 of the Scoping Report does not describe the flood risk posed to AGIs and only refers to Flood Zone 2, C2 and C1. The Applicant should ensure that they provide an accurate and consistent description of the baseline flood risk for each element of the Proposed Development in the ES. This description should clearly distinguish between Flood Zones, including Flood Zones 3a and 3b where relevant	A detailed description of baseline flood risk is provided in Chapter 18: Water Resources and Flood Risk (Volume II), Appendix 18.4 - Flood Risk Assessment (Volume III) and Appendix 18.5 – Flood Consequences Assessment (Volume III), with reference to each relevant element of the DCO Proposed Development.
Temporary diversions or pumping of minor watercourses.	PINS noted that the Applicant should provide a clear description of the location, extent, design and works associated with the diversion or pumping of minor watercourses in the ES and provide an assessment of this matter where significant effects are likely to occur. The ES should demonstrate that reasonable attempts have been made to avoid or reduce impacts on diverted watercourses, through the design of the DCO Proposed Development and/or appropriate mitigation measures.	Design proposals have been iteratively reviewed so that location and type of watercourse crossings will eliminate or reduce the potential impact to the water environment, wherever possible. A full assessment of the potential effects associated with temporary diversions or pumping of watercourses is presented in Chapter 18: Water Resources and Flood Risk (Volume II) and Appendix 18.3 – WFDa (Volume III).
Sustainable Drainage Systems (SuDS) requirements will be followed for AGIs	PINS noted that SuDS requirements should be considered in relation to each element of the DCO Proposed Development, including BVS and the Cathodic Protection (CP) system, where the drainage environment is likely to be affected. The Applicant should seek agreement with the relevant consultation bodies regarding the location, design and management of SuDS for the DCO Proposed Development and evidence this in the ES. The Applicant's attention is drawn to consultation responses from Dŵr Cymru (Welsh Water), United Utilities, Flintshire County Council and Cheshire West County Council (CWCC) in this regard.	The Outline Surface Water Drainage Strategy Report (Document reference: D.6.5.13) outlines how the DCO Proposed Development will manage and discharge surface water via the use of SuDS and reports the consultation undertaken with relevant bodies and stakeholders.
Existing water and sewerage infrastructure	PINS noted that there is existing water supply and sewerage infrastructure located within or in close proximity to the DCO Proposed Development. PINS noted that the ES should demonstrate that reasonable attempts have been made to avoid or reduce impacts on the existing water supply and sewerage infrastructure, through the design and layout of the DCO Proposed Development. The location of the existing water supply and sewerage infrastructure should be clearly illustrated in appropriate figures in the ES.	The assessment of the DCO Proposed Development upon public water supply and public/private drainage assets is scoped out of Chapter 18: Water Resources and Flood Risk (Volume II). Although hydrostatic testing water may be abstracted from the public water supply, the potential impacts of this will be controlled through a permit application to the asset owner. The Newbuild Carbon Dioxide Pipeline may cross the public water supply however these crossings will be managed in conjunction with the utility owners, and no impact is anticipated.
Paragraph 16.7.21 of the Scoping Report states that no 'Very High' category of receptor sensitivity is proposed.	PINS noted that where the assessment deviates from established guidance, the Applicant should ensure that this is clearly stated and suitably justified in the ES. The Applicant should seek agreement with the relevant consultation bodies regarding the methodology used in the assessment and evidence this in the ES.	The significance criteria used is based upon the guidance provided in the Design Manual for Roads and Bridges (LA113) and does include a 'Very High' category, as presented in Chapter 18: Water Resources and Flood Risk (Volume II). Consultation has been undertaken with relevant bodies including Cheshire West and Chester Council Lead Local Flood Authority, Flintshire County Council, Natural Resources Wales and the Environment Agency, as reported in Chapter 18: Water Resources and Flood Risk (Volume II).
Dewatering	Paragraph 16.5.2 of the Scoping Report states that dewatering may be required during construction of the Proposed Development. The Applicant should explain of how and where dewatering will be undertaken and provide an assessment of this matter where significant effects are likely to occur in the ES. In addition, the Applicant should describe the requirements for additional abstraction licenses and a Dewatering Management Plan in the ES. The Applicant's attention is drawn to consultation responses from NRW and the Canal and River Trust in this regard (see Appendix 2 of this report).	Potential effects associated within dewatering are assessed within Chapter 18: Water Resources and Flood Risk (Volume II). The requirement for abstraction licences and a Dewatering Management Plan are also discussed.
