

Councillor B Chapple OBE
Councillor for Aston Clinton & Bierton
Buckinghamshire Council
The Gateway
Gatehouse Road
Aylesbury
HP19 8FF

27 November 2023

Dear Councillor Chapple,

RE: Transport, Environment and Climate Change Committee

Further to our attendance at Buckinghamshire Council's Transport, Environment & Climate Change Select Committee on Thursday 30 March, please find below our responses to the outstanding queries raised.

1 - Question received from Cllr Newcombe – Wendover ward

“Packages 3 (Small Dean) and 4 (Nash Lee) impact on the Chiltern aquifer through the construction of the Wendover Green Tunnel and associated works. There has been concern in the Wendover area that the consequential effects could include:

- **Increased water flow in the Stoke Brook leading to flooding downstream at times of high rainfall.**
- **The drying up of Hampden Pond**
- **Decreased water flow to Weston Turville Reservoir with adverse consequences for the SSI**
- **Decreased water flow to the Wendover arm of the Grand Union Canal with adverse environmental consequences**

Bearing in mind the commitments made by HS2 in the Environmental Minimum Requirements to:

'continuity of surface and groundwater flows and quality will be maintained to mitigate environmental impacts, by means of watercourse diversions, sustainable drainage systems (SuDS), creation of natural banks and features and, where unavoidable, culverts;'

will HS2/EKFB confirm:

- 1. That the Environment Agency has given approval to the HS2/EKFB proposals to prevent the abovementioned situations occurring,**
- 2. The date by which the existing connection to Hampden Pond will be unblocked,**
- 3. That they will monitor if any of the above four situations occurs; explain in advance how the monitoring will take place; and that all relevant data will be promptly supplied to Buckinghamshire Council, Wendover Parish Council and be publicly made available,**
- 4. That in the event of any of the above four situations occurring appropriate remedial action will be taken notwithstanding whether the occurrence is before or after the "Bringing into Use" process has been completed."**

EKFB response

- An application for planning approval under Schedule 17 has been made for the south end of Wendover (Package 3) and approval granted for the north end (Package 4).
- EA are statutory consultees on these applications and had no material comments as further approvals are required for impacts to water bodies under Schedule 33 Part 5 and are being made to the EA.
- We have been engaging with the EA for a number of years to determine the potential impacts on groundwater in Wendover, and the consequential impacts on the surrounding environment.
- This includes updated groundwater modelling of the proposed excavation, assessment of flows, water levels, and impacts to aquatic ecology in the SSSI.
- An assessment under the Water Framework Directive has been developed with regular EA consultation throughout the process. The completed assessment is currently being reviewed by the Environment Agency such that approval to commence excavation for the Wendover Green Tunnel, the Wendover North Cutting, and installation of the Low Permeability Wall can be progressed through Sch33.5 allowing construction of the main works to follow.
- The assessment has shown:
 - The impact to Stoke Brook is minimal and is managed through the creation of flood mitigation areas along the corridor towards Aylesbury.
 - We have designed mitigation for the cutting to ensure that any impact on flows to the Wendover Brook is insignificant. Our model predicts a small residual impact: a 8% reduction in mean flows in Wendover Brook and a 7% reduction in summer flows. Because there are many other streams that flow into Weston Turville Reservoir (Castle Park Stream and Blue Sky Brook), and because only part of the flow of Wendover Brook is diverted into the reservoir, we estimate that the overall reduction in flows into the reservoir will be about 2%. The

reservoir will still always overflow, so there is to be no change in the reservoir water level. A slight reduction in flows may change nutrient concentrations in the reservoir by about 1%. We are confident that this is nowhere near enough to change the trophic status of the reservoir.

- The springs that feed the Wendover Arm of the Grand Union Canal are almost outside of the zone of influence of the cutting and the part of the tunnel that is beneath the water table. Our model results indicate a very slight increase in flows (c. 0.5%) to the Wendover Arm of the Grand Union Canal.
- Hampden Pond is outside of the zone of influence of the cutting and the part of the tunnel that is beneath the water table. We have not modelled spring flows to Hampden Pond, but we have modelled spring flows to Witchell Pond (which is closest to the cutting). Our model results indicate a very slight increase in flows (c. 1%) to Witchell Pond.
- We carried out surveys on the flows into Hampden Pond in 2020 to determine whether we could divert drainage flows into the pond, but this was inconclusive. Hampden Pond will not be unblocked by the works, as it is not blocked currently.
- The application to the EA includes a monitoring plan and has an established baseline. During the construction stage, monitoring will be maintained to ensure compliance with the assessments, and monitoring will extend a number of years beyond the excavation works.
- The excavation works are planned to commence in the next few months and be completed in 2025. We are confident that the extensive modelling and assessments will have minor impacts on the surrounding groundwater and aquatic ecology. Application for Bringing into Use of the railway will not occur until after 2027, so impacts will be known by then.
- We have developed an engagement plan identifying a number of stakeholders who we will brief on the groundwater impacts and will include a public facing FAQ on what we are doing and how we are monitoring. Updates will be provided through our regular newsletters.

