

Appendix 1B: Scoping Opinion

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North Lincolnshire Council

Your Ref: 60668866
Our Ref: PA/SCO/2022/2
Date: 11th March 2022

VPI Immingham LLP and Philips 66 Limited Project Team

Your Ref: 60668866

Dear Sir/ Madam,

Re: Scoping opinion request in relation to proposed post- combustion carbon capture (PCC) developments.

Thank you for your consultation letter dated 25th January 2022.

I have taken the opportunity to review the Humber Zero EIA Scoping Report and Draft Technical Appendices submitted to the Authority. Technical consultees within the Council have raised matters which will hopefully advise the final production of the Environmental Statement and support you in make a robust submission to the Local Planning Authority.

North Lincolnshire Council does not wish to raise any objection to the principle of the proposed scheme at this moment in time. At application stage North Lincolnshire Council will engage with the applicant and as such we do reserve the right to raise concerns at a later stage following consideration of the application once submitted.

At this stage of pre-application consultation, I would like to make the following observations:

Planning Policy

Having considered this section of the report NLC consider the following Policies to be relevant:

North Lincolnshire Local Plan:

- Policy IN3: Industrial and Commercial Development in the Urban Area, Principal Growth Settlements, South Humber Bank (Including North Killingholme Airfield) and Humberside International Airport;
- Policy IN6: Defined Industrial Buffer Areas;
- Policy IN12: Bulk Rail Freight Handling Facilities;
- Policy RD2: Development in the Open Countryside;
- Policy T1: Location of Development;
- Policy T2: Access to Development;
- Policy T11: Protecting Rail Routes;

- Policy T18: Traffic Management;
- Policy T19: Car Parking Provision and Standards;
- Policy LC1: Special Protection Areas, Special Areas of Conservation and Ramsar Sites;
- Policy LC2: Sites of Special Scientific Interest and National Nature Reserves;
- Policy LC4: Development Affecting Sites of Local Nature Conservation Importance;
- Policy LC5: Species Protection;
- Policy LC7: Landscape Protection;
- Policy LC12: Protection of Trees, Woodland and Hedgerows;
- Policy LC20: South Humber Bank – Landscape Initiative;
- Policy HE5: Development affecting Listed Buildings;
- Policy HE9: Archaeological Evaluation;
- Policy DS1: General Requirements;
- Policy DS7: Contaminated Land;
- Policy DS9: Development of Land in the Vicinity of Established Hazardous Installations and Pipelines;
- Policy DS11: Polluting Activities;
- Policy DS12: Light Pollution;
- Policy DS13: Groundwater Protection and Land Drainage;
- Policy DS14: Foul Sewage and Surface Water Drainage;
- Policy DS15: Water Resources; and
- Policy DS16: Flood Risk.

Core Strategy:

- Policy CS1: Spatial Strategy for North Lincolnshire;
- Policy CS2: Delivering More Sustainable Development;
- Policy CS3: Development Limits;
- Policy CS5: Delivering Quality Design;
- Policy CS6: Historic Environment;
- Policy CS11: Provision and Distribution of Employment Land;
- Policy CS12: South Humber Bank Strategic Employment Site – A Broad Location;
- Policy CS16: North Lincolnshire’s Landscape, Greenspace and Waterscape;
- Policy CS17: Biodiversity;
- Policy CS18: Sustainable Resource Use and Climate Change;
- Policy CS19: Flood Risk;
- Policy CS20: Sustainable Waste Management;
- Policy CS25: Promoting Sustainable Transport;
- Policy CS26: Strategic Transport Infrastructure Proposals; and
- Policy CS27: Planning Obligations

Housing and Employment Land Allocation DPD:

- Policy PS1: Presumption in Favour of Sustainable Development
- Policy SHBE-1: South Humber Bank

Air Quality

Having considered this section of the EIASR, Environmental Protection have been consulted. In summary the following points have been raised. The Environmental Statement will include the following:

- emission of pollutants to air from the stacks and other emission sources on the plant during operation;
- emission of pollutants to air from vehicles associated with construction, operation and decommissioning of the Proposed Development; and
- construction dust and mobile plant exhaust emissions generated during construction and decommissioning of the capture plant.

The following has been scoped out of the air quality assessment:

- Detailed assessment of emission of pollutants to air from vehicles associated with operation

The following statement is then made *“Operational traffic is considered likely to be negligible when compared with air quality screening criteria, and not likely to result in vehicle numbers which could generate significant changes in air quality due to vehicle emissions.”* The Environmental Protection Team do not necessarily disagree, any accompanying report should include the anticipated vehicle movements during operation to substantiate this statement.

The Environmental Protection Team have also noted that the modelling of point source emissions will be undertaken in accordance with the Environment Agency ‘Air emissions risk assessment for your environmental permit’ (2016) (‘AERA Guidance’). This guidance is used when operators are applying for an Environmental Permit (or varying an existing one) under the Environmental Permitting Regulations (2016). The assessment submitted will be to support a planning application for which there is specific guidance issued by the IAQM/EPUK titled Land-Use Planning & Development Control: Planning for Air Quality.

The IAQM/EPUK Guidance makes the following comment in relation to the use of the EA assessment for planning applications:

‘It must be recognised, however, that the EA assessment methodology and the assessment guidance in this document serve different purposes. The EA methodology is intended for the purpose of screening out insignificant emissions of individual pollutants and identifying where there is a risk of other pollutants emitted being potentially significant in terms of environmental effects. This exercise is carried out as part of the impact assessment in support of an application under the Environmental Permitting Regulations. The IAQM/EPUK guidance is intended to provide a means of reaching a conclusion on whether the proposed development has a likely significant effect on local air quality, taking into account the overall severity of the impacts and other factors as appropriate. In each case, the concept of significance has a deliberately different meaning and context.’

With the above in mind, this the Environmental Protection Team would expect the assessment to follow the IAQM/EPUK Guidance.

Noise and Vibration

Having considered the noise section of the report, the Environmental Protection Team have been consulted. In summary, the general approach is supported. The noise assessment which will accompany the ES will include the following:

- construction and decommissioning noise and vibration impacts (including impacts related to traffic on public roads);
- operational noise impacts from the Proposed Development, including the potential air-cooling infrastructure; and
- operational noise impacts from road traffic on public roads.

The following has been scoped out of the assessment:

- Operational traffic-related noise impacts.

The following statement is then made: "It is anticipated that operational traffic generation would be negligible, hence any effects due to traffic-related noise Impacts are not likely to be significant." As above, justification for this will be required.

The methodology and details regarding the assessment will be agreed in advance with North Lincolnshire Council.

Traffic and Transport

Having considered this section of the report the Local Highway Authority have been consulted. However, no response has been received from the LHA to date. However, this will be forward on to the agent as soon as this have been received.

Furthermore, Network Rail have been consulted on the EIA Scoping Report. In summary Network rail have advised that the ES should consider any impact of the scheme upon the railway infrastructure and upon operational railway safety. It should also include a Transport Assessment to identify any HGV traffic/haulage routes that may utilise railway assets such as bridges and level crossings during the construction and subsequent operation of the site. If the site's rail connection is to be used during the construction and operation of the development, details of this will also be required in the Transport Assessment and also agreements would be required with Network Rail for track access to the main line.

Please note that if the intention is to install a pipeline in support of the project through railway land, the developer will be need an easement from Network Rail and we would recommend that they engage with us early in the planning of their scheme in order to discuss and agree this element of the proposals.

