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Ms Emily Catcheside

Planning Department

Oxfordshire County Council

My Ref: CVH/OCC/HIF1

20 January 2023

SENT BY EMAIL

Dear Ms Catcheside

Re: Didcot HIF1 Scheme. Planning Application Ref. No. R3.0138/21.

Further Objection following receipt of Regulation 25 Further Information.

I continue to be instructed by and act for 5 Parish Councils (Appleford, Sutton Courtenay, Culham, Nuneham Courtenay and Burcot & Clifton Hampden) who are referred to throughout as the Neighbouring Parish Council Joint Committee (NPC-JC).

The NPC-JC maintains its objection to the planning application on the following grounds, which are set out in summary form below:

- The application conflicts with a significant number of policies in the adopted Development Plan.
- The scheme, if approved, will have the effect of undermining part 2 of the newly adopted LTCP, contrary to the guidance set out in para 49 of the NPPF.

- The application conflicts with national planning guidance as set out in the National Planning Policy Framework (NPPF) as revised in 2021 and Planning Policy Guidance (PPGs).
- The application, if approved, will have the effect of undermining legally binding national targets for significant reductions in carbon emissions and carbon neutrality.
- The application conflicts with policies in the newly adopted Local Transport Plan – the Local Transport and Connectivity Plan (LTCP).
- No Health Impact Assessment (HIA) has been submitted, despite the specific policy requirements of LTCP Policy 9.
- Although a Climate Change Position Statement (Appendix K) has now been submitted it fails to meet the requirements of LTCP Policy 27.
- The HIF 1 scheme fails to comply with the Department for Transport's Transport Analysis Guidance (WebTAG) in its assessment of alternatives to a new road and in its assessment of landscape and visual impacts.
- The traffic modelling is fundamentally flawed in its scope and failure to assess the impacts of induced traffic. As a consequence, the Environmental Statement (ES) wholly underestimates adverse impacts on residential amenity, biodiversity and landscape.
- There is no tangible or substantive evidence that the scheme is financially viable.
- The Environmental Statement which includes the Further Information submitted pursuant to the Regulation 25 request still fails to comply with the Environmental Impact Assessment Regulations 2017. Pursuant to Regulation 3 of the 2017 Regulations planning permission cannot lawfully be granted.

1. Prematurity

In our Interim objection dated 13 June 2022 we made reference to the NPPF para 49 which sets out a basis for the refusal of substantial developments which could undermine emerging plans.

Whilst the Oxfordshire 2050 Plan has now been dropped, carbon reduction targets will now be the responsibility of South Oxfordshire District Council (SODC) and the

Vale of White Horse District Council (VoWHDC). At the time of writing there is no reason to believe that the targets set out in the 2050 Plan, as well as the visions, aims, objectives and policies of that Plan will not be replicated at a District level in order to meet national carbon reduction targets. Consequently, our arguments in respect of the HIF1 scheme undermining such targets remain valid.

A similar case was made in respect of the then emerging LTCP. This has been adopted since the Regulation 25 request for further environmental information was made by OCC to its consultants AECOM.

The LTCP refers at various points to "part 2" of the LTCP. This is a reference to a further stage of the LTCP, and will include the development of "area and corridor transport strategies". These strategies are referred to explicitly in Policy 52 of the LTCP which states:

"Policy 52 – We will develop and deliver area transport strategies that align with the LTCP vision and translate the LTCP policies into schemes for use in bidding, funding and developer negotiations."

The explanatory text to Policy 52 (LTCP page 133) specifically identifies an area strategy for:

*"**South Oxfordshire and Vale of White Horse Area Strategy** – including urban focus areas of Didcot, Henley, Wallingford, Wantage, Abingdon, Thame and Faringdon."*

The text regards these area transport strategies as a "benefit for people in Oxfordshire", as they will put the transport user hierarchy into practice and deliver schemes that put human health first. The improvement of walking, cycling, public and shared transport infrastructure will help the LTCP to "create healthy communities across Oxfordshire."

Clearly, if the HIF 1 scheme is approved this will have the effect of wholly undermining the delivery of part 2 of the LTCP and the aspirations of Policy 52.

In addition, the Government has very recently announced that it is dropping housing targets set by central government, permitting local planning authorities to set their own targets. A revised version of the NPPF is currently subject to consultation and it

is anticipated that it will be adopted in Spring 2023. The consultation draft includes proposals to review Housing Delivery Tests, and a relaxation of 5year Housing Land Supply (HLS) targets, whilst placing greater emphasis on sustainability in all areas, including housing and infrastructure.

