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The Planning Inspectorate
National Infrastructure Planning
Temple Quay House
2 The Square
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14th December 2022

Dear Richard Allen,

Reference: A66 Northern Trans-Pennine Project

As the UK's leading woodland conservation charity, the Woodland Trust aims to protect native woods, trees and their wildlife for the future. We own over 1,000 sites across the UK, covering over 30,000 hectares and we have over 500,000 members and supporters. We are an evidence-led organisation, using existing policy and our conservation and planning expertise to assess the impacts of development on ancient woodland and ancient and veteran trees. Planning responses submitted by the Trust are based on a review of the information provided as part of the application to the Planning Inspectorate.

The proposed scheme will result in likely detrimental impact to two areas of ancient woodland as outlined in the consultation documents. Our concerns focus on the Temple Sowerby to Appleby and Cross Lanes to Rokeby sections of the scheme, which are likely to affect the following ancient woodlands:

- Chapel Wood ASNW (grid reference: NY6690921738)
- Jack Wood PAWS (grid reference: NZ0716713475)

Ancient Woodland

Natural England and the Forestry Commission, the Government's respective bodies for the natural environment and protecting, expanding and promoting the sustainable management of woodlands, define ancient woodland as follows within their standing advice[1]:

"*Ancient woodland takes hundreds of years to establish and is defined as an irreplaceable habitat. It is a valuable natural asset important for: wildlife (which include rare and threatened species); soils; carbon capture and storage; contributing to the seed bank and genetic diversity; recreation, health and wellbeing; cultural, historical and landscape value. It has been wooded continuously since at least 1600AD. It includes:*

- *Ancient semi-natural woodland* [ASNW] *mainly made up of trees and shrubs native to the site, usually arising from natural regeneration.*

[1] https://www.gov.uk/guidance/ancient-woodland-ancient-trees-and-veteran-trees-advice-for-making-planning-decisions

- *Plantations on ancient woodland sites* – [PAWS] *replanted with conifer or broadleaved trees that retain ancient woodland features, such as undisturbed soil, ground flora and fungi"*

Both ASNW and PAWS woodland are given equal protection in government's National Planning Policy Framework (NPPF) regardless of the woodland's perceived condition, its size, or features it contains.

Veteran Trees

Natural England's standing advice on veteran trees states that they "*can be individual trees or groups of trees within wood pastures, historic parkland, hedgerows, orchards, parks or other areas. They are often found outside ancient woodlands. They are also irreplaceable habitats. A veteran tree may not be very old, but it has significant decay features, such as branch death and hollowing. These features contribute to its exceptional biodiversity, cultural and heritage value."* We consider that not all veteran trees are ancient, but all ancient trees are also veteran trees.

Planning Policy

The National Policy Statement for National Networks (NNNPS) Paragraph 5.32 states: *"Ancient woodland is a valuable biodiversity resource both for its diversity of species and for its longevity as woodland. Once lost it cannot be recreated. The Secretary of State should not grant development consent for any development that would result in the loss or deterioration of irreplaceable habitats including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the national need for and benefits of the development, in that location, clearly outweigh the loss. Aged or veteran trees found outside ancient woodland are also particularly valuable for biodiversity and their loss should be avoided. Where such trees would be affected by development proposals, the applicant should set out proposals for their conservation or, where their loss is unavoidable, the reasons for this."*

The **National Planning Policy Framework**, paragraph 180, states: "*When determining planning applications, local planning authorities should apply the following principles: c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons[63] and a suitable compensation strategy exists;"*

Reducing Carbon Emissions

The Woodland Trust supports an increase in UK woodland cover from its current 13% of land area to 19% by 2050 to tackle this country's biodiversity and climate crises. The value of woodland in sequestering carbon emissions has been recognised by Government, yet further erosion of ancient and mature woodland by government-led road projects would further undermine its ability to meet net zero obligations. Indeed, in England, ancient woodland has been shown to hold 36% more carbon per hectare than all other woodland.

A number of important developments in UK climate change policy have occurred in recent times. Meeting the recently adopted target of net zero carbon by 2050 represents a major policy challenge of which transport is a central component. The UK Committee on Climate Change (CCC) reports that transport emissions increased by 6% between 2013 and 2019 and were 4% higher than in 1990. Road transport accounts for 91% of the UK's domestic surface transport emissions. Although vehicles have become more fuel efficient, this has been offset by increasing travel demand.

To overcome such trends, the CCC Net Zero report highlighted the need for new policy frameworks to be developed. The Department for Transport acted on this recommendation, publishing a Green Paper, '*Decarbonising transport - setting the challenge'*, in March 2020. This includes recognition that "*We will use our cars less and be able to rely on a convenient, cost-effective and coherent public transport network.*" The Government has further committed to tackling the issue by the publication of '*Decarbonising Transport - A Better, Greener Britain'* in July 2021. A successful strategy to reduce transport's carbon emissions must include measures to manage road travel demand, not accommodate its growth, and we would challenge whether the A66 Northern Trans-Pennine Project is consistent with this approach.