Water Resource and Flood Risk

Having considered this section of the report, the LLFA have been consulted. In summary, the general approach is supported. The LLFA have noted that Section 6.5 of the report covers all water resources including surface waters, e.g. rivers, lakes/ponds, riparian/land drainage systems, coastal or underground waters on or around the location which could be affected

by the project, particularly in terms of their volume and flood risk. Therefore, this will be assessed further at detailed design states.

Furthermore, the Environment Agency have been consulted. In summary the EA are generally satisfied with what is being proposed within the scoping report with regards to the water environment.

The EA note that risk of pollution to surface watercourses within or near the site during construction and operation will be included within the scope of the EIA, as stated on page 64 of the report. This should include detailed risk assessment of the construction and operation of the proposed CO2 pipeline that will link the two sites as indicated in Figure 6 (page 82) of the report. The indicative pipeline route appears to cross a tributary of the North Killingholme Main Drain. Appropriate mitigation measures during the construction and operational phase of the development should be identified to protect water quality in this tributary plus the designated wildlife sites identified further downstream.

Section 6.5.4 refers to pollution risk due to possible effluent treatment plants. The applicant should investigate the practicality of discharging either industrial or 'domestic' effluent from the site to the main Anglian Water sewerage system.

With reference to water resource quantity, rather than quality, the applicant should be aware that water availability is a major constraining factor for industrial development in this area. This is because the Catchment Abstraction Management Strategy that covers the South Humber Bank states that *"the groundwater unit balance shows more water has been abstracted based on recent amounts than the amount available. We (the EA) will not grant further consumptive licences"*.

The EA note that section 6.9.9 mentions two groundwater abstraction licences currently held by Phillips 66 Limited within the site boundary.

It has been acknowledged in the Scoping Report that a flood risk assessment (FRA) based on the requirements of the National Planning Policy Framework (NPPF) must be prepared to accompany the future planning application.

The FRA should consider all sources of flooding, which may include tidal, fluvial, ground water, drainage systems, reservoirs, canals and ordinary watercourses. The FRA should demonstrate that the proposed development will be safe for its lifetime, without increasing risk elsewhere and where possible reducing flood risk overall. The FRA should also provide evidence that appropriate mitigation measures including flood resilience techniques have been incorporated into the development.

The EA's Hazard Mapping should be used to inform the FRA. Our Hazard Mapping shows the consequences should a breach or overtopping of our sea defences occur, including the likely flood depths, velocities and overall hazard that could impact the site over its lifetime. The modelled depths vary considerably across the site.

The FRA should identify the vulnerability classification of the proposal, the expected lifetime of the development and whether the site needs to remain operational in case of flooding. For development defined as essential infrastructure, we advise that all critical infrastructure and equipment should be located above the modelled flood depth in case of a breach during a

0.1% (1 in 1000) annual probability event, including climate change depending on lifetime of development

Finished floor levels generally should be raised as high as practicable and, if these will be below the flood depth, suitable flood resistance/resilience measures identified with consideration of operational needs. Single storey buildings should be built with finished floor levels above the predicted flood depth (referring to the tidal hazard map for the 0.5% annual probability event breach scenario, allowing for climate change). If this is not practicable an area of safe refuge will need to be provided (preferably) or an appropriate flood warning and evacuation plan submitted to and approved by the local planning authority.

The operators referred to within the document will need to apply for a permit variation to include the changes to their processes and operating techniques.

Landscape and Visual Amenity

Having considered this section of the report the Natural Environment Policy Specialist has been consulted. In summary the general approach is supported. Of the ten representative views selected, one should represent a view from the Village of South Killingholme towards Eastfield Road and the temporary work area west of Eastfield Road. Representative views should also consider residents of Marsh Lane and users of the England Coast Path.

Cultural Heritage

Having considered this section of the report the Historic Environment Officer has been consulted. In summary a number of points have been raised as follows.

The proposed developments have the potential for physical and indirect impacts on designated and non-designated heritage assets and their settings including known and potential archaeological sites and palaeoenvironmental deposits. The Scoping Report proposes to undertake a desk-based assessment for EIA of the Cultural Heritage (6.7); this is inadequate. Archaeological field evaluation will be required to adequately assess the heritage significance and inform the EIA and planning application in accordance with NPPF policy 194 and local planning policies CS6, HE8 and HE9.

The Cultural Heritage EIA will need to comprise the following assessments:

- Desk based assessment
- Archaeological field evaluation (non-intrusive and intrusive surveys)
- Assessment of significance based on results of completed field evaluation and including the contribution of settings to significance
- Mitigation proposals based on evaluation results

All archaeological evaluation reports should be included with the EIA and submitted with the planning applications. Measures to enhance and conserve the heritage assets and their settings should inform the planning and design of the development. Mitigation strategies to off-set any justifiable harm that entail archaeological and/or palaeoenvironmental excavation and recording prior to or during construction work should be detailed in a Written Scheme of Investigation submitted with the planning applications. The CEMP should include any archaeological exclusion zones and sensitive areas, appropriate protection measures and

the archaeological mitigation WSIs should be appended to the CEMP.

Ecology and Nature Conservation

Having considered this section of the report, the Natural Environment Policy Specialist has been consulted. In summary, the approach is broadly supported. As described in the report, the applicant(s) should provide the information reasonably required for a Habitats Regulations Assessment. In this case, the information required will include, but not be limited to:

- A plan, in Shapefile, pdf or Jpeg format, showing the location of the proposals in relation to the boundaries of the Humber Estuary SAC, SPA and Ramsar site.
- A habitat survey of the application site and surrounding areas, with particular reference to habitat features that may support breeding, wintering or passage birds associated with the Humber Estuary SPA and Ramsar Site.
- Recent wintering and passage survey information sufficient to assess the usage of the application site, surrounding area and adjacent SSSI units by birds associated with the Humber Estuary SPA and Ramsar Site.
- Details of any aerial or waterborne emissions and any impact pathways in relation to the Humber Estuary SAC, SPA and Ramsar site.

Furthermore, the EA agree that ecology and nature conservation should be scoped into the assessment and welcome the commitment to providing 10% biodiversity net gain. We have no further comments at this stage.

Geology, Hydrology and Contaminated Land

Having considered this section of the report the Environmental Protection Team have been consulted. In summary the general approach is supported. Contaminated land has been scoped into any subsequent ES.

The report acknowledges that a Phase 1 Geo Environmental Desk Study will be undertaken to identify potential contaminative land uses and potential source pathway-receptors, this information will then be used to create a Conceptual Site Model (CSM). The results of the Phase 1 desk study and CSM will be used to assess data gaps and uncertainties and, if required, an initial scope for additional site investigation prior to construction. It is anticipated that the requirements for intrusive investigation will be discussed and agreed in advance with the Environment Agency and NLC as appropriate.

The Environmental Protection Team agree that a Phase 1 report should be submitted with any future application and depending on the findings, a Phase 2 report may be required.

Furthermore, the EA have no concerns with the scope of assessment proposed in Section 6.9 - Geology, Hydrogeology & Contaminated Land, with regard to the assessment of the potential risks to controlled waters from contamination.

Waste Management

Having considered this section of the report, the Environmental Protection Team have been consulted. In summary NLC do not have any objections to the approach set out in the EIASR at this stage.

Climate Change and Carbon

Having considered this section of the report, NLC do not have any objections to the approach set out within the EIASR at this stage. However, it should be noted that NLC does not have the expertise in some of the methods used in the study.

Furthermore, the EA agree that climate change and carbon should be scoped into the assessment, covering both the effects of emissions from the proposed scheme over its lifetime (including construction) and the resilience of the scheme to climate change impacts.

Major Accidents and Disasters

Having considered this section of the report, NLC do not have any objections to the approach set out within the EIASR at this stage. However, it should be noted that NLC does not have the expertise in some of the methods used in the study.

