Suffolk Wildlife Trust
Brooke House
Ashbocking
Ipswich
IP6 9JY
01473 890089
teamwilder@suffolkwildlifetrust.org
suffolkwildlifetrust.org

Andy Rutter
Development Manager (Planning)
Suffolk County Council

By email only

26th October 2023

Dear Andy,

RE: Planning Application SCC/0045/23SE | Construction and operation of an anaerobic digestion facility, associated infrastructure and new access road, connecting pipeline and covered digestate lagoons | Land to the north of Spring Grove Farm, Withersfield, Suffolk, CB9 7SW

We have reviewed this application and share our comments and recommendations below, which relate primarily to:

1) air quality impacts to Ancient Woodland sites close to the proposed development site and the potential for mitigation and compensation for these to deliver long-term ecological benefits, and
2) water vole surveys and opportunities to enhance the biodiversity value of watercourses on and adjacent to the site, including for water voles and otter.

Summary of recommendations

- A lifetime carbon impact assessment for the proposed scheme should be carried out and submitted to the planning authority prior to determination.
- Cumulative air quality impacts on sensitive ecological receptors in combination with other projects and plans should be assessed and the findings submitted to the planning authority prior to determination.
- Ancient Woodland Site Management Plans and proposals to buffer, extend, and connect existing Ancient Woodland and other deciduous woodlands to mitigate residual adverse effects on Ancient Woodland sites should be secured by S106 agreement and or Conservation Covenants.
- The Biodiversity Net Gain assessment should include watercourses on the site and adjacent watercourses where the red line boundary crosses into the riparian zone.
- Further surveys of watercourses on and adjacent to the site for water vole and otter should be carried out in the early part of the breeding season when the watercourses that were dry in August and September are likely to contain water and provide more suitable habitat for these riparian mammals.
- Opportunities for potential biodiversity enhancements to watercourses briefly mentioned in the Riparian Mammal Survey Report should be expanded on and secured by condition to deliver a Biodiversity Net Gain for these habitat features and benefit water voles and otters.

We would welcome the opportunity to discuss our recommendations and detailed comments below with the applicant and planning and ecology officers at Suffolk County Council to ensure that should this scheme be approved it delivers significant and meaningful benefits for wildlife and biodiversity.

General comments on AD plants, climate change, and nature recovery

Suffolk Wildlife Trust has not adopted a formal position on the role of anaerobic digester plants in energy production, but we fully support the need to decarbonise the UK energy sector as part of national and international efforts to mitigate the worst impacts of climate change on people, the economy, and nature.

The development of low carbon energy infrastructure has the potential for adverse ecological impacts, and it is important that the drive to decarbonise energy production does not come at the expense of protecting and restoring nature and the urgent need to reverse biodiversity loss.

The merits and de-merits of biofuel production and their sustainability, including their overall ecological and carbon impacts, are a contested area of scientific research. Critics of biofuels point to unsustainable and highly intensive land management practices to grow crops for use in their production as a significant factor in assessing their credentials as green and renewable energy sources.

While it may not be in the scope of this consultation to consider these strategic questions, for which no specific local strategy or policy exists in Suffolk, as we approach the UK's legally binding target date for achieving net zero carbon emissions it will be important for local authorities to consider how we achieve the decarbonisation of energy production while at the same time meeting targets to halt and reverse biodiversity loss.

A strategic review of the role of anaerobic digestion in helping to achieve these national and local climate and biodiversity goals would help to inform future strategic planning and specific policy to ensure the right projects are brought forward in the right places in Suffolk to support these aims.

<u>Carbon impact assessment</u>

The application gives prominence in the Planning Statement and other supporting documents to the lifetime carbon negativity of the proposed AD plant as one of the principal benefits of the scheme. However, we could not find a carbon impact assessment in the supporting documents submitted with the application. Given the importance of the carbon impact of the proposals in establishing the benefits of and need for the scheme, we believe a full carbon impact assessment should be undertaken and submitted to the planning authority prior to determination of the application.