Any decision regarding the A66 Northern Trans-Pennine Project must be consistent with the UK's international commitments regarding carbon emissions. The court decision concerning plans for a third runway at Heathrow highlighted the need for consistency in the Government's legal objectives regarding emissions cuts and major infrastructure development proposals which are predicated on increasing transport movements. While the court decision was overturned, the Government must lead the way in cutting emissions if the UK is to remain credible at climate negotiations.

Impacts to Ancient Woodland

The proposed scheme is predicted to result in likely detrimental impact to Jack Wood from the proximity of the new Rokeby Junction and to Chapel Wood during upgrade works to the existing A66. In addition, Chapter 5 of the Environmental Statement outlines the potential for nitrogen deposition to several ancient woodlands within the wider scheme area (5.10.65).

We are concerned about potential detrimental impact to both Jack Wood and Chapel Wood from their proximity to the proposed carriageway alignment. Whilst we acknowledge that Chapel Wood is sited adjacent to the existing A66, the close proximity of the dual carriageway will lead to numerous adverse impacts such as increased noise and light pollution from traffic, as well as dust pollution during construction of the proposal.

Furthermore, where the wood edges overhang the road network, branches and even whole trees can be indiscriminately lopped/felled, causing reduction of the woodland canopy as well as changes to the hydrology of the woodlands by altering ground water and surface water quantities.

Natural England and Forestry Commission have identified impacts of development on ancient woodland or ancient and veteran trees within their standing advice (please see the annex at the foot of this document for the full range of impacts outlined). This guidance should be considered Government's position with regards to development impacting ancient woodland, although Natural England and Forestry Commission should still be consulted for specific comment on this application.

Ancient and Veteran Trees

We are concerned that an arboricultural impact assessment has not been submitted to accompany this proposal. It is therefore difficult for us to assess the potential impacts of the scheme on the veteran trees outlined in Table 6-16 of the Environmental Statement (Chapter 6).

It is essential that no ancient or veteran trees are lost as part of the development. The loss of any such trees can have a significant impact on local wildlife, particularly those which depend on the habitat provided by veteran trees. Any loss of veteran trees can also be highly deleterious where there is a wider population of veteran trees within close proximity, which may harbour rare and important species.

Mitigation for ancient woodland

Detrimental edge effects have been shown to penetrate woodland causing changes in ancient woodland characteristics that extend up to three times the canopy height in from the forest edges. As such, it is necessary for mitigation to be considered to alleviate such impacts. Natural England and Forestry Commission have also produced guidance on mitigation measures to alleviate impacts to ancient woods and trees within their standing advice (please see the annex at the foot of the document).

It is important that for any offline construction bringing new road infrastructure within proximity to ancient woodland areas, appropriate buffer zones are considered and implemented. Where loss of ancient woods may occur, the only appropriate form of mitigation is avoidance.

We consider that the proposed Rokeby Junction should be re-configured to ensure that a **30m** buffer zone can be provided to Jack Wood. This is to alleviate impacts such as dust, noise and light pollution, run-off containing pollutants, as well as to avoid damage to tree roots.

The 30m buffer zone should be kept free of development unless the proposed works would aid in further alleviating impacts on the ancient woodland, i.e., in the form of barriers, fencing, bunds, or embankments. In the case of the aforementioned features, it is important that such works remain 15m away from the ancient woodland, not only to prevent impacts on the root systems of the trees that make up the woodland edge, but also to prevent other indirect impacts associated with construction works. To this end, we recommend that the buffer zone is planted prior to construction, to create a phased habitat to the ancient woodland that absorbs the indirect impacts occurring during the construction and operational phase.

This is backed up by Natural England and Forestry Commission's standing advice which states that "*the proposal should have a buffer zone of at least 15 metres from the boundary of the woodland to avoid root damage (known as the root protection area). Where assessment shows other impacts are likely to extend beyond this distance, the proposal is likely to need a larger buffer zone. For example, the effect of air pollution from development that results in a significant increase in traffic*." Further information on buffer zones is outlined in the annex below.

Furthermore, we hold concerns with regards to potential nitrogen deposition to several ancient woodlands within the surrounding area. The Trust is of the opinion that all developments should ensure that the process contribution of ammonia/nitrogen does not exceed 1% of the critical level and load. The applicant should therefore seek to model the distance that the road would need to be located to achieve insignificant process contributions on the surrounding ancient woodlands.

Mitigation for veteran trees

Trees are susceptible to change caused by construction/development activity. As outlined in

'BS5837:2012 - Trees in relation to design, demolition and construction' (the British Standard for ensuring development works in harmony with trees), construction work often exerts pressures on existing trees, as do changes in their immediate environment following construction of any new infrastructure. Root systems, stems and canopies, all need allowance for future movement and growth, and should be taken into account in all proposed works on the scheme through the incorporation of the measures outlined in the British Standard.