Socioeconomics and Human Health

Having considered this section of the report, NLC do not have any objections to the approach set out within the EIASR at this stage. However, it should be noted that NLC does not have the expertise in some of the methods used in the study.

Cumulative and Combined Effects

Having considered this section of the report, this details the committed developments in the vicinity of the application site and which more recent committed developments are of relevance when considering cumulative effects. It is considered that the list of committed developments appears generally up to date.

However, it should be noted that an application for the V Net Zero Pipeline is expected to be submitted to the planning inspectorate Q4 of 2023.

In addition to these projects, the LPA are aware that the Humber Nature Partnership now maintain an In Combination Database for the Humber Estuary. This was developed to aid in combination assessments for HRA's for projects adjacent to the Estuary but is a useful tool for cumulative impact assessments as part of an ES also. It may be worthwhile checking with the Humber Nature Partnership to see if their database flags any additional developments that have not been identified via other means. The contact for this database is Jackson Sage – tel: 01652 631522, email: Jackson.sage@humburnature.co.uk.

Other

NLC will forward any comments received subsequent to the production of this response as soon as they are received.

I trust that the comments contained within this letter are helpful. Please do not hesitate to contact me should you wish to discuss any aspect of this response or this development.

Yours Sincerely



Rebecca Leggott

Principle Development Management Officer

MEMO

**North
Lincolnshire
Council**

To: Rebecca Leggott, Development Management
From: Andrew Taylor, Place Planning & Housing
Your Ref: SCO/2022/2
Date: 07 February 2022

Subject: Scoping opinion request to determine the information to be provided in an Environmental Statement relating to the first phase of the Humber Zero project for the proposed Post-Combustion Carbon Capture (PCC) developments VPI Power Station, Rosper Road, South Killingholme, DN40 3DZ

Summary

- I support the approach set out in the Scoping Report.
- There are key viewpoints that should be considered in the LVIA.
- The applicant should provide the information reasonably required for a Habitats Regulations Assessment.

Thank you for consulting Place Planning & Housing on the above scoping request.

The applicant has highlighted that the combined Phillips 66 and VPI proposals represent Schedule 1 development in terms of the Town and Country Planning (EIA) Regulations 2017 (as amended). Therefore there is a clear requirement for Environmental Impact Assessment (EIA).

Landscape and Visual Impact Assessment (LVIA)

I support the approach set out in the scoping report. Of the ten representative views selected, one should represent a view from the Village of South Killingholme towards Eastfield Road and the temporary work area west of Eastfield Road. Representative views should also consider residents of Marsh Lane and users of the England Coast Path.

Ecology

I support the approach set out in the scoping report.

As described in the report, the applicant(s) should provide the information reasonably required for a Habitats Regulations Assessment. In this case, the information required will include, but not be limited to:

- A plan, in Shapefile, pdf or Jpeg format, showing the location of the proposals in relation to the boundaries of the Humber Estuary SAC, SPA and Ramsar site.
- A habitat survey of the application site and surrounding areas, with particular reference to habitat features that may support breeding, wintering or passage birds associated with the Humber Estuary SPA and Ramsar Site.
- Recent wintering and passage survey information sufficient to assess the usage of the application site, surrounding area and adjacent SSSI units by birds associated with the Humber Estuary SPA and Ramsar Site.
- Details of any aerial or waterborne emissions and any impact pathways in relation to the Humber Estuary SAC, SPA and Ramsar site.

If you have any questions, please do not hesitate to contact me.

Andrew Taylor
Natural Environment Policy Specialist

MEMO

**North
Lincolnshire
Council**

TO: REBECCA LEGGOTT, DEVELOPMENT MANAGEMENT
FROM: ALISON WILLIAMS, HISTORIC ENVIRONMENT RECORD
REF: PA/SCO/2022/2
DATE: 16/02/2022

SUBJECT: Scoping opinion request to determine the information to be provided in an Environmental Statement relating to the first phase of the Humber Zero project for the proposed Post-Combustion Carbon Capture (PCC) developments, Vpi Power Station, Rosper Road and the Humber Refinery site at Eastfield Road, South Killingholme

SUMMARY OF ADVICE

- The proposed developments have the potential for physical and indirect impacts on designated and non-designated heritage assets and their settings including known and potential archaeological sites and palaeoenvironmental deposits
- The Scoping Report proposes to undertake a desk-based assessment for EIA of the Cultural Heritage (6.7); this is inadequate
- Archaeological field evaluation will be required to adequately assess the heritage significance and inform the EIA and planning application in accordance with NPPF policy 194 and local planning policies CS6, HE8 and HE9
- The Cultural Heritage EIA will need to comprise the following assessments:
 - Desk based assessment
 - Archaeological field evaluation (non-intrusive **and** intrusive surveys)
 - Assessment of significance based on results of completed field evaluation and including the contribution of settings to significance
 - Impact of proposals
 - Mitigation proposals based on evaluation results
- All archaeological evaluation reports should be included with the EIA and submitted with the planning applications
- Measures to enhance and conserve the heritage assets and their settings should inform the planning and design of the development
- Mitigation strategies to off-set any justifiable harm that entail archaeological and/or palaeoenvironmental excavation and recording prior to or during construction work should be detailed in a Written Scheme of Investigation submitted with the planning applications
- The CEMP should include any archaeological exclusion zones and sensitive areas, appropriate protection measures and the archaeological mitigation WSIs should be appended to the CEMP.

HISTORIC ENVIRONMENT RECORD (HER) FUNCTION: To hold, maintain, interpret and manage heritage information, enhancing the understanding of the area's historical development as a distinctive and attractive place. HER information provides source material for interpretation by heritage professionals and for use by community groups and individuals. The HER database is updated as new information about the historic environment is discovered.

The HER also provides advice on development proposals that affect, or may affect, the sites and settings of all heritage assets i.e. designated and non-designated historic buildings, archaeological sites and monuments, and historic places, areas and landscapes. This advice is provided against saved local plan policies and national historic environment policies. See <https://www.northlincs.gov.uk/planning-and-environment/historic-environment-and-conservation/>

DETAILED ADVICE: Thank you for consulting the HER on this Scoping Report.

The consultant archaeologist contacted the HER for historic environment data and in December 2021 I advised them that in view of the archaeological potential of the site the results of archaeological field evaluation would be required to inform the EIA and provide an adequate statement of heritage significance for submission with a planning application.

It is therefore disappointing that the Cultural Heritage section of the Scoping Report (6.7) refers only to the undertaking of desk-based assessment and does not provide a commitment to carry out the pre-application field evaluation as advised. The report states that '*further archaeological evaluation such as geophysical survey is not anticipated, but this will be discussed and agreed with NLC*' (6.7.10). This despite the previous conversation with the NLHER. The report goes on to suggest (6.7.11) that desk based assessment without field evaluation will provide sufficient information to propose appropriate mitigation of any harm, despite that any harm cannot be identified or understood without field evaluation.

Without the results of a completed archaeological field evaluation the EIA will not provide adequate information to assess archaeological significance and the impact of the proposed development to inform a planning determination. The planning authority would not be in a position to make a balanced planning decision nor agree any mitigation measures that may be appropriate in accordance with national and local heritage planning policy. Such a situation may result in invalid planning applications and/or an unnecessary delay in their determination.

Clearly it is in the interests of all parties concerned to advise the applicant to resolve these matters at the earliest opportunity and for the Scoping proposal to include adequate pre-application archaeological field evaluation appropriate to the EIA and relevant planning policy.

Heritage Baseline

The archaeological consultant has obtained the HER records and spatial data for these developments.