Comments and recommendations relating to the ecological impacts and outcomes of the proposals:

<u>Air Quality and impacts on ecological receptors</u>

While the assessed Process Contributions (PC) as a % of Critical Levels (C_{Le}) for NO_x, SO_2, and NH_3, and Critical Loads (C_{Lo}) for nitrogen (N) are below the thresholds established by the Environment Agency for being considered as having potential for significant adverse effects on national and local nature conservation sites, we note that nitrogen Critcal Load is already being significantly exceeded for all the assessed Ancient Woodland receptors.

The potential impact on Cadge's Wood is of particular concern, where the predicted PC would cause the nitrogen C_{Lo} for this Ancient Woodland site to be further exceed by 39% of the C_{Lo}.

The Advisory Note: Ecological Assessment of Air Quality Impacts published by CIEEM in 2021[1] notes that:

> *'The guidance gap between the numerical output of air quality assessments and conclusions on ecological significance is broad and complex. Ecologists need to assess the impacts and the ecological*

[1] *Air-Quality-advice-note.pdf (cieem.net)

effects of the predicted changes in air quality at the site concerned. The diversity of habitats and species that may be affected by air pollution preclude standardised methodological approaches…'

The Lichen Survey Report notes the presence of several Nationally Rare (NR) and Nationally Scarce (NS) lichen species in each of the assessed AW sites identified as sensitive ecological receptors potential affected by increased nitrogen deposition.

The increased exceedance of the nitrogen C_{Lo} for these AW sites, especially Cadge's Wood, would only exacerbate the recovery of nitrogen-sensitive lichen communities including NR and NS species, and potentially increase the risk that these species could disappear from these woodlands.

Apart form the potential impact on lichens, increased nitrogen deposition has the potential to result in changes to higher plant communities associated with Ancient Woodland, to the detriment of the floristic diversity and botanical interest of these sites.

Cumulative impacts
We cannot see that cumulative impacts in combination with other projects and plans have been considered. It is therefore not possible to assess based on the information submitted, whether the cumulative PC in combination with other projects and plans as a % of C_{Le} or C_{Lo} might exceed the thresholds for having potentially significant effects on sensitive ecological receptors.

Mitigation
We welcome the mitigation measures proposed in the Ecology Report to address the residual adverse effects on AW sites.

We support the need to investigate the potential effectiveness of buffering through hedgerow and tree planting and natural regeneration of scrub and woodland both at the sources of NO, NH, and SO emissions at the main site, and at the AW receptor sites, for mitigating residual adverse air quality impacts on these sites. Buffering between Cadge's Wood AW and the source of airborne NO, NH, and SO2, emissions will be especially important.

Suffolk Wildlife Trust, in partnership with Suffolk County Council, Suffolk Biodiversity Information Service, and Natural England, helps to manage and maintain Suffolk's County Wildlife Site (CWS) system. As such we have a special interest in supporting improvements to the ecological condition and resilience of CWS habitats and would welcome engagement with the applicant, their consultants, and the landowner of the CWS and other undesignated Ancient Woodland sites during the development of any Ancient Woodland Site Management Plans and proposals to buffer, extend, and connect existing AW and other deciduous woodlands to mitigate the effects of the proposals.

We note there are significant opportunities to connect isolated parcels of AW and other deciduous woodland habitat near the scheme through natural regeneration of woodland on land in between North Wood AW CWS, Littley Wood AW CWS to the south, and New Plantation AW CWS to the north.

We would also encourage consideration of use of S106 agreements and or Conservation Covenants to secure beneficial long-term management of AW CWS and non-designated AW sites, which do not have any statutory requirement for beneficial management.