It was noted in our previous interim objection that the VoWHDC has reviewed its housing figures resulting in a 32% reduction across the district. SODC is due to review its housing figures in 2025. In light of the Government's announcement, it is highly likely that this review will now need to be brought forward.

A substantial reduction in housing over the plan period will have significant bearing on the purported justification for HIF1 and the calculations upon which the Transport Assessment (TA) are based. A 32% reduction in housing across the scheme area significantly reduces the need for the scheme, whilst simultaneously increasing the 5 year housing land supply in both districts, enabling the district authorities to more easily meet housing targets without the scheme.

Any reduction in housing figures will also have impacts on the traffic modelling of the scheme. 32% less new dwellings should result in a pro rata reduction in vehicle movements. This reduction has not been factored into the TA, which is now clearly out-of-date. At the very least the model should be re-run using the new housing figures available.

For these reasons this scheme should be refused on the grounds of prematurity, or at the very least put on hold until the District Councils have reviewed their housing targets for the plan periods.

2. Local Transport and Connectivity Plan (LTCP) 2022.

A new Local Transport Plan, the LTCP, was adopted by OCC in July 2022 (that is after the Regulation 25 request was submitted). As such, the LTCP is a material consideration to which significant weight should be afforded in the determination of this current application. Conflict with the aims, objectives and policies set out in the LTCP should result in the refusal of planning permission of the scheme.

The adopted LTCP sets out a series of targets. They include:

- By 2030 to replace or remove 1 out of every 4 current car trips in Oxfordshire
- By 2040 to deliver a zero-carbon transport network and to replace or remove 1 out of every 3 current car trips in Oxfordshire

The Plan aims to achieve these targets through a combination of transport policies focussed on the promotion of walking and cycling, investment in strategic public transport, improving multi-modal travel and making sustainable travel more attractive.

The Plan sets out a series of key policies which aim to deliver these targets. These are considered below.

Policy 1 seeks to prioritise alternatives to travel by the private car, through the establishment of a transport user hierarchy. This hierarchy will be applied to the assessment of transport schemes (such as HIF1), with private car travel given the lowest priority in the hierarchy. As the explanatory text sets out, this approach, apart from enabling carbon reduction targets to be met, will bring further benefits in respect of improving air quality, reducing noise pollution and improving levels of physical activity.

Policy 2 seeks to ensure that internal routes are easily connected to a comprehensive walking and cycling network, whilst Policies 16 and 17 will apply the 20-minute neighbourhood model in order to reduce the need to travel by private car and improve connectivity by walking and cycling.

Policy 26 prioritises bus travel over the private car through the development of infrastructure measures and will ensure that new strategic development is designed for bus access.

Most significantly, Policy 27 will assess, manage and minimise both embodied and operational carbon in infrastructure projects, whilst pursuant to Policy 36 OCC will adopt a “decide and provide” approach (as opposed to the now outdated and ineffective “predict and provide” approach which appears to inform the HIF1 scheme) to transport planning throughout the County. This approach should apply to all new transport infrastructure schemes such as HIF1.

At a strategic level the LTCP envisages both area transport strategies which will align with the vision of the Plan to be utilised in bidding, funding and developer

negotiations (Policy 91) and with a similar approach to transport corridor strategies (Policy 92).

The adopted LTCP will be wholly undermined by the HIF1 scheme, as will Part 2 of the LTCP which will involve the development of area wide strategies.

3. Health Impact Assessment

Policy 9 of the LTCP requires a Rapid or Full Health Impact Assessment (HIA) to be submitted for larger-scale infrastructure proposals in order to deliver health benefits and to mitigate any negative impacts.

Para 3.12 of Appendix K submitted by AECOM acknowledges that no HIA has been submitted with this application, as the scope of the Environmental Statement (ES) was agreed with OCC as part of the EIA Scoping process.

The EIA Scoping process would have been undertaken well in advance of the drafting of the original ES submitted jn support of the application, is now out of date and has been superseded by the new LTCP. There is no good reason why an HIA could not have been undertaken and submitted under the Reg 25 response.

Public Health England (PHE) published a guide for local authority public health and planning teams entitled “Health Impact Assessment in spatial planning” in October 2020. This sets out clear guidance on why HIAs are necessary, when they should be undertaken and what processes should be followed. Further, the guide is informed by the NPPF and PPGs on healthy and safe communities. Any failure to follow the HIA guidance is equally a failure to comply with the requirements of the NPPF and PPGs.