While BS5837 guidelines state that trees should have a root protection area (RPA) of 12 times the stem diameter (capped at 15m), this guidance does recognise that veteran trees need particular care to ensure adequate space is allowed for their long-term retention. It is imperative that Natural England and Forestry Commission's standing advice on root protection areas for veteran trees is taken into account in planning decisions. This advice states: "*For ancient or veteran trees (including those on the woodland boundary), the **buffer zone should be at least 15 times larger than the diameter of the tree**. The buffer zone should be **5 metres from the edge of the tree's canopy if that area is larger than 15 times the tree's diameter**. This will create a minimum root protection area. Where assessment shows other impacts are likely to extend beyond this distance, the proposal is likely to need a larger buffer zone.*"

We also note the presence of numerous notable trees recorded on the Ancient Tree Inventory adjacent/within the DCO boundary. Although not afforded the same protection in planning policy as ancient and veteran trees, notable trees are likely to develop veteran features if afforded time and space. As such, we ask that these trees are identified, retained, and afforded suitable root protection areas in line with Natural England and Forestry Commission's standing advice to ensure their future longevity and protection.

Conclusion

Ancient woods and trees are irreplaceable habitats, once lost they are gone forever. Any development resulting in loss or deterioration of ancient woodland must consider all possible measures to ensure avoidance of adverse impact.

Yours sincerely,

Nicole Moses
Campaigner – Woods Under Threat
Woods Under Threat Team

Annex 2:

Natural England and Forestry Commission's standing advice:
Ancient woodland, ancient trees and veteran trees: advice for making planning decisions

Direct and indirect effects of development:

Development, including construction and operational activities can affect ancient woodland, ancient and veteran trees, and the wildlife they support on the site or nearby.

Direct effects of development can cause the loss or deterioration of ancient woodland or ancient and veteran trees by:

- *damaging or destroying all or part of them (including their soils, ground flora or fungi)*
- *damaging roots and understorey (all the vegetation under the taller trees)*
- *damaging or compacting soil*
- *damaging functional habitat connections, such as open habitats between the trees in wood pasture and parkland*
- *increasing levels of air and light pollution, noise and vibration*
- *changing the water table or drainage*
- *damaging archaeological features or heritage assets*
- *changing the woodland ecosystem by removing the woodland edge or thinning trees - causing greater wind damage and soil loss*

Indirect effects of development can also cause the loss or deterioration of ancient woodland, ancient and veteran trees by:

- *breaking up or destroying working connections between woodlands, or ancient trees or veteran trees - affecting protected species, such as bats or wood-decay insects*
- *reducing the amount of semi-natural habitats next to ancient woodland that provide important dispersal and feeding habitat for woodland species*
- *reducing the resilience of the woodland or trees and making them more vulnerable to change*
- *increasing the amount of dust, light, water, air and soil pollution*
- *increasing disturbance to wildlife, such as noise from additional people and traffic*
- *increasing damage to habitat, for example trampling of plants and erosion of soil by people accessing the woodland or tree root protection areas*
- *increasing damaging activities like fly-tipping and the impact of domestic pets*
- *increasing the risk of damage to people and property by falling branches or trees requiring tree management that could cause habitat deterioration*
- *changing the landscape character of the area*

Mitigation measures

Mitigation measures will depend on the type of development. They could include:

- *putting up screening barriers to protect ancient woodland or ancient and veteran trees from dust and pollution*
- *measures to reduce noise or light*
- *designing open space to protect ancient or veteran trees*
- *rerouting footpaths and managing vegetation to deflect trampling pressure away from sensitive locations*
- *creating buffer zones*

Use of buffer zones

Buffer zones can protect ancient woodland and individual ancient and veteran trees and provide valuable habitat for woodland wildlife, such as feeding bats and birds. The size and type of buffer zone should vary depending on the:

- *scale and type of development and its effect on ancient woodland, ancient and veteran trees*
- *character of the surrounding area*

For example, larger buffer zones are more likely to be needed if the surrounding area is:

- *less densely wooded*
- *close to residential areas*
- *steeply sloped*

Buffer zone recommendations

Where possible, a buffer zone should:

- *contribute to wider ecological networks*
- *be part of the green infrastructure of the area*

A buffer zone should consist of semi-natural habitats such as:

- *woodland*
- *a mix of scrub, grassland, heathland and wetland*

The proposal should include creating or establishing habitat with local and appropriate native species in the buffer zone.

You should consider if access is appropriate. You can allow access to buffer zones if the habitat is not harmed by trampling.

You should not approve development proposals, including gardens, within a buffer zone.

You should only approve sustainable drainage schemes if:

- *they do not affect root protection areas*
- *any change to the water table does not negatively affect ancient woodland or ancient and veteran trees*