Groundwater Dependent Terrestrial Ecosystems (GWDTEs)	The Applicant should provide an assessment of the potential effects of the Proposed Development on GWDTEs where significant effects are likely to occur and cross reference the ecology chapter (and vice versa) where relevant in the ES.	An assessment of the potential effects of the DCO Proposed Development on GWDTEs is reported in Chapter 18: Water Resources and Flood Risk (Volume II).
Potential sources of contamination	The Applicant should seek agreement with the relevant consultation bodies regarding the potential sources of contamination included in the assessment and evidence this in the ES. The Applicant's attention is draw to NRW's consultation response in this regard (see Appendix 2 of this report)	Potential effects upon water quality as a result of the DCO Proposed Development, including potential contamination sources, are assessed in Chapter 18: Water Resources and Flood Risk (Volume II).
Potential impacts arising from operation of the DCO Proposed Development	The Applicant should consider potential impacts arising from the Carbon Dioxide Pipeline acting as a preferential drainage pathway and the compaction of soils during operation of the DCO Proposed Development in relevant aspect chapters of the ES and provide an assessment of these matters where significant effects are likely to occur. The Applicant's attention is drawn to consultation responses from NRW and Mollington Parish Council in this regard.	Chapter 18: Water Resources and Flood Risk (Volume II) considers the potential impacts of the Carbon Dioxide Pipeline on drainage pathways and compaction of soil during operation. An Outline Soil Management Plan (Document reference: D.6.5.4.1) has been produced to accompany the DCO submission and outlines mitigation measures to be implemented to reduce the compaction of soils. A detailed Soil Management Plan will be produced pursuant to the requirements of the Draft DCO (Document Reference: D.3.1)
The Applicant may identify areas for stockpiling and storing of waste during construction of the DCO Proposed Development.	PINS noted that the Applicant should ensure that the location and extent of waste stockpiles/ storage areas are clearly described in the ES and provide an assessment of this matter where significant effects are likely to occur.	The location of stockpiles and storage areas has been assessed with respect to the water environment, flood risk and drainage in Chapter 18: Water Resources and Flood Risk (Volume II), and required mitigation presented.
General comments raised by CRT.	The details of how any water during the works is to be captured, treated, and disposed of should be considered especially where adjacent to the canal corridor or any watercourses which interact with the Shropshire Union canal (including those culverted under the canal). This should include the potential for spillage or run-off directly in the canal during the construction works.	Details of drainage and water treatment is presented in the Outline Surface Water Drainage Strategy Report (Document reference: D.6.5.13). Chapter 18: Water Resources and Flood Risk (Volume II) considers the potential effects to the canal as a result of the DCO Proposed Development.
General comments raised by CRT.	In terms of any dewatering of the works/trenches, CRT would not want any silty discharges to the Shropshire Union canal or indeed to any watercourses which are culverted under the canal. Any abstraction of water from the canal would also need the formal consent of CRT.	Potential effects associated within dewatering are assessed within Chapter 18: Water Resources and Flood Risk (Volume II). The requirement for abstraction licences and a Dewatering Management Plan are also discussed. The DCO Proposed Development will be delivered in compliance with all relevant legislation, consents and permits.
General comments raised by CRT.	The canal and any associated watercourse culverted under the canal must be protected from silty discharges associated with the works and mitigation should be set out with the EIA.	Appropriate mitigation is set out in Chapter 18: Water Resources and Flood Risk (Volume II) to prevent, where possible, and control the risk of sediment release into the channel. This includes appropriate turbidity monitoring and the control of the risk of silt release.
General comments raised by CRT.	Any impacts on the canal from drainage or flood risk should be included within the EIA as this could affect both water quality and quantity and have a wider impact on our network. Depending on the final route the potential for a breach of the canal should be considered within the Flood Risk Assessment.	The canal is assessed within Chapter 18: Water Resources and Flood Risk (Volume II) and associated appendices including Appendix 18.4 - Flood Risk Assessment Appendix 18.4 (Volume III).