2 - Since your attendance at TECC last year, how many trees have been removed by HS2 in Buckinghamshire?

HS2 does not record information on the number and species of trees removed but undertakes measurement of clearance in terms of area (hectares).

The Phase One Environment Statement (Map Books) indicate those areas which may be lost as a result of HS2 construction. Please refer to the Volume 2 Map Books held here: <https://www.gov.uk/government/publications/hs2-phase-one-environmental-statement-volume-2-community-forum-area-reports-and-mapbooks>

All ancient woodlands affected by HS2, and the associated bespoke compensation measures, are described in the Ancient Woodland Strategy for Phase One with updates in the Ancient Woodland Summary Reports ([HS2 Ancient Woodland Reports - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/hs2-ancient-woodland-reports)).

3 - Of the trees you have planted, how many have perished and required re-planting?

At current we are unable to provide data due to assurance requirements. The basis of HS2's approach to tree planting and woodland creation is The National Plant Specification - Handling and Establishment (Published by The Committee for Plant Supply and Establishment, Revised edition, November 1995). This provides industry standard guidance on the processes of plant handling and establishment for large scale planting projects.

For Phase One, HS2 Ltd has committed, through an Act of Parliament, to plant and then maintain up to seven million trees and shrubs between London and Birmingham. This commitment, to plant and then maintain the scheme's original plant numbers, is a requirement of HS2.

All tree planting sites being planted and maintained by HS2 contractors and are subject to ongoing assessment and monitoring. Any plant failures are replaced, to ensure the commitment to plant and maintain seven million trees on Phase One is met. Failures in saplings should be expected in the early years following planting.

Aligning to industry-wide guidance, HS2 Ltd expects failure rates of new tree and shrub planting across its construction sites to be within the industry best practice range of 5-15 percent. Due to the typical industry wide failures of a proportion of newly planted trees, the Forestry Commission advise that the success of tree planted areas is best assessed after five years from initial planting, when the plantation should, by then, be as near to 100 percent of the original planting intention.

The HS2 Phase One Information Paper E26, describes the minimum periods for the management and monitoring of habitats and is available here:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/672401/E26 -](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/672401/E26_-_Indicative_Periods_Management_and_Monitoring_of_Habitats_v1.2_2_.pdf)

[_Indicative_Periods_Management_and_Monitoring_of_Habitats_v1.2_2_.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/672401/E26_-_Indicative_Periods_Management_and_Monitoring_of_Habitats_v1.2_2_.pdf)

Please refer to Page 7.

4 - Further details regarding water management and drainage systems in the River Great Ouse catchment.

Across the River Great Ouse catchment there are multiple interactions of the HS2 scheme with the water environment, these can be through crossings of surface watercourse such as the River Great Ouse itself or its tributaries, discharge of rainfall runoff to surface waters and through works below ground with the potential to interact with groundwater bodies.

Activities with the potential to affect surface or ground waters are subject to approval under Schedule 33 Part 5 of the HS2 Phase One Act. This requires approval from the Environment Agency or the Lead Local Flood Authority (depending on the nature of the works and the water feature affected) before works can commence.

An exception to this approval mechanism is the control of rainwater runoff quality from hardstanding surfaces such as roofs and car parking or from the permanent railway footprint, which are typically not subject to approval by the EA nor the LLFAs. In these instances however the design is still controlled by HS2 Technical Standards and the Environmental Minimum Requirements.

In brief, these requirements ensure that the drainage systems have to include Sustainable Drainage Systems, such as ponds, and control the rate and volume of discharge such that it does not exceed the pre-development runoff rate.

During construction, the majority of runoff from our sites is treated as non-rainfall quality as it has potential to contain elevated levels of silt or other pollutants from construction activities and is therefore subject to approval of discharge rates and quality by the Environment Agency under Schedule 33 Part 5, this includes approval of mitigation measures and pollution control measures on our sites.

Other examples of mitigation measures within the River Great Ouse catchments are the two viaduct crossings of the main river at Turweston and Westbury. The viaduct crossings minimise the scheme's permanent interaction with the river channel itself and its floodplain and are set at a suitable level above the floodplain which ensures both HS2 can remain operational during extreme flood events but also that the viaduct structure does not form a barrier to floodwaters or collect any floating debris within the flood water.

Detailed hydraulic modelling is undertaken at all major watercourse crossings and in the case of the River Great Ouse this modelling has been independently reviewed and approved by the Environment Agency's flood modelling consultants. This flood modelling is used to confirm the impact of the scheme on the flood regime and inform the design of mitigation measures such as size and location of Replacement Floodplain Storage Areas which replicate any floodplain lost due to the presence of the scheme and ensure any changes in flood level remain within the tolerances set by the Environmental Statement.

Full details can be found within the [Phase One Environmental Statement Scope and Methodology Report](#) (Chapter 17 is Water).

5 - What further information can you provide on the progress of the Calvert Infrastructure Maintenance Depot (IMD)?

An updated Schedule 17 submission was made to Buckinghamshire Council in July. We await formal feedback on this application.