The guide advises that for complex schemes (such as HIF1) a comprehensive or Full HIA should be produced (para 2.5) It further advises that HIAs should be done prospectively (para 2.11) during the options appraisal stage of a development project, that is before applications are submitted. Section 6 of the guidance provides advice on how HIAs should be integrated with the EIA process.

The failure to produce an HIA represents a clear, unequivocal breach of Policy 9 of the LTCP. It is, by extension, a failure to comply with guidance set out in the NPPF

and PPGs and further represents a significant defect in the Environmental Impact Assessment of the scheme.

4. Climate Change Position Statement

On 18th February 2022 the Joint Parish Councils requested, inter alia, that a Climate Change Position Statement be produced to accompany the planning application in order to assess the climate change related impacts of the scheme having regard to the cumulative effects of Greenhouse Gas emissions of the scheme.

In its response dated 23rd March 2022 AECOM stated that:

"a Climate Change Position Statement comprising a cumulative impact assessment of greenhouse gas emissions is not required."

Notwithstanding this, on 26th April 2022 OCC requested that this information be provided (see OCC Regulation 25 request), setting out the further information required in detail, including measures to reduce embodied carbon emissions during construction and operation.

AECOM has now, albeit reluctantly, produced what purports to be a Climate Change Position Statement, Appendix K.

Para 2.2 of App K makes reference to mitigation measures that should, if implemented, result in reductions of embodied carbon and emissions.

However, it then states:

It should be noted that currently, and at the point of submitting the ES, a Principal Contractor (PC) has not been appointed and it has not been confirmed if these measures are deliverable."

Such a stance is wholly unacceptable, and completely negates the purpose of the Reg 25 request. The effect of failing to confirm the deliverability of mitigation measures prior to planning permission being granted flies in the face of government policy on climate change and is a clear breach of the requirements of the EIA Regulations 2017.

It also represents a clear breach of Policy 27 of the LTCP.

Policy 27 states explicitly that OCC will:

"a. Follow the embodied carbon reduction hierarchy in our decisions about transport infrastructure.

b. Take into account embodied, operational and user emissions when assessing a potential infrastructure project and its contribution to Oxfordshire's carbon budges and to a net-zero transport network by 2040.

c. Require a science-based percentage of embodied carbon reduction from baseline infrastructure projects."

None of these policy requirements have been met. App K wholly fails to address these points, and the only data provided by OCC/AECOM in respect of carbon budgets are to be found in the original ES Vol 1 Chapter 16, Table 15.15, which sets out national carbon budgets, with no details whatsoever of the County's carbon budget or how this scheme will affect the County's carbon reduction targets.

Our interim objection of 13th June 2022 was accompanied by a report by Prof John Whitelegg, one of the country's leading experts on sustainable transport.

His report calculated a figure for embodied carbon produced by the scheme of 288,414 tonnes of CO2e (see Whitelegg Report para 4.8). This figure has not been challenged or addressed by AECOM.

More recently (January 2023) Friends of the Earth (FOE) Oxford have commissioned a Report entitled "Is HIF1 compatible with Oxfordshire's climate goals?" by Ng Chien Xen, an expert transport economist.

The conclusions of his report only serve to reinforce the criticisms of the HIF1 scheme submitted previously by the Parish Councils' experts.

The Executive Summary of the FOE Report states;

The transport sector in Oxfordshire will consume its remaining carbon budget under the Paris agreement in three and a half years unless there are steep and immediate cuts to emissions. However, at this critical time, the proposed HIF1 scheme is likely to increase rather than decrease emissions and car use. While an analysis by Oxfordshire County Council's consultants concluded that there will be no significant climate impact, there are significant flaws in their analysis. When these are accounted for, we estimate the scheme will consume around 8% of Oxfordshire's remaining transport carbon budget. This will be greater than the potential carbon savings from hitting Oxfordshire's cycling targets. Compared to district-level targets, the scheme will consume 19% of South Oxfordshire and the Vale of White Horse's transport carbon budget. We recommend that the county puts a freeze on the scheme in order to further assess its climate impact, and consider more sustainable ways to support growth in Oxfordshire.

Having regard to AECOM's assessment, the Report further states;

"However, their analysis is based on a number of flawed assumptions.