General comments raised by CWCC LLFA	AGIs, BVSs, and compound areas will require a FRA and drainage strategy in accordance with NPPF. Where development is proposed within Flood Zone 2 and 3 mitigation measures should be provided in accordance with NPPF and Environment Agency standing advice.	Appendix 18.4 – Flood Risk Assessment (Volume III) and Outline Surface Water Drainage Strategy Report (Document reference: D.6.5.13) are submitted as part of the ES in accordance with the NPPF. These documents cover the permanent works (Operation Stage). An assessment of flood risk during the Construction Stage (including construction compounds) is included in Chapter 18: Water Resources and Flood Risk (Volume II). A drainage strategy will be developed for the compound areas during the detailed design stage. Appropriate mitigation required is presented in Chapter 18: Water Resources and Flood Risk (Volume II).

General comments raised by CWCC LLFA.	Where ordinary watercourses are crossed via trenched crossings, a Land Drainage Consent will be required for both the temporary and permanent works and mitigation measures provided through temporary diversion or pumping along with method statement for undertaking the works.	A full assessment of the potential effects associated with watercourse crossings is presented in Chapter 18: Water Resources and Flood Risk (Volume II) and Appendix 18.3 – WFDa (Volume III), together with mitigation required. Consultation with the LLFA has been undertaken, as reported in Chapter 18: Water Resources and Flood Risk (Volume II). All relevant permits and consent will be obtained prior to commencing works on site.
General comments raised by CWCC LLFA.	Potential for increased groundwater flood risk up gradient of longitudinal below ground structures should be assessed and mitigation measures provided to manage any temporary and permanent groundwater emergence at the surface.	Detailed groundwater flood risk as a result of the DCO Proposed Development (i.e. below ground structures) is assessed in Chapter 18: Water Resources and Flood Risk (Volume II), and mitigation required is presented.
General comments raised by CWCC LLFA.	The DCO Proposed Development is generally within an area at low risk of surface water flooding but there are parts of the DCO Proposed Development which are at medium to high risk of surface water flooding which need to be considered as part of the layout to ensure any overland flow routes are retained.	Surface water flood risk, including overland flow routes, is assessed in Chapter 18: Water Resources and Flood Risk (Volume II) and Appendix 18.5 – Flood Consequences Assessment (Volume III).
General comments raised by CWCC LLFA.	Surface water attenuation requirements should be assessed that offer a reduction in surface water runoff rate in line with the Policy DM 41 (i.e., at least 30% betterment on brownfield flows and greenfield runoff for existing greenfield sites). Please note that all new connections to the watercourses shall comply with reduction of flows to greenfield runoff rates. Surface water should be managed to ensure there is no increased surface water from the DCO Proposed Development and runoff from extreme events should be managed such that adjacent third-party land is not affected. Hydraulic calculations and drawings to support the design need to be provided along with an assessment of overland flow routes for extreme events that is diverted away from buildings. Maintenance of SuDS is essential for its proper operation and a clear management and maintenance plan for the lifetime of the works.	Appendix 18.4 – Flood Risk Assessment (Volume III) and Outline Surface Water Drainage Strategy Report (Document reference: D.6.5.13) have been submitted as part of the DCO Application in accordance with the NPPF. The Outline Surface Water Drainage Strategy Report (Document reference: D.6.5.13) has been progressed in consultation with CWCC and in accordance with Policy DM 41. Surface water flood risk has been assessed and reported in Chapter 18: Water Resources and Flood Risk (Volume II) and Appendix 18.4 – Flood Risk Assessment (Volume III). The Outline Surface Water Drainage Strategy Report (Document reference: D.6.5.13) outlines how the DCO Proposed Development will manage and discharge surface water via the use of SuDS and reports the consultation undertaken with relevant bodies and stakeholders. it also includes surface water storage calculations.
General comments raised by FCC LLFA.	All new developments of more than 1 dwelling house or where the construction area is 100 square meters or more, will require sustainable drainage systems (SuDS) for surface water. Therefore, the BVS and the AGIs will require SuDS approval. The SuDS must be designed and built, in accordance with Statutory SuDS Standards published by the Welsh Ministers and SuDS Schemes must be approved by the local authority acting in its SuDS Approving Body (SAB) role before construction work begins.	The Outline Surface Water Drainage Strategy Report (Document reference: D.6.5.13) outlines how the DCO Proposed Development will manage and discharge surface water via the use of SuDS and reports the consultation undertaken with relevant bodies and stakeholders. The drainage strategy has been progressed in alignment with FCC and pre-SAB requirements. The Draft DCO (Document reference: D.3.1) includes provisions for the surface water drainage plans to be produced in accordance with the Outline Surface Water Drainage Strategy Report (Document reference: D.6.5.13) which will be submitted to and approved by the relevant planning authority or, where applicable, the Environment Agency and/or NRW and/or the Lead Local Flood Authority.