The scoping report erroneously states that 'there are no known heritage assets within the Phillips 66 Site and no cropmarks have been mapped from aerial photography' (2.3.4 & 6.7.6). The North Lincolnshire HER records the cropmark of an enclosure within the Phillips66 site visible on air photos taken in 1958 prior to refinery construction. Romano-British pottery was collected from the area of the cropmarks during refinery construction (refs MLS1614; MLS20078).

These cropmarks are seen to extend into the site proposed for the Phillips66 PCC plant. Dependent on the extent of previous ground disturbance on the PCC site which is currently used for above ground coke storage, below-ground archaeological remains associated with this cropmark may survive. It may be assumed that the cropmark and finds represent an Iron Age/Romano-British farmstead settlement comparable to a number of other settlements of similar date recorded and excavated within 1km of the Phillips66 PCC site.

With regard to the VPI site, there are excavated and recorded Iron Age/Romano-British settlement sites within the VPI CHP plant where unexcavated remains survive in situ alongside Rosper Road within the existing car park to the plant. Further settlement remains were uncovered in 2015 when the A160 Rosper Road link spur was built on the south side of the proposed VPI PCC plant. Earlier occupation of Bronze Age date was recorded during an archaeological evaluation a short distance to the south east of the site. There is therefore high potential that further archaeological remains and palaeoenvironmental deposits associated with former tidal inlets will survive within the VPI PCC site, currently of unknown significance.

Given this evidence, there is the potential that the sites of both proposed PCC and their associated infrastructure will contain archaeological remains that would be disturbed and or destroyed during construction.

Irrespective of whether EIA is carried out under the Regulations, where a planning application is to be made for this proposal, a detailed heritage assessment will be required in view of the heritage assets affected and the archaeological potential of the site; this is in accordance with policy 194 of the NPPF, Core Strategy CS6 and saved Local Plan policies HE8 and HE9.

Relevant Policy

The National Planning Policy Framework (NPPF, 2021) provides guidance to local authorities for conserving and enhancing heritage assets and their settings, which includes archaeological sites and remains. Paragraph 8 refers to the role of the planning system to contribute to achieving sustainable development under three overarching objectives; economic, social and environmental. The environmental objective includes contributing to protecting and enhancing the historic environment.

Section 16 (paragraphs 189-208) of the NPPF details the government's approach to conserving and enhancing the historic environment. Paragraph 189 describes heritage assets as '**an irreplaceable resource**' to be '**conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of existing and future generations**'.

Paragraph 194 requires an applicant to submit information that identifies any heritage asset that their proposals may affect, and that assesses the significance of the assets including the contribution of their settings. Consultation of the local HER is the minimum requirement in this process. Paragraph 194 states that '**Where a site on which development is proposed includes, or has the potential to include, heritage assets of archaeological interest, local planning authorities should require developers to submit an appropriate desk based assessment and, where necessary, a field evaluation.**'

This information should be sufficient to understand the potential impact of the proposal on the significance of any affected heritage assets. It should also allow the local planning authority to assess the degree of impact on the heritage assets and their settings, and how this impact may be mitigated, by avoiding or minimising any conflict between conserving the asset and any aspect of the proposal (NPPF 195).

Such assessment allows the planning authority to make an informed and reasonable decision in line with the sustainable development principles of the NPPF, as well as local planning Plan policies HE8 Ancient Monuments and HE9 Archaeological Evaluation.

Core Strategy policy CS6 states that '**The council will seek to protect, conserve and enhance North Lincolnshire's historic environment as well as the character and setting of area of acknowledged importance including historic buildings, conservation areas, listed buildings (both statutory and locally listed), registered parks and gardens, scheduled ancient monuments and archaeological remains....Development proposals should provide archaeological assessments where appropriate.**'

Where Scheduled Monuments, or sites of equivalent significance, are affected directly or indirectly, Local Plan policy HE8 directs '**Development proposals which would result in an adverse effect on Scheduled [Ancient] Monuments and other nationally important monuments, or their settings, will not be permitted.**'

Policy HE9 Archaeological Evaluation states that '**Where development proposals affect sites of known or suspected archaeological importance, an archaeological assessment to be submitted prior to the determination of a planning application will be required. Planning permission will not be granted without adequate assessment of the nature, extent and significance of the remains present and the degree to which the proposed development is likely to affect them.**

Sites of known archaeological importance will be protected. When development affecting such sites is acceptable in principle, mitigation of damage must be ensured and the preservation of the remains in situ is a preferred solution. When in situ preservation is not justified, the developer will be required to make adequate provision for excavation and recording before and during development.'

Heritage Assessment – Scoping Advice

Any planning application submitted for this proposed development will need to be accompanied by a heritage assessment prepared in line with the HER advice in this memo.

A suitably experienced heritage specialist should carry out the following assessments on the applicants behalf and should comprise **ALL** the following stages:

1. Desk Based Research

- Collation and synthesis of existing historic environment data sources relating to **all** heritage assets that the proposed development may affect directly or indirectly. The spatial scope should be a minimum 2km from the site boundary for designated heritage assets (dependent on the height of development) and 1km for non-designated heritage assets to provide the archaeological context for the subsequent fieldwork, including appropriate research objectives. Sources should include but not be limited to: local and national databases; local archives; historic maps and plans including illustrating the development of the modern industry; assessment of aerial photographs, drone survey and LIDAR data; other published and unpublished documents.
- Geo-archaeological assessment of existing data for the site to produce a preliminary deposit model of the sub-surface of the application site and identify gaps for further investigation
- Site visit to identify the presence of any above or below ground archaeological remains or historic landscape features within the application area and/or any constraints on the following stages of archaeological fieldwork

2. Pre-Application Archaeological Field Evaluation

- Archaeological monitoring and recording during geo-technical investigations on the site.
- Hand augering or machine drilled purposive coring to fill identified gaps in the deposit model, to identify and model the deposit sequence and former land surfaces, and provide an understanding of the development of the landscape; and/or to obtain appropriate samples for assessment of preservation potential and the potential for palaeo-environmental evidence to inform the archaeological record including all relevant palaeo-environmental indicators and provision for a programme of scientific dating of the deposit sequence as appropriate.
- Geophysical magnetometry survey of the proposed site to identify and plot anomalies of potential archaeological origin.
- Dependent on the results of the above survey/s, the excavation of sample trial trenches to determine the nature, extent, state of preservation and importance of any archaeological remains, such as those associated with the warping channels mapped in this area, the peat deposits and the pre-peat landscape.
- The archaeological field evaluation be carried out by a suitably experienced archaeological contractor, such as a Registered Organisation accredited by the Chartered Institute for Archaeology (see <http://www.archaeologists.net/>) or an organisation that can demonstrate that they have equivalent experience, capability and quality management systems in place. The appointed contractor must have access to appropriate geo-archaeological expertise. All fieldwork should be undertaken in accordance with CIFA's published Standards and Guidance for evaluation, and Historic England professional guidelines (<https://www.historicengland.org.uk/images-books/publications>) to written specifications that have been agreed with the HER prior to commencement.

3. Assessment of Significance

- Assessment of the significance of those heritage assets and their settings likely to be directly or indirectly impacted by the development; the assessment of the significance of heritage assets will take account of the combined results of all the preceding stages of desk based assessment and site field evaluation, and be based on the heritage values set out in *Conservation Principles, Policies and Guidance for the sustainable management of the historic environment*, Historic England, 2008 <https://www.historicengland.org.uk/images-books/publications/conservation-principles-sustainable-management-historic-environment/>.
- The methodology of assessing the contribution of setting to significance should be undertaken as set out in Historic England's Historic Environment Good Practice Advice Note 3 ('The Setting of Heritage Assets' 2nd Edition, 2017) <https://historicengland.org.uk/images-books/publications/gpa3-setting-of-heritage-assets/>.