- *The Scheme's emissions are compared against national rather than local carbon budgets, as required by the LTCP. This inevitably leads to the conclusion that the Scheme's emissions are immaterial as national emissions are inherently several order of magnitudes larger than local projects. However, when compared to Oxfordshire's transport carbon budget, the Scheme's emissions are significant, as will be discussed in the paragraphs below.*
- *They have assumed, with agreement from OCC, that traffic and emissions growth will be the same whether or not the Scheme is built. This is not a credible assumption: adding new road capacity leads to extra traffic, known as 'induced demand'. This is a significant source of emissions; we estimate that it could be around 2.3x larger than the emissions from constructing the scheme. Therefore, AECOM has significantly underestimated the Scheme's emissions.*
- *They assume that people will travel the same amount regardless of the level of congestion. In fact, people travel less when there is high congestion, and more when there is lower congestion. This means they overestimate the level*

of congestion without the Scheme and overestimate the improvement in congestion with the Scheme. Therefore, they overestimate the potential carbon savings from reduced congestion."

Neither OCC nor AECOM have produced any evidence in respect of embodied carbon emissions arising from the scheme, nor have they produced any figures setting out the County's carbon budget for the construction period and operational life of the scheme. In the absence of any evidence or data to the contrary, significant weight should be afforded to both Prof Whitelegg's and FOE's Reports.

As the explanatory text to Policy 27 of the LTCP sets out, reducing carbon emissions and improving air and environmental quality is "essential for the health of Oxfordshire residents."

The policy is needed to contribute towards a net-zero transport system, and as explained, the starting point should be to attempt to meet identified transport need without building new infrastructure. (LTCP page 88)

This approach is reinforced by the policy requirements of LTCP Policy 36.

The text to the policy (LTCP page 104) notes that new road building;

"is not a sustainable long term solution because we have found that road building schemes often generate new demand and quickly reach capacity again."

Further,

"there is substantial national and international evidence of motor traffic "disappearance" when road capacity is reduced, particularly where there are viable alternatives and in areas of excessive demand on road space."

This is an explicit recognition of the phenomenon of induced demand, addressed by Prof Phil Goodwin in our Appendix 2 submitted in support of our interim objection in June 2022. As Prof Goodwin notes, the Paramics model used in the HIF1 scheme does not have the facility to take into account induced demand, representing a serious shortcoming in the modelling of the scheme.

In addition, on 7th March 2022 Prof Goodwin presented a paper entitled "Outline Comments on HIF1 Forecasts and Appraisal" to OCC's Transport Scrutiny Working Group. In this paper Prof Goodwin concludes that:

- The traffic forecasts in the TA are based on inappropriate, outdated inputs, derived from a narrow range of factors.
- The TA Paramics model fails (and does not have the capability) to calculate induced traffic.
- As a consequence of these shortcomings the benefits of the scheme in terms of reducing congestion and CO2 emissions have been overstated and any value for money calculation should be reduced accordingly.
- It is unclear how the forecasting methodology adopted allows for various development design considerations to effect traffic.

Given this, Prof Goodwin commends the approach of the Welsh Government, which has effectively paused all new road schemes to allow for the reassessment of schemes in light of wider policy objectives such as carbon reduction and zero carbon targets. In our submission this is precisely what should happen with the HIF1 scheme.

Prof Goodwin concludes that the forecasts over-state the benefits of the scheme and thereby understate the impacts on the surrounding villages. This adds weight to the concerns of the Parish Councils, which have been expressed in frequent requests for the data underpinning the application and re-iterated in the NPC-JC paper of November 2021.

5. **Principle of Development and Local Plans.**

The adopted Development Plan (DP) comprises the South Oxfordshire Local Plan 2036 (SOLP) and the Vale of White Horse Local Plan 2031 (VoWHLP).

The Planning Statement (PS) submitted by AECOM in support of this application lists the relevant DP policies at pages 29-32. It is not proposed to repeat that list here.

In normal circumstances planning applications should be determined in accordance with the DP unless material considerations dictate otherwise (see NPPF para 47).

Whilst it is acknowledged that a number of adopted plan policies support the principle of the HIF1 scheme, including TRANS3 of the SOLP and Core Policy 18 of

the VoWHLP, these policies now need to be considered and afforded due weight in the context of a radically different policy environment.

LTP4 which was heavily relied upon by OCC to provide policy justification for the scheme, but this has now been replaced by the LTCP, and the previous LTP cannot be afforded any weight in planning terms.