WFD Compliance	The WFD Compliance Assessment should assess potential impacts on all WFD elements. Bathing Waters Protected Areas and Shellfish Water Protected Areas will need to be considered in the WFD compliance assessment. The nearest bathing waters are at West Kirby and Prestatyn. The Scoping Report has correctly identified the Dee Transitional waterbody to be included in the WFD compliance assessment. If the SoS considers that the coastal works should be scoped into the EIA the North Wales Coastal waterbody should also be included, or considered cumulatively with the proposed development if the SoS agrees with the applicant's proposed approach. 68. The Dee Estuary is a classified Shellfish Water and any pollution or contaminated water running into the estuary could affect the shellfish classification. There is a cockle Regulating Order in the Dee estuary that supports 54 fishermen and any reduction in water quality could affect the fishery. This should be considered in the WFD compliance assessment.	Protected areas are assessed in the WFDa (Appendix 18.3 - Volume III). The Dee Estuary and North Wales Coastal water bodies are considered in the WFD assessment.
Environmental Permits	Environmental permits will be required within 8 meters of a Main River, flood defence structure or culverted main river, within 16m of a tidal defence or in the floodplain. Consideration should be given to the WFD. Where appropriate a WFDa should be completed. Dewatering license will be required where operations are greater than 20m3/day. Refer to the EA's approach to groundwater protection.	Chapter 18: Water Resources and Flood Risk (Volume II) sets out relevant permits to be obtained by the Construction Contractor. Appendix 18.3 – WFDa (Volume III) has been submitted as part of the ES.
General comments raised by Welsh Water	Whilst we have no comments on the scoping opinion itself, we would advise that we have numerous wastewater and clean water assets crossing in close proximity to the site and would be grateful if the developer could contact us to discuss further so we can assess the impact on our assets.	Prior to Detail Design, the Applicant will liaise with the DCWW to confirm the location of their assets and easements required to avoid any future impacts.
General comments raised by Mollington Parish Council.	The proposed route is liable to flooding. Earlier this year (2021) there was a severe flooding event with several properties affected and we feel that the works involved in laying the pipeline could further disrupt the drainage of water which the local residents and farmers currently work hard to mitigate.	Mollington Parish Council comments are noted. Chapter 18: Water Resources and Flood Risk (Volume II) considers the potential impacts of the Carbon Dioxide Pipeline on drainage pathways and compaction of soil during operation.
Groundwater (construction)	The Scoping Report does not mention whether there are any groundwater dependent terrestrial ecosystems (GWDTEs), wet woodlands or other ecosystems that may be dependent on shallow groundwater within the proposed corridor/area of interest. If some dewatering is required in particular locations, these types of receptors would need to be considered.	An assessment of the potential effects of the DCO Proposed Development on GWDTEs is reported in Chapter 18: Water Resources and Flood Risk (Volume II).
Groundwater (construction)	There is no clear reference as to how dewatering will be performed. Groundwater abstractions above 20m3 /day generally require a licence but exemptions may apply if the abstraction or series of abstractions last less than 6 months and if the dewatering will not result in impacts e.g. to local private water supplies (i.e. no reduction in flows and water quality) or negatively affect a particular ecosystem. It is unclear whether sheet-piles, for example, would be used as a hydraulic control measure to stop the ingress of water into sections of the excavation and if the sheet- piles would then remain in the ground. Depending on their length, these types of structures can impede and alter the flow of shallow groundwater which may be currently relied upon by a Private Water Supply (PWS) or an ecosystem. Therefore, a Dewatering Management Plan should be developed that provides a general framework for assessing the potential risks arising from dewatering, but also to act as a vehicle for more specific and detailed assessment. The Hydrogeological Impact Appraisal (HIA) for dewatering abstractions Science Report – SC040020/SR1 - Dewatering HIA post edit (publishing.service.gov.uk) is a useful reference document. Assessment of the risks that dewatering may pose to the environment should be performed and included as part of the EIA; this risk assessment is often referred to as an HIA.	Dewatering impacts, including expected inflow rates and radius of impact have been assessed in Chapter 18: Water Resources and Flood Risk (Volume II). Sheet piles most likely would be used to limit inflow as well as shore up the trench sides. It is understood that these would not be left insitu and would be removed when no longer necessary. The requirement for abstraction licences and a Dewatering Management Plan are also discussed.