- The use of photographic visualisations from appropriate viewpoints towards and out from the proposed site would be of particular use to demonstrate indirect effects of the proposals on settings, including evidence of no effects. Impacts other than visual, such as noise, dust and odour, should also be considered. Viewpoints should be agreed with the HER and planning case officers.

4. Assessment of Impact

- Assessment of impacts of the proposed development on the significance of the heritage assets and their settings based on the findings of the preceding stages, with reference to details of proposed construction ground works in relation to archaeological assets, and justification of impacts explaining why the works would be necessary or desirable, including any benefits or heritage enhancements which justify any resulting harm. In the case of substantial harm or loss of significance, the relevant tests in the NPPF should be applied.

5. Mitigation

- An explanation of any measures taken to avoid, minimise or mitigate any harm to the significance of the heritage asset/s, including within their settings.
- Where harm is unavoidable, measures to offset the harm to significance should be included; in the case of archeological remains these measures should be set out in a Written Scheme of Investigation (WSI) detailing the scope, methodologies and timelines of an appropriate programme of archaeological work.

The Cultural Heritage chapter of the EIA should be prepared on completion of **ALL** stages of the assessment and field evaluation set out above, and the Environmental Statement should include the results of all historic environment and archaeological fieldwork reports.

The Environmental Statement should consider what the impact of the development on the significance of the heritage assets will be together with a statement of justification of why the works would be desirable or necessary, including any benefits which justify any resulting harm. In the case of substantial harm or loss of significance, the tests in the NPPF should be applied.

If the assessment demonstrates that the significance of heritage assets will be adversely affected by the proposals, then appropriate mitigation measures should be drawn up to conserve them. This may include avoiding or minimizing effects to areas of significance, if necessary by modifying the layout and/or design of the proposals ie. In situ preservation.

Alternatively, where harm is unavoidable and loss of heritage assets as a result of development is considered justified, provision should be made to record the evidence before it is lost either in advance of, or during, development.

Mitigation measures should be detailed in the application, including the provision of Written Schemes of Investigation (specification) for further archaeological excavation and recording, as may be necessary. Where planning permission may subsequently be granted, the implementation of appropriate mitigation measures can be secured by condition without the necessity for pre-commencement conditions that can lead to unnecessary delay to the construction programme.

Recommendation

Any planning application submitted for this site would need to be accompanied by a Cultural Heritage Statement as set out above to accord with paragraph 194 of the NPPF, Core Strategy CS6 and saved Local Plan policies HE8 and HE9.

An application without such a heritage statement should not be validated. Where a heritage statement is incomplete or inadequate, the HER will advise the local planning authority to defer determination of a planning application until sufficient information is available to allow an informed decision.

I would be grateful therefore if you would pass this advice to the applicant or their consultant.

Alison Williams
Historic Environment Officer
Alison.williams@northlincs.gov.uk

Ref PA/SCO/2022/2 - Scoping Opinion, VPI Power Station, Rosper Road, South Killingholme

Matt Leighton <Matt.Leighton@networkrail.co.uk> on behalf of
Town Planning LNE <TownPlanningLNE@networkrail.co.uk>

Wed 23/02/2022 12:41

To: Planning <Planning@northlincs.gov.uk>;

FAO – Rebecca Leggott

Ref – PA/SCO/2022/2

Proposal – Scoping Opinion relating to first phase of Humber Zero project for the proposed Post-Combustion Carbon Capture (PCC) developments

Location – VPI Power Station, Rosper Road, South Killingholme, DN40 3DZ

Thank you for your letter of 2 February 2022 providing Network Rail with an opportunity to comment on the abovementioned Scoping Opinion.

With reference to the protection of the railway, the Environmental Impact Assessment should consider any impact of the scheme upon the railway infrastructure and upon operational railway safety. It should also include a Transport Assessment to identify any HGV traffic/haulage routes that may utilise railway assets such as bridges and level crossings during the construction and operation of the site. If the site's rail connection is to be used during the construction and operation of the development, details of this will also be required in the Transport Assessment and also agreements would be required with Network Rail for track access to the main line.

Please note that if the intention is to install a pipeline in support of the project through railway land, the developer will need an easement from Network Rail and we would recommend that they engage with us early in the planning of their scheme in order to discuss and agree this element of the proposals.

Kind regards



Matt Leighton

Town Planning Technician

Diversity and Inclusion Champion

Network Rail Property - Eastern Region

George Stephenson House, Toft Green, York, YO1 6JT

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Date: 21 February 2022
Our ref: 382957
Your ref: PA/SCO/2022/2



Rebecca Leggott, North Lincolnshire Council
BY EMAIL ONLY

Consultations
Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

T 0300 060 900

Dear Rebecca Leggott,

Environmental Impact Assessment Scoping consultation (Regulation 15 (4) of the Town and Country Planning EIA Regulations 2017): Scoping opinion request to determine the information to be provided in an Environmental Statement relating to the first phase of the Humber Zero project for the proposed Post-Combustion Carbon Capture (PCC) developments

Location: Vpi Power Station, Rosper Road, South Killingholme, DN40 3DZ

Thank you for seeking our advice on the scope of the Environmental Statement (ES) in the consultation dated 02 February 2022.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

A robust assessment of environmental impacts and opportunities based on relevant and up to date environmental information should be undertaken prior to a decision on whether to grant planning permission. Annex A to this letter provides Natural England's advice on the scope of the Environmental Impact Assessment (EIA) for the proposed development.

Further guidance is set out in Planning Practice Guidance on [environmental assessment, natural environment and climate change](#).

Should the proposal be amended in a way which significantly affects its impact on the natural environment then, in accordance with Section 4 of the Natural Environment and Rural Communities Act 2006, Natural England should be consulted again.

Please note that Natural England must be consulted on Environmental Statements.

Please send any new consultations or further information on this consultation to consultations@naturalengland.org.uk.

Yours sincerely,

Laura Tyndall
Yorkshire and Northern Lincolnshire Area Team

Annex A – Natural England Advice on EIA Scoping

General Principles

[Schedule 4](#) of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017, sets out the information that should be included in an Environmental Statement (ES) to assess impacts on the natural environment. This includes:

- A description of the development – including physical characteristics and the full land use requirements of the site during construction and operational phases
- Expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation etc.) resulting from the operation of the proposed development
- An assessment of alternatives and clear reasoning as to why the preferred option has been chosen
- A description of the aspects of the environment likely to be significantly affected by the development including biodiversity (for example fauna and flora), land, including land take, soil, water, air, climate (for example greenhouse gas emissions, impacts relevant to adaptation, cultural heritage and landscape and the interrelationship between the above factors
- A description of the likely significant effects of the development on the environment – this should cover direct effects but also any indirect, secondary, cumulative, short, medium, and long term, permanent and temporary, positive, and negative effects. Effects should relate to the existence of the development, the use of natural resources (in particular land, soil, water and biodiversity) and the emissions from pollutants. This should also include a description of the forecasting methods to predict the likely effects on the environment
- A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment
- A non-technical summary of the information
- An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the applicant in compiling the required information

Further guidance is set out in Planning Practice Guidance on [environmental assessment](#) and [natural environment](#).

Cumulative and in-combination effects

The ES should fully consider the implications of the whole development proposal. This should include an assessment of all supporting infrastructure.

An impact assessment should 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.

Environmental data

Natural England is required to make available information it holds where requested to do so. National datasets held by Natural England are available at <http://www.naturalengland.org.uk/publications/data/default.aspx>.