Biodiversity Net Gain

We have not carried out an in-depth review of the Biodiversity Net Gain (BNG) report or Defra Metric submitted with the application, but on an initial reading the baseline assessment appears to exclude ditches and other linear watercourse features within and immediately adjacent to the site.

'Section 10. Watercourse unit module' of the Biodiversity Metric 4.0 User Guide[2] states that:

> *10.1.3. The watercourse module includes an assessment of the riparian zone. If the site boundary crosses into the riparian zone, adjacent lengths of watercourse must be included within a metric assessment (Figure 10-1).*

For ditches, the riparian zone extends to 5m from the top of each bank. For canals, rivers, and streams this is 10m. Any ditches or streams whose riparian zones extend into the site should be recorded in the BNG baseline and subsequent assessments, and a net gain of at least 10% demonstrated for these features in addition to any net gain achieved for area habitats.

The Planning Statement in section 5.5. Ground conditions/ land quality states:

> *'The Spring Grove Farm site includes two adjoining arable fields. Bowsey Field in the west was covered with dead crop stubble and Spring Grove Field in the east was open and ploughed. A high pressure gas pipeline was noted to run along the northern boundary of Bowsey Field.* **A ditch runs in a southerly direction between the two fields**.*'*
>
> **[our emphasis]**

This ditch has not been included the BNG baseline. This may be because it does not meet the criterion of holding water for at least four months of the year, but this is not made clear in the BNG Report.

Implications of observed flooding for risk of contamination of surface water and watercourse with foul water

Considering the recent flooding of parts of the main site during the heavy rainfall that resulted in significant flooding across much of Suffolk[3], we would like to understand:

1) whether this event has implications for the assessment of risk for surface water contamination and subsequent runoff into nearby watercourses,
2) the potential impact to sensitive ecological features and the overall chemical and ecological status of Water Framework Directive watercourses adjacent to and downstream of the site, and
3) any design changes or additional measures that may be needed to mitigate this risk if it is considered to have changed as a result of the recent flooding.

Riparian Mammals

The Riparian Mammal Survey Report records the potential suitability of watercourses on and adjacent to the site for supporting water vole and otter following surveys carried out in August and September 2022. The Report does not include a map showing the locations of the watercourses surveyed.

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[2] The Biodiversity Metric 4.0 - JP039 (naturalengland.org.uk)

[3] Reported to Suffolk Wildlife Trust by a resident of Haverhill and Trust member on 24th October 2023.

The Report states that:

> *'Surveys conducted by SLR on 16th August and 27th September 2022 showed no signs of water vole anywhere on site and ditches were dry.'*

The Report notes though that:

> *'Though the ditch was dry during the survey in August and September, it was not the case during the UKHab survey in February (Figure 2). It is possible that habitat suitability was higher during the earlier parts of year, and results may be different if it had been surveyed during spring. The Site may provide suitable habitat for parts of the year.'*

Best practice for surveying for water voles is to carry out two surveys during the breeding season (April to September); one earlier in the season (April to June) and one later (July to September), as water voles can react quickly to changes in conditions in a water course – for instance the presence or absence of water.

We do not agree with the Report that the surveys conducted to date are sufficient and that no furthers surveys are required.

To give greater confidence in the assessment of the suitability of riparian habitats on and adjacent to the site for water voles (and otters) further surveys should be carried out in the early part of the breeding season when there it is likely the watercourses will have water in them. This would give a better indication of the suitability of these habitats for water voles and otter and increase the likelihood of field signs being spotted if water voles and otters are present.

Recommendations for potential biodiversity enhancements of ditches and streams in the proximity of the site have been included in the Riparian Mammal Survey Report but have not been sufficiently developed and should be expanded on, with measures to enhance the biodiversity value of watercourse on and adjacent to the site conditioned secured by condition and included in the BNG assessment for watercourse habitats.

Please do not hesitate to contact us should you require any further information or to discuss our comments above.

Yours sincerely,

Rupert Masefield
Planning & Advocacy Manager