Groundwater (construction)	The Scoping Report does not mention the need to assess groundwater levels (see above) particularly where these levels are expected to be shallow and where they may be supporting baseflow to watercourses, or particular habitats (e.g. wet woodlands or ancient woodlands) or private water supplies. EC7 Geotechnical requirements for ground investigations as EN 1997-2:2007 (E) states: "For linear structures (roads, railways, channels, pipelines, dikes, tunnels, retaining walls), a spacing of 20m to 200m is required between ground investigation boreholes." Therefore, a Groundwater Management and Monitoring Plan (e.g. nature, scope, locations and frequency of groundwater monitoring) should be developed for the proposed scheme and the monitoring data used to inform potential risks to the water environment, ecosystems and receptors such as PWS	Groundwater levels are assessed within Chapter 18: Water Resources and Flood Risk (Volume II). A Ground Investigation was undertaken from November 2021 through to March 2022, and groundwater monitoring has been undertaken at specific locations. The data collected has been used to inform the assessment of water resources and flood risk reported in Chapter 18: Water Resources and Flood Risk (Volume II). A Groundwater Management and Monitoring Plan is included as a Requirement of the Draft DCO and will be implemented alongside a detailed CEMP produced by the Construction Contractor.
Groundwater (construction)	Section 16.7.10 of the Scoping Report states that: "An assessment of the potential impacts of the Proposed Development on groundwater quality and quantity will be undertaken with respect to identified groundwater abstractions including licenced activities and private water supplies, and other groundwater dependent receptors." This is a very high level and generic statement and an assessment of the potential impact of the Proposed Development on groundwater should be developed which describes not only the assessment method but also the assessment itself. Some of this is also addressed by the HIA (see above)	The assessment of the potential effects upon groundwater quality and quantity as a result of the DCO Proposed Development, together with the assessment methodology, is presented in Chapter 18: Water Resources and Flood Risk (Volume II).
Groundwater (construction)	The Scoping Report does not specifically mention how the number and locations of PWS will be assessed and then screened in/out to determine which PWS may be at a greater/lesser risk from the pipeline. Conceptual Site Models for PWS that are deemed to be at greater risk from the proposed development should be developed and used as the basis for a risk assessment. In the worst case, trench dewatering may affect the flow and quality of the water that sources a PWS. A questionnaire may need to be developed that can be distributed to homeowners along the proposed development so that a more accurate assessment of PWS numbers can be determined.	Information on PWS was gathered from relevant sources and is presented in Chapter 18: Water Resources and Flood Risk (Volume II), together with the assessment of potential effects.

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Groundwater (source of contamination)	We advise that other potential sources of contamination are added to section 9.3.12 of the Scoping Report, including: • Oil/fuel/diesel leakage from heavy construction equipment and trucks. Heavy plant will be required to excavate and install the pipeline. • Possible water quality degradation from the use of chemicals such as bentonite for construction and/or the need for temporary slurry lagoons that may be required for the pipeline construction, notably at water crossing points where any impacts would be greatest. • Possible water quality degradation from stormwater runoff, including sediment impacts	These are considered within Chapter 18: Water Resources and Flood Risk (Volume II) and Appendix 18.2: Summary of Effects (Volume III)).
Groundwater (operation)	The operational pipeline poses several risks that require more detailed assessment as part of the EIA. These risks include: i. The pipeline acting as a preferential drainage pathway, notably where it may divert flows away from watercourses or where it may alter the existing local groundwater flow-net that may support an ecosystem or private water supply. This risk increases depending on the nature of the materials that surround the pipeline and their relative compaction. Potential changes to drainage characteristics arising from the operational pipeline have not been discussed within the Scoping Report. It may be necessary that some degree of groundwater monitoring is continued in particular locations, notably to assess the effects during the early operational period. ii. Impacts on soils, notably compaction arising from the use of heavy plant, can result in crop loss.	These are considered within Chapter 18: Water Resources and Flood Risk (Volume II), where relevant.