On site, EKFB are continuing with their earthworks to prepare the site for the Rail Systems contractor that will be responsible for construction of the IMD.

6 - How much has been spent on the HS2 internal site access roads?

The costs associated with the internal haul road are linked to varying elements of localised construction, including piling, excavation, resurfacing and landscaping works. There is no figure available for the overall cost, as it is tied in to these additional works, but we are

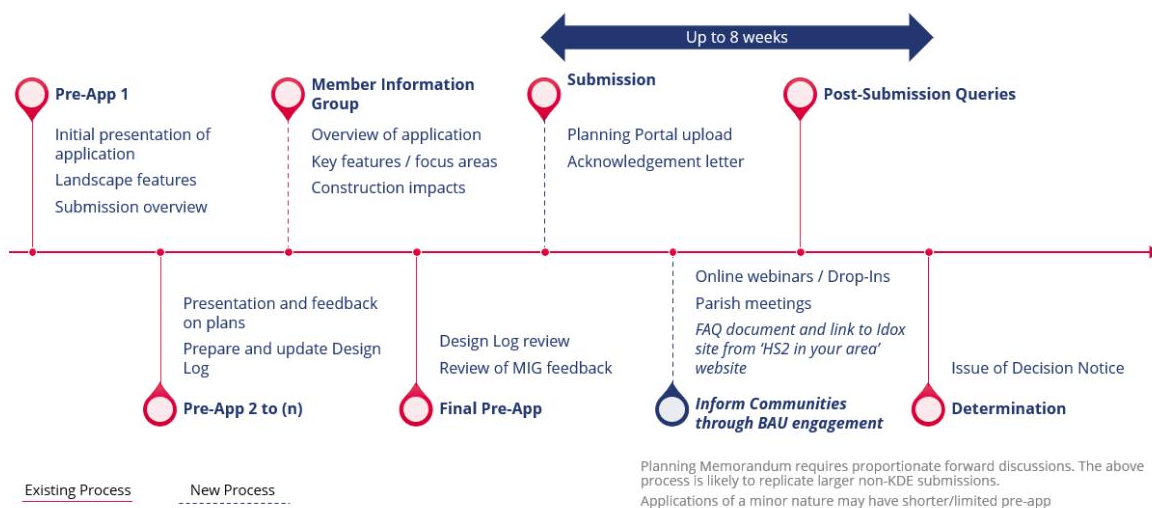
confident that the end result is of local benefit to the community as it removes the need for thousands of additional lorries to use the local road network.

7 - Given the approvals programme frequently slips, has HS2 adequately resourced its contractors to adhere to the programme?

Yes, our main works contractors have sufficient resource to carry out their works in accordance to the programme. Unfortunately delays can occasionally occur on such programmes, and we are working with Officers and Members of the Council to avoid any further interruptions to the consenting process.

To address the additional concerns previously raised by Members of the Council, a bespoke process, operational only within Buckinghamshire, was agreed in December 2021. This details the requirements of the Council and HS2 Ltd. and is intended to avoid any additional lengthy determinations, and subsequent delays to construction activities.

We will continue to work to the agreed process and engage with the Council to ensure the successful adherence to the agreed timelines. This process is detailed below:



8 - HGVs parking in laybys was highlighted at the meeting, are there adequate contingency plans in place for instances when incoming vehicles exceeds compound capacity?

Our top priority is to ensure compounds never receive deliveries in such a manner that it exceeds compound capacity. Our contractor’s VMBS (Vehicle Management & Booking Systems) are utilised to limit the number of arrivals during a particular booking slot, based on any restrictions we have in place - such as the capacity of the security plaza for HGVs, to allow for our vehicle compliance checks to occur without there being any impact to the public highway.

EKFB’s OSCR (Operational Support Control Room) also support the delivery teams with the management of HGV deliveries, allowing for oversight from a central control room with access to live data from the vehicles fed from EKFB’s driver app.

Where there are instances of drivers not adhering to their booking slots, and site capacity is subsequently a concern, resilience plans are in place to make use of spare capacity at larger compounds such as Greatworth Park & Station Road. It is worth noting that significant work has been undertaken in collaboration with many of our hauliers through our contractor's logistics and supply chain management teams to improve compliance with booking slot times across the supply chain.

Our delivery teams are briefed in advance of any changes made to gate arrangements or booking slots, with our local traffic safety officer and logisticians pro-actively monitoring the local area and immediately challenging any problematic parking that may trigger complaints from the local community.

9 - What refused planning applications have been appealed against by HS2 Ltd (if any)?

Buckinghamshire Council Planning Department are fully aware of any refusals that have been appealed by HS2 Ltd. Please contact the Council's Planning Department for details of these appeals and the results from the Planning Inspectorate.

Many thanks for inviting us to the Buckinghamshire Council Transport, Environment and Climate Change Select Committee. We hope the above responses have suitably addressed the outstanding queries, but should you require any more information please let us know and we will work to resolve.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'David Emms', with a stylized flourish at the end.

David Emms
HS2 Ltd.