Detailed information on the natural environment is available at www.magic.gov.uk.

Natural England's SSSI Impact Risk Zones are a GIS dataset which can be used to help identify the potential for the development to impact on a SSSI. The dataset and user guidance can be accessed from the [Natural England Open Data Geoportal](#).

Natural England does not hold local information on local sites, local landscape character, priority habitats and species or protected species. Local environmental data should be obtained from the appropriate local bodies. This may include the local environmental records centre, the local wildlife trust, local geo-conservation group or other recording society.

Biodiversity and Geodiversity

General principles

The [National Planning Policy Framework](#) (paragraphs 174-175 and 179-182) sets out how to take account of biodiversity and geodiversity interests in planning decisions. Further guidance is set out in Planning Practice Guidance on the [natural environment](#).

The potential impact of the proposal upon sites and features of nature conservation interest and opportunities for nature recovery and biodiversity net gain should be included in the assessment.

Ecological Impact Assessment (EclA) is the process of identifying, quantifying, and evaluating the potential impacts of defined actions on ecosystems or their components. EclA may be carried out as part of the EIA process or to support other forms of environmental assessment or appraisal. [Guidelines](#) have been developed by the Chartered Institute of Ecology and Environmental Management (CIEEM).

Local planning authorities have a [duty](#) to have regard to conserving biodiversity as part of their decision making. Conserving biodiversity can include habitat restoration or enhancement. Further information is available [here](#).

Designated nature conservation sites

International and European sites

The development site is within or may impact on the following **European/internationally designated nature conservation site(s)**:

- Humber Estuary Special Protection Area
- Humber Estuary Special Area of Conservation
- Humber Estuary Ramsar

European site conservation objectives are available at <http://publications.naturalengland.org.uk/category/6490068894089216>

The ES should thoroughly assess the potential for the proposal to affect nationally and internationally designated sites of nature conservation importance, including marine sites where relevant. European sites (Special Areas of Conservation (SAC) and Special Protection Areas (SPA)) fall within the scope of the Conservation of Habitats and Species Regulations 2017 (the 'Habitats

Regulations'). In addition paragraph 181 of the National Planning Policy Framework (NPPF) requires that potential SPAs, possible SAC, listed or proposed Ramsar sites, and any site identified or required as compensatory measures for adverse effects on habitat (European) sites, potential SPAs, possible SACs and listed or proposed Ramsar sites have the same protection as classified sites (NB. sites falling within the scope of regulation 8 of the Conservation of Habitats and Species Regulations 2017 are defined as 'habitats sites' in the NPPF). Under Regulation 63 of the Habitats Regulations, an appropriate assessment must be undertaken in respect of any plan or project which is (a) likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and (b) not directly connected with or necessary to the management of the site. The consideration of likely significant effects should include any functionally linked land outside the designated site. These areas may provide important habitat for mobile species populations that are qualifying features of the site, for example birds and bats. This can also include areas which have a critical function to a habitat feature within a designated site, for example by being linked hydrologically or geomorphologically.

Should a likely significant effect on a European/Internationally designated site be identified (either alone or in-combination) or be uncertain, the competent authority (in this case the Local Planning Authority) may need to prepare an appropriate assessment in addition to the consideration of impacts through the EIA process. Further guidance is set out in Planning Practice Guidance on appropriate assessment

<https://www.gov.uk/guidance/appropriate-assessment>

This should also take into account any agreed strategic mitigation solution that may be being developed or implemented in the area to address recreational disturbance, nutrients, or other impacts.

Nationally designated sites

The development site is within or may impact on the following **Site of Special Scientific Interest**:

- Humber Estuary SSSI
- North Killingholme Haven Pits SSSI

Sites of Special Scientific Interest are protected under the Wildlife and Countryside Act 1981 and paragraph 180 of the NPPF. Further information on the SSSI and its special interest features can be found at www.magic.gov.

Natural England's SSSI Impact Risk Zones can be used to help identify the potential for the development to impact on a SSSI. The dataset and user guidance can be accessed from the [Natural England Open Data Geoportal](#).

The Environmental Statement should include a full assessment of the direct and indirect effects of the development on the features of special interest within the SSSI and identify appropriate mitigation measures to avoid, minimise or reduce any adverse significant effects. The consideration of likely significant effects should include any functionally linked land outside the designated site. These areas may provide important habitat for mobile species populations that are interest features of the SSSI, for example birds and bats. This can also include areas which have a critical function to a habitat feature within a site, for example by being linked hydrologically or geomorphologically.

Regionally and Locally Important Sites

The ES should consider any impacts upon local wildlife and geological sites, including local nature reserves. Local Sites are identified by the local wildlife trust, geoconservation group or other local group and protected under the NPPF (paragraph 174 and 175). The ES should set out proposals for mitigation of any impacts and if appropriate, compensation measures and opportunities for enhancement and improving connectivity with wider ecological networks. Contact the relevant local body for further information.

Protected Species

The conservation of species protected under the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2017 is explained in Part IV and Annex A of Government Circular 06/2005 [Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System](#).

The ES should assess the impact of all phases of the proposal on protected species (including, for example, great crested newts, reptiles, birds, water voles, badgers and bats). Natural England does not hold comprehensive information regarding the locations of species protected by law. Records of protected species should be obtained from appropriate local biological record centres, nature conservation organisations and local groups. Consideration should be given to the wider context of the site, for example in terms of habitat linkages and protected species populations in the wider area.

The area likely to be affected by the development should be thoroughly surveyed by competent ecologists at appropriate times of year for relevant species and the survey results, impact assessments and appropriate accompanying mitigation strategies included as part of the ES. Surveys should always be carried out in optimal survey time periods and to current guidance by suitably qualified and, where necessary, licensed, consultants.

Natural England has adopted [standing advice](#) for protected species, which includes guidance on survey and mitigation measures. A separate protected species licence from Natural England or Defra may also be required.

District Level Licensing for Great Crested Newts

District level licensing (DLL) is a type of strategic mitigation licence for great crested newts (GCN) granted in certain areas at a local authority or wider scale. A [DLL scheme for GCN](#) may be in place at the location of the development site. If a DLL scheme is in place, developers can make a financial contribution to strategic, off-site habitat compensation instead of applying for a separate licence or carrying out individual detailed surveys. By demonstrating that DLL will be used, impacts on GCN can be scoped out of detailed assessment in the Environmental Statement.

Priority Habitats and Species

Priority Habitats and Species are of particular importance for nature conservation and included in the England Biodiversity List published under section 41 of the Natural Environment and Rural Communities Act 2006. Most priority habitats will be mapped either as Sites of Special Scientific Interest, on the Magic website or as Local Wildlife Sites. Lists of priority habitats and species can be found [here](#). Natural England does not routinely hold species data. Such data should be collected when impacts on priority habitats or species are considered likely.

Consideration should also be given to the potential environmental value of brownfield sites, often found in urban areas and former industrial land. Sites can be checked against the (draft) national Open Mosaic Habitat (OMH) inventory published by Natural England and freely available to [download](#). Further information is also available [here](#).

An appropriate level habitat survey should be carried out on the site, to identify any important habitats present. In addition, ornithological, botanical, and invertebrate surveys should be carried out at appropriate times in the year, to establish whether any scarce or priority species are present.

The Environmental Statement should include details of:

- Any historical data for the site affected by the proposal (e.g. from previous surveys)
- 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
- Full details of any mitigation or compensation measures
- Opportunities for biodiversity net gain or other environmental enhancement

Ancient Woodland, ancient and veteran trees

The ES should assess the impacts of the proposal on any ancient woodland, ancient and veteran trees, and the scope to avoid and mitigate for adverse impacts. It should also consider opportunities for enhancement.