Groundwater (operation)	Section 3.6.19 'Reinstatement' states: "The ground will be reinstated with the stored topsoil and subsoil following trenching. If necessary, the subsoil will be ripped prior to topsoil placement if compaction has occurred. Topsoil will be spread in such a way as to ensure that it does not become compacted. All surplus construction materials will be removed on completion of the work." However, The installation of underground pipelines: effects on soil properties - Batey - 2015 - Soil Use and Management - Wiley Online Library also recommends other measures, which include the installation of new drains.	The proposed pipeline will be laid in a trench and surrounded with a backfill material which will likely have a higher permeability than the surrounding existing material, as detailed in Chapter 3: Description of the DCO Proposed Development (Volume II). Additional drainage for the near-surface strata will therefore not be necessary (refer to Appendix 18.2: Summary of Effects (Volume III)).
Groundwater (operation)	The longer-term effects of leaking carbon dioxide from the proposed development have not been mentioned in the Scoping Report. We advise that potential impacts that may affect the local environment should be considered.	The Carbon Dioxide Pipeline will have leak detection equipment installed which will prevent long term leakage of carbon dioxide, as detailed in Chapter 3: Description of the DCO Proposed Development (Volume II).
Flood Risk	We welcome that additional information and assessments in the form of a separate Flood Consequences Assessment (FCA) is scoped in to be produced in support of the ES. The development crosses areas of zone C1 and C2 of the Development Advice Map (DAM) from TAN15: Development and Flood Risk.	Noted by the Applicant. Potential sources of flooding are considered within Appendix 18.5 – Flood Consequences Assessment (Volume III).
Flood Risk	Any buildings or above ground installations (e.g. AGI's, BVS etc.) associated with the pipeline and shown to have a flood risk (as per NRW flood maps) will need to comply with the requirements of TAN15. As the proposed revised TAN15 may affect FCA requirements and flood risk sustainability constraints we reserve the right to revisit any comments we make at this time. The FCA will need to assess flood risk from the tidal river Dee and the other watercourses which are crossed by the development. The FCA should be based on readily available information including our Tidal Dee Flood Modelling Study (2020) which can be requested through contacting our data distribution team at: datadistribution@naturalresourceswales.gov.uk.	Noted by the Applicant. Potential sources of flooding are considered within Appendix 18.5 – Flood Consequences Assessment (Volume III), which has been prepared in accordance with TAN15. Sources of information used are presented within Appendix 18.5 – Flood Consequences Assessment (Volume III).
Emissions to water	When considering baseline conditions (of existing water quality) and the assessment and future monitoring of impacts, these should: • include assessment of potential impacts on human health and not focus solely on ecological impacts • identify and consider all routes by which emissions may lead to population exposure (e.g., surface watercourses, recreational waters, sewers, geological routes etc.) • assess the potential off-site effects of emissions to groundwater (eg. on aquifers used for drinking water) and surface water (used for drinking water abstraction) in terms of the potential for population exposure • include consideration of potential impacts on recreational users (eg, from fishing, canoeing etc.) alongside assessment of potential exposure via drinking water	These are considered within Chapter 18: Water Resources and Flood Risk (Volume II). Impacts to public water supply are scoped out of this assessment. Impacts to water quality and groundwater quality of surface and ground water bodies is scoped in for both the construction and operation phase of the DCO Proposed Development.
Surface water drainage	In line with National Planning Practice Guidance, any surface water flow from the proposed above ground installations should be discharged in the following order of priority: 1. An adequate soakaway or some other form of infiltration system. 2. An attenuated discharge to surface water body. 3. An attenuated discharge to public surface water sewer, highway drain or another drainage system. 4. An attenuated discharge to public combined sewer. There should be no requirement for surface water drainage to discharge to public sewer. Wherever practicable, Sustainable Drainage Systems (SuDS) should be implemented in accordance with the CIRIA SuDS manual. Managing surface water through the use of SuDS can provide benefits in water quantity, water quality, amenity and biodiversity. We would expect the Environmental Impact Assessment to be submitted as part of the planning application for the proposed development to include a Flood Risk and Drainage Strategy that takes the above into full consideration.	The discharge hierarchy will be followed in the drainage strategy. Appendix 18.4 – Flood Risk Assessment (Volume III) and Outline Surface Water Drainage Strategy Report (Document reference: D.6.5.13) are submitted as part of the DCO Application in accordance with the NPPF. The Outline Surface Water Drainage Strategy Report (Document reference: D.6.5.13) has been progressed in consultation with CWCC and in accordance with Policy DM 41, follows the discharge hierarchy and outlines how the DCO Proposed Development will manage and discharge surface water via the use of SuDS. Surface water flood risk has been assessed and reported in Chapter 18: Water Resources and Flood Risk (Volume II) and Appendix 18.4 – Flood Risk Assessment (Volume III).