It should be noted in passing that the predecessor to LTP4, LTP3, took the following view towards any new river crossing;

"Improvements to the Culham and Clifton Hampden road river crossings or implementation of a new bridge are not identified projects within the Transport Strategy. This was discussed extensively at SODCs Core Strategy examination and the arguments still stand. The Strategy to accommodate movement north /south is focussed on rail and the A34. Capacity problems are not only created by the bridges themselves but also by the surrounding road network and junctions. This capacity issue acts as a deterrent to some drivers and aids commuters to make a choice about how/when they travel."
Local Transport Plan 3 2011-2030 (para 15)

Whilst it is trite to state that Development Plans and national policy guidance such as the NPPF should be taken as a whole, it should be borne in mind that specific proposals should be considered against the policy context taken as a whole. There will be tensions and conflicts between DP policies and many development schemes will not fully meet policy requirements. The planning balancing exercise is therefore unavoidable, and if harms outweigh benefits even in cases where land has been safeguarded for a particular purpose such as here, then planning permission must be refused.

In any event, a safeguarding policy is precisely that, it is prohibitive of development that could prejudice development identified in an adopted plan, but it does not provide either in principle support for a specific planning application or a presumption in favour of development simply by dint of the fact that a scheme falls within the broad scope of a safeguarding policy.

Both Local Plans make numerous references to the need to reduce carbon emissions significantly over the plan period.

The SODLP 2031 Objective 8.1 seeks to:

"Minimise carbon emissions and other pollution…" by supporting growth in locations that help reduce the need to travel.

Objective 4.2 seeks to make sustainable transport, walking and cycling an alternative and viable choice for people.

Policy STRAT 1 states that:

"A key outcome of the spatial strategy is the minimisation of the need to travel to help to reduce carbon emissions generated through travel choices."

STRAT 3 seeks to improve rail services to Didcot and STRAT 7 seeks improvements to public transport in the context of transport infrastructure.

The VoWHLP 2031 has similar aspirations. Para 2.15 states that:

"The Vale will need to play its part in meeting Government targets for reducing Greenhouse Gas emissions…"

whilst *"Responding to Climate Change is one of our Strategic Objectives."*

As Prof Whitelegg observed in our earlier interim objection,

"Transport in South Oxfordshire (territorial direct emissions) is responsible for 52% of all CO2 emissions. In the Vale of the White Horse it is 50%. My view as a transport and climate change specialist is that it is impossible to meet a 13.4% pa or a 13.7% annual reduction in transport carbon in these two local authority areas when large infrastructure projects such as this planning application are increasing transport carbon emissions."

His observations remain as pertinent now as they did then. There can be no doubt that were the HIF1 scheme to proceed, the key objectives, spatial strategies, strategic policies, and aspirations of both District Local Plans would be wholly undermined and frustrated. The scheme represents a departure from the development plan not only in respect of the Green Belt, but in respect of all Climate Change and carbon reduction policies.

6. Traffic Modelling.

The shortcomings of the Paramics model utilised by AECOM have been set out above and are not repeated here.

In addition to the failure to assess the impacts of induced traffic, a significant number of other impacts have also not been picked up by the model, having been "scoped out" at an early stage. These flaws are set out in detail in two documents submitted alongside this objection. They have been produced by an independent traffic modeller, Andrew Dorrian MRTPI, via Planning Aid England, and are titled "Independent Transport Assessment Review" (Appendix 3) and "Reconciliation of Modelling" (Appendix 4).

As these documents show, as long ago as February 2022 the Parish Councils submitted a number of detailed questions to OCC regarding the scope of the modelling and impacts upon the transport network likely to be affected by the HIF1 scheme. As the reviews by Mr Dorrian illustrate, a number of stretches of the B4016 through Sutton Courtenay and Appleford have not been assessed, Nuneham Courtenay has been scoped out of the assessment completely, together with the Golden Balls Roundabout and impacts on Abingdon and the town centre remain unclear.

At the time of writing the modelling undertaken does not appear to have been subject to any other further independent third-party review, such as the audit by the JCT consultancy in January 2022. No comments from OCC's Transport Development Control appear to be available either. In the event that further documents emerge in respect of traffic modelling, the Parish Councils reserve the right to comment on such prior to any determination of this application.

7. Review of the Assessment of Alternatives & WebTAG Compliance

The NPC-JC has commissioned a report to review OCC's treatment of alternatives to the HIF1 scheme and compliance of that treatment with the Department of Transport's (DfT) Transport Analysis Guidance (WebTAG) published in 2014. The full report is appended to this submission at Appendix 1.