Natural England maintains the Ancient Woodland [Inventory](#) which can help identify ancient woodland. The [wood pasture and parkland inventory](#) sets out information on wood pasture and parkland.

The [ancient tree inventory](#) provides information on the location of ancient and veteran trees.

Natural England and the Forestry Commission have prepared [standing advice](#) on ancient woodland, ancient and veteran trees.

Biodiversity net gain

Paragraph 174 of the NPPF states that decisions should contribute to and enhance the natural and local environment by minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

Biodiversity Net Gain is additional to statutory requirements relating to designated nature conservation sites and protected species.

The ES should use an appropriate biodiversity metric such as [Biodiversity Metric 3.0](#) together with ecological advice to calculate the change in biodiversity resulting from proposed development and demonstrate how proposals can achieve a net gain.

The metric should be used to:

- assess or audit the biodiversity unit value of land within the application area
- calculate the losses and gains in biodiversity unit value resulting from proposed development
- demonstrate that the required percentage biodiversity net gain will be achieved

Biodiversity Net Gain outcomes can be achieved on site, off-site or through a combination of both. On-site provision should be considered first. Delivery should create or enhance habitats of equal or higher value. When delivering net gain, opportunities should be sought to link delivery to relevant plans or strategies e.g. Green Infrastructure Strategies or Local Nature Recovery Strategies.

Opportunities for wider environmental gains should also be considered.

Landscape

Landscape and visual impacts

The environmental assessment should refer to the relevant [National Character Areas](#). Character area profiles set out descriptions of each landscape area and statements of environmental opportunity.

The ES 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 .

A landscape and visual impact assessment should also be carried out for the proposed development and surrounding area. Natural England recommends use of the methodology set out in *Guidelines for Landscape and Visual Impact Assessment 2013* ((3rd edition) produced by the Landscape Institute and the Institute of Environmental Assessment and Management . For National Parks and AONBs, we advise that the assessment also includes effects on the 'special qualities' of the designated landscape, as set out in the statutory management plan for the area. These identify the particular landscape and related characteristics which underpin the natural beauty of the area and its designation status.

The assessment should also include the cumulative effect of the development with other relevant existing or proposed developments in the area. This should include an assessment of the impacts of other proposals currently at scoping stage.

To ensure high quality development that responds to and enhances local landscape character and distinctiveness, the siting and design of the proposed development should reflect local characteristics and, wherever possible, use local materials. Account should be taken of local design policies, design codes and guides as well as guidance in the [National Design Guide](#) and [National Model Design Code](#). The ES should set out the measures to be taken to ensure the development will deliver high standards of design and green infrastructure. It should also set out detail of layout alternatives, where appropriate, with a justification of the selected option in terms of landscape impact and benefit.

Heritage Landscapes

The ES should include an assessment of the impacts on any 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 is available at www.hmrc.gov.uk/heritage/lbsearch.htm.

Connecting People with nature

The ES should consider potential impacts on access land, common land, public rights of way and, where appropriate, the England Coast Path and coastal access routes and coastal margin in the vicinity of the development, in line with NPPF paragraph 100. It should assess the scope to mitigate for any adverse impacts. Rights of Way Improvement Plans (ROWIP) can be used to identify public rights of way within or adjacent to the proposed site that should be maintained or enhanced.

Measures to help people to better access the countryside for quiet enjoyment and opportunities to connect with nature should be considered. Such measures could include reinstating existing footpaths or the creation of new footpaths, cycleways, and bridleways. Links to other green networks and, where appropriate, urban fringe areas should also be explored to help promote the creation of wider green infrastructure. Access to nature within the development site should also be considered, including the role that natural links have in connecting habitats and providing potential pathways for movements of species.

Relevant aspects of local authority green infrastructure strategies should be incorporated where appropriate.

Soils and Agricultural Land Quality

Soils are a valuable, finite natural resource and should also be considered for the ecosystem services they provide, including for food production, water storage and flood mitigation, as a carbon

store, reservoir of biodiversity and buffer against pollution. It is therefore important that the soil resources are protected and sustainably managed. Impacts from the development on soils and best and most versatile (BMV) agricultural land should be considered in line with paragraphs 174 and 175 of the NPPF. Further guidance is set out in the Natural England [Guide to assessing development proposals on agricultural land](#).

As set out in paragraph 211 of the NPPF, new sites or extensions to sites for peat extraction should not be granted planning permission.

The following issues should be considered and, where appropriate, included as part of the Environmental Statement (ES):

- The degree to which soils would be disturbed or damaged as part of the development
- The extent to which agricultural land would be disturbed or lost as part of this development, including whether any best and most versatile (BMV) agricultural land would be impacted.

This may require a detailed Agricultural Land Classification (ALC) survey if one is not already available. For information on the availability of existing ALC information see www.magic.gov.uk.

- Where an ALC and soil survey of the land is required, this should normally be at a detailed level, e.g. one auger boring per hectare, (or more detailed for a small site) supported by pits dug in each main soil type to confirm the physical characteristics of the full depth of the soil resource, i.e. 1.2 metres. The survey data can inform suitable soil handling methods and appropriate reuse of the soil resource where required (e.g. agricultural reinstatement, habitat creation, landscaping, allotments and public open space).
- The ES should set out details of how any adverse impacts on BMV agricultural land can be minimised through site design/masterplan.
- The ES should set out details of how any adverse impacts on soils can be avoided or minimised and demonstrate how soils will be sustainably used and managed, including consideration in site design and master planning, and areas for green infrastructure or biodiversity net gain. The aim will be to minimise soil handling and maximise the sustainable use and management of the available soil to achieve successful after-uses and minimise off-site impacts.

Further information is available in the [Defra Construction Code of Practice for the Sustainable Use of Soil on Development Sites](#) and The British Society of Soil Science Guidance Note [Benefitting from Soil Management in Development and Construction](#).

Air Quality

Air quality in the UK has improved over recent decades but air pollution remains a significant issue. For example, approximately 85% of protected nature conservation sites are currently in exceedance of nitrogen levels where harm is expected (critical load) and approximately 87% of sites exceed the level of ammonia where harm is expected for lower plants (critical level of 1µg) ^[1]. A priority action in the England Biodiversity Strategy is to reduce air pollution impacts on biodiversity. The Government's Clean Air Strategy also has a number of targets to reduce emissions including to reduce damaging deposition of reactive forms of nitrogen by 17% over England's protected priority sensitive habitats by 2030, to reduce emissions of ammonia against the 2005 baseline by 16% by

^[1] [Report: Trends Report 2020: Trends in critical load and critical level exceedances in the UK - Defra, UK](#)

2030 and to reduce emissions of NO_x and SO₂ against a 2005 baseline of 73% and 88% respectively by 2030. Shared Nitrogen Action Plans (SNAPs) have also been identified as a tool to reduce environmental damage from air pollution.

The planning system plays a key role in determining the location of developments which may give rise to pollution, either directly, or from traffic generation, and hence planning decisions can have a significant impact on the quality of air, water and land. The ES should take account of the risks of air pollution and how these can be managed or reduced. This should include taking account of any strategic solutions or SNAPs, which may be being developed or implemented to mitigate the impacts on air quality. Further information on air pollution impacts and the sensitivity of different habitats/designated sites can be found on the Air Pollution Information System (www.apis.ac.uk).