	Both during and post construction, there should be no additional load bearing capacity on the mains without prior agreement from United Utilities. This would include earth movement and the transport and position of construction equipment and vehicles. The applicant should therefore give careful consideration to the implications of any changes in proposed land levels. Any such changes will need to be agreed with United Utilities. Our standard conditions document includes details of trees and shrubbery suitable for planting in the vicinity of a water main	As reported in Chapter 3: Description of the DCO Proposed Development (Volume II), surveys and engagement with utility providers has been undertaken to identify known utilities within the Newbuild Infrastructure Boundary. Engagement will be ongoing throughout the DCO examination and prior to / during construction. No works will take place within the utility easements without prior engagement and agreement.
Combined and Cumulative Effects		
	PINS noted that the Scoping Report stated that the BVSs will be powered using connections to existing electrical and telecoms utilities, and that these works are to be undertaken by the relevant statutory undertakers and not included in the DCO for the DCO Proposed Development. The Applicant should ensure that the potential environmental effects of these connection works or any other consequential development are considered in the assessment of cumulative effects where significant effects are likely to occur.	The connections of the BVS to existing electrical and telecoms utilities has been included in the inter-project assessment within Chapter 19 - Combined and Cumulative Effects (Volume II) as an other development (development 1d).
Impacts arising from the TCPA Proposed Development (excluding BVS) in relation to all environmental topics.	PINS noted that the Applicant should ensure that the potential impacts of the TCPA Proposed Development are considered in the assessment of cumulative effects where significant effects are likely to occur.	The TCPA Proposed Development is included in the inter-project effects assessment within Chapter 19 - Combined and Cumulative Effects (Volume II).
A55 'Red Route'	PINS and FCC noted that the proposed A55 'Red Route' relief road is located in proximity to the DCO Proposed Development. Although this application is currently on hold by the Welsh Government, PINS requested that Applicant consult with the North and Mid Wales Trunk Road Agency (NMWTRA) to consider whether this project should be included within the assessment of cumulative effects.	The A55 relief road has been included in the inter-project assessment, within Chapter 19 - Combined and Cumulative Effects (Volume II), based on the worst case assumption that the development would be progressed. At time of writing NMWTRA was not consulted as it was not deemed as required due to the worst case being assumed.
Search area for NSIPs and other projects	The Scoping Report stated that based on professional judgement the initial search area will be based on 15km for NSIPs and 2km for other projects. It is appreciated that this may be an initial step in the process. However, PINS noted that the ES should demonstrate how the projects identified in the Long List reflect the Zone of Influence (ZoI) of the DCO Proposed Development as advised in PINS Advice Note 17 Cumulative Effects Assessment.	Chapter 19 - Combined and Cumulative Effects (Volume II) has superseded the initial search areas of 15km and 2km by conforming to PINS Advice Note 17. Zol have been applied to each included environmental topic. This has resulted in a maximum Zol of 10km and minimum Zol of adjacency to the Newbuild Infrastructure Boundary.
Cumulative and in-combination effects	NE noted that full consideration of the implications of the whole scheme should be included in the ES. NE noted that all supporting infrastructures should be included within the cumulative assessment. NE noted reference to the whole 'Project' and emphasised that importance of assessing cumulative impact in accordance with the Conservation of Habitats and Species Regulations 2017 (as amended).	A full assessment of both inter-project and intra-project effects has been carried out in Chapter 19 - Combined and Cumulative Effects (Volume II).

Cumulative and in-combination effects	NRW advise that the applicant's general approach of assessing the 'proposed development' for which the DCO is being sought as a distinct project could be acceptable in principle if the applicant can demonstrate that the DCO Proposed Development can be justified on its own merits and is not dependent on the other parts of the project. Whether this approach is correct is a judgment for the planning decision maker (Secretary of State for the DCO). Furthermore, if the applicant's approach is accepted by the SoS we advise that works subject to other consents would need to be considered cumulatively within the EIA and should not be scoped out because they do not fall within the DCO.	A full assessment of both inter-project and intra-project effects has been carried out in Chapter 19 - Combined and Cumulative Effects (Volume II). This methodology conforms with PINS Advice Note 17 and other guidance where applicable.