Information on air pollution modelling, screening and assessment can be found on the following websites:

- SCAIL Combustion and SCAIL Agriculture - <http://www.scail.ceh.ac.uk/>
- Ammonia assessment for agricultural development <https://www.gov.uk/guidance/intensive-farming-risk-assessment-for-your-environmental-permit>
- Environment Agency Screening Tool for industrial emissions <https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit>
- Defra Local Air Quality Management Area Tool (Industrial Emission Screening Tool) – England <http://www.airqualityengland.co.uk/laqm>

Water Quality

The planning system plays a key role in determining the location of developments which may give rise to water pollution, and hence planning decisions can have a significant impact on water quality, and land. The assessment should take account of the risks of water pollution and how these can be managed or reduced. A number of water dependent protected nature conservation sites have been identified as failing condition due to elevated nutrient levels and nutrient neutrality is consequently required to enable development to proceed without causing further damage to these sites. The ES needs to take account of any strategic solutions for nutrient neutrality or Diffuse Water Pollution Plans, which may be being developed or implemented to mitigate and address the impacts of elevated nutrient levels. Further information can be obtained from the Local Planning Authority.

Climate Change

The ES should identify how the development affects the ability of the natural environment (including habitats, species, and natural processes) to adapt to climate change, including its ability to provide adaptation for people. This should include impacts on the vulnerability or resilience of a natural feature (i.e. what's already there and affected) as well as impacts on how the environment can accommodate change for both nature and people, for example whether the development affects species ability to move and adapt. Nature-based solutions, such as providing green infrastructure on-site and in the surrounding area (e.g. to adapt to flooding, drought and heatwave events), habitat creation and peatland restoration, should be considered. The ES should set out the measures that will be adopted to address impacts.

Further information is available from the [Committee on Climate Change's \(CCC\) Independent Assessment of UK Climate Risk](#), the [National Adaptation Programme \(NAP\)](#), the [Climate Change Impacts Report Cards](#) (biodiversity, infrastructure, water etc.) and the [UKCP18 climate projections](#).

The Natural England and RSPB [Climate Change Adaptation Manual](#) (2020) provides extensive information on climate change impacts and adaptation for the natural environment and adaptation focussed nature-based solutions for people. It includes the Landscape Scale Climate Change Assessment Method that can help assess impacts and vulnerabilities on natural environment

features and identify adaptation actions. Natural England's [Nature Networks Evidence Handbook](#) (2020) also provides extensive information on planning and delivering nature networks for people and biodiversity.

The ES should also identify how the development impacts the natural environment's ability to store and sequester greenhouse gases, in relation to climate change mitigation and the natural environment's contribution to achieving net zero by 2050. Natural England's [Carbon Storage and Sequestration by Habitat report](#) (2021) and the British Ecological Society's [nature-based solutions report](#) (2021) provide further information.

Contribution to local environmental initiatives and priorities

The ES should consider the contribution the development could make to relevant local environmental initiatives and priorities to enhance the environmental quality of the development and deliver wider environmental gains. This should include considering proposals set out in relevant local strategies or supplementary planning documents including landscape strategies, green infrastructure strategies, tree and woodland strategies, biodiversity strategies or biodiversity opportunity areas.



Ms Rebecca Leggott
North Lincolnshire Council
Church Square House
30-40 Church Square
Scunthorpe
North Lincolnshire
DN15 6NL

Our ref: AN/2022/132739/01-L01
Your ref: PA/SCO/2022/2
Date: 22 February 2022

Dear Rebecca

Scoping Opinion Request to determine the information to be provided in an Environmental Statement relating to the first phase of the Humber Zero project for the proposed post-combustion carbon capture (PCC) developments VPI Power Station, Rosper Road and the Humber Refinery site at Eastfield Road, South Killingholme, DN40 3DZ

Thank you for consulting us on the above EIA Scoping Opinion request, on 2 February 2022.

Environment Agency position

We have reviewed the submitted Scoping Report, dated January 2022, with regard to the following matters within our remit:

- Water resources and flood risk
- Ecology & nature conservation
- Geology, hydrogeology and contaminated land (risk to controlled waters)
- Climate change and carbon

The report appears comprehensive, covering a suitable range of topics, and we are satisfied with the scope proposed for the Environmental Impact Assessment.

We have the following additional comments and advice.

Water resources

We note that risk of pollution to surface watercourses within or near the site during construction and operation will be included within the scope of the EIA, as stated on page 64 of the report.

This should include detailed risk assessment of the construction and operation of the proposed CO₂ pipeline that will link the two sites as indicated in Figure 6 (page 82) of the report. The indicative pipeline route appears to cross a tributary of the North Killingholme Main Drain. Appropriate mitigation measures during the construction and operational phase of the development should be identified to protect water quality in this tributary plus the designated wildlife sites identified further downstream.

Section 6.5.4 refers to pollution risk due to possible effluent treatment plants. The applicant should investigate the practicality of discharging either industrial or 'domestic' effluent from the site to the main Anglian Water sewerage system.

With reference to water resource quantity, rather than quality, the applicant should be aware that water availability is a major constraining factor for industrial development in this area. This is because the [Catchment Abstraction Management Strategy](#) that covers the South Humber Bank states that "the groundwater unit balance shows more water has been abstracted based on recent amounts than the amount available. We (the EA) will not grant further consumptive licences".

We note that section 6.9.9 mentions two groundwater abstraction licences currently held by Phillips 66 Limited within the site boundary.

Flood risk

It has been acknowledged in the Scoping Report that a flood risk assessment (FRA) based on the requirements of the National Planning Policy Framework (NPPF) must be prepared to accompany the future planning application.

The FRA should consider all sources of flooding, which may include tidal, fluvial, ground water, drainage systems, reservoirs, canals and ordinary watercourses. The FRA should demonstrate that the proposed development will be safe for its lifetime, without increasing risk elsewhere and where possible reducing flood risk overall. The FRA should also provide evidence that appropriate mitigation measures including flood resilience techniques have been incorporated into the development.

The Environment Agency's Hazard Mapping should be used to inform the FRA. Our Hazard Mapping shows the consequences should a breach or overtopping of our sea defences occur, including the likely flood depths, velocities and overall hazard that could impact the site over its lifetime. The modelled depths vary considerably across the site.

The FRA should identify the vulnerability classification of the proposal, the expected lifetime of the development and whether the site needs to remain operational in case of flooding. For development defined as essential infrastructure, we advise that all critical infrastructure and equipment should be located above the modelled flood depth in case of a breach during a 0.1% (1 in 1000) annual probability event, including climate change depending on lifetime of development.

Finished floor levels generally should be raised as high as practicable and, if these will be below the flood depth, suitable flood resistance/resilience measures identified with consideration of operational needs. Single storey buildings should be built with finished floor levels above the predicted flood depth (referring to the tidal hazard map for the 0.5% annual probability event breach scenario, allowing for climate change). If this is not practicable an area of safe refuge will need to be provided (preferably) or an appropriate flood warning and evacuation plan submitted to and approved by the local planning authority.

Ecology and nature conservation

We agree that ecology and nature conservation should be scoped into the assessment and welcome the commitment to providing 10% biodiversity net gain. We have no further comments at this stage.

Geology, hydrogeology & contaminated land

We have no concerns with the scope of assessment proposed in Section 6.9 - Geology, Hydrogeology & Contaminated Land, with regard to the assessment of the potential risks to controlled waters from contamination.

Climate change and carbon

We agree that climate change and carbon should be scoped into the assessment, covering both the effects of emissions from the proposed scheme over its lifetime (including construction) and the resilience of the scheme to climate change impacts.

Environmental permitting

The operators referred to within the document will need to apply for a permit variation to include the changes to their processes and operating techniques.

Should you require any additional information, or wish to discuss these matters further, please do not hesitate to contact me on the number below.

Yours sincerely

Nicola Farr
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