Cumulative effects	We advise that works subject to other consents would need to be considered cumulatively within the EIA and should not be scoped out only because they do not fall within the DCO.	The cumulative assessment considers other developments and their potential cumulative effects with the DCO Proposed Development as part of the inter-project assessment.
Determining significant effects	Will the NSIP's impacts on this determinant combine with effects from other existing or proposed NSIPs or large-scale developments in the area, resulting in an overall cumulative effect different to that of the project alone? What are the cumulative effects of the impacts of the scheme on communities or populations? Individual impacts individually may not be significant but in combination may produce an overall significant effect.	The inter-project and intra-project effects of Population and Human Health are considered, where relevant, in Chapter 19 - Combined and Cumulative Effects (Volume II).
Information sources for assessment of cumulative effects	Large complex schemes that involve significant effects on communities or significant cumulative effects can benefit from identifying impacts and reporting at an individual community level. This assists in the identification of the overall potential effects across a range of impacts. These community level reports will also aid local communities to engage with consultations by providing relevant and accessible information.	Localised impacts are considered within Chapter 16: Population and Human Health (Volume II). As a result, considerations of localised impacts are inherently considered as part of the inter-project and intra-project effects as part of Chapter 19 - Combined and Cumulative Effects (Volume II).
Cumulative effects	A full consideration of the implications of the whole scheme should be included in the ES. All supporting infrastructure should be included within the assessment. The ES should include an impact assessment to identify, describe and evaluate the effects that are likely to result from the project in combination with other projects and activities that are being, have been or will be carried out. The following types of projects should be included in such an assessment, (subject to available information): a. existing completed projects; b. approved but uncompleted projects; c. ongoing activities; d. plans or projects for which an application has been made and which are under consideration by the consenting authorities; and e. plans and projects which are reasonably foreseeable, i.e. projects for which an application has not yet been submitted, but which are likely to progress before completion of the development and for which sufficient information is available to assess the likelihood of cumulative and in-combination effects.	The cumulative assessment in Chapter 19 - Combined and Cumulative Effects (Volume II) considers the effects of the DCO Proposed Development incombination with other developments as part of the inter-project effects assessment. Criteria for the types of project included in the assessment are outlined in Appendix 19.1: Inter-Project Effects Assessment (Volume III).
the Project	We note paragraph 17.2.3 refers to the cumulative assessment of the whole 'Project' i.e. the proposed works to the existing pipeline and Hydrogen Production Infrastructure. It is important the impacts of the whole 'Project' are identified and assessed in accordance with the Conservation of Habitats and Species Regulations 2017 (as amended). We support the assessment of cumulative and in-combination impacts for the whole 'Project' and future individual development applications in the ES	Consideration of other Hynet projects has been included in the inter-project effects assessment of Chapter 19 - Combined and Cumulative Effects (Volume II). These projects have been identified as Hynet projects to distinguish them from other developments. An assessment of these projects in accordance with the Conservation of Habitats and Species Regulations 2017 (as amended) is included in the Habitats Regulations Assessment (HRA) (Document reference: D.6.5.6).
Landscape	would be likely to be a material consideration at the time of determination of the planning application.	Chapter 19 - Combined and Cumulative Effects (Volume II) considers the effects of the DCO Proposed Development in-combination with other developments as part of the inter-project effects assessment. Criteria for the types of project included in the assessment are outlined in Appendix 19.1: Inter-Project Effects Assessment (Volume III) and includes projects at Scoping Stage in line with PINS Advice Note 17.
Consents	We advise that works subject to other consents would need to be considered cumulatively within the EIA and should not be scoped out only because they do not fall within the DCO.	The inter-project effects assessment in Chapter 19 - Combined and Cumulative Effects (Volume II) includes an assessment of other developments incombination with the DCO Proposed Development.
Description of the proposed development	The BVS will be powered using connections to existing electrical and telecoms utilities, and that these works are to be undertaken by the relevant statutory undertakers and not included in the DCO for the Proposed Development. The Applicant should ensure that the potential environmental effects of these connection works or any other consequential development are considered in the assessment of cumulative effects where significant effects are likely to occur.	The connections of the BVS to existing electrical and telecoms utilities has been included in the inter-project assessment within Chapter 19 - Combined and Cumulative Effects (Volume II) as an other development (development 1d).