The Report concludes:

"The assessment of alternatives fails at a very basic level, in relation to both guidance in the form of WebTAG (DfT standard transport appraisal guidance since 2004, current version 2014 with later updates), and Oxfordshire County Council (OCC) policy most recently set out in the Local Transport Connectivity Plan July 2022 (LTCP). The central problem of the option assessment is that there has not been adequate consideration of alternatives to road building at the earliest stages in the project development, either as standalone packages of options or in conjunction with a lower level of highway provision. The full HIF1 highway scheme, with a smattering of active travel facilities that do not contribute significantly to the scheme's core provision, has been the required option since at least 2014, and as such it was inevitably the preferred outcome of the HIF1 appraisal.

Furthermore, it is now very clear that HIF1 is in fundamental conflict with the LTCP's core target to remove or replace one in four car journeys in the County by 2030, and with OCC's policy on option appraisal. Policy 36 of the LTCP states that OCC "will only consider road capacity schemes after all other options have been explored", and that transport schemes should move away from 'predict and provide' to 'decide and provide'. The justification for HIF1 is entirely predict and provide – a given amount of development is going to happen in the area, which will require this scheme, rather than a balanced transport and land use strategy that seeks to establish what level of development is compatible with sustainable transport solutions aimed at traffic reduction."…James Report p.1

"In summary, HIF1 was predicated on Local Plans that are 5-8 years old, at least one of which has been reviewed and development demands downgraded. The scheme is based on 'predict and provide' concepts that were discredited almost 30 years ago (PPG 13 1994), but which seem to take a long time to disappear from project practice. It appears that the LTCP has finally caught up, and supplanted 'predict and provide' with 'decide and provide'. The approval or rejection of HIF1 will be a test of whether this policy evolution has translated into project practice. James Report p.7

8. Green Belt and Landscape

The County Council acknowledges that the proposed scheme is a departure from the Development Plan (13 Oct. 2021), and despite some limited policy support for the scheme as considered above, the scheme is nevertheless regarded as inappropriate development in the Green Belt.in that it would permanently encroach into the countryside, would not protect the setting of historic towns, and would not preserve the openness of the Green Belt.

The prohibition on inappropriate development in the Green Belt can only be overcome by OCC establishing that any harm arising from the scheme is clearly outweighed by other considerations which constitute “very special circumstances”. (See NPPF paras 147 – 148)

An expert report on Landscape and Green Belt issues has been commissioned by the PCs and is attached to this document as Appendix 2.

The report is highly critical of the ES Landscape and Visual Appraisal (LVIA) submitted by AECOM in support of the planning application.

The assessment of the landscape impacts of the scheme is “disingenuous” (page 1). The correct application of WebTAG guidance on landscape impacts should have concluded that overall, there will be a “large adverse” impact on landscape, despite suggested mitigation (page 2). The openness of the Green Belt will not be maintained and consequently the scheme will cause harm to the Green Belt (page 2).

With regard to the landscape impacts of specific sections of the scheme, the Report highlights that even after 15 years the impact on the Thames Path National Trail will remain “Major and Large Adverse” (page 3).

It is “difficult to understand” (page 3) why, given that the loss of tranquillity resulting from the Clifton Hampden by pass section of the scheme is one of the major effects of the scheme, that loss will purportedly be reduced over a period of 15 years from “Large adverse” to “Slight adverse”. Loss of tranquillity is loss of tranquillity.

The assessment of impacts caused by the viaduct at the gravel lakes to the South of the Thames is described in the Report as a “travesty” (page 3) for the reasons set out in the Report.

The apparent acceptance by the applicants of significant adverse effects on local residents of the elevated section of the scheme at Appleford Sidings is described as “beyond comprehension” (page 5).

Consultation responses from SODC and the Vale dated 23 December 2022 and 22 December 2022 respectively have now been published, and it would appear that the views of the Councils’ professional officers concur with Mr James’ analysis in many respects.

The professional officers from both local authorities set out a number of concerns that remain, despite the submission of the Reg 25 further information, and conclude that the HIF1 scheme conflicts with a significant number of Local Plan Policies and guidance as set out in the NPPF.

These include:

- Bridge design – contrary to NPPF paras 126, 130 and 131, and the Didcot Garden Town Delivery Plan (SODC). Also Core Policies 37 and 44 of Part 1 of the Vale’s Local Plan 2031.
- Tree and hedge planting – is “considered inadequate” to address the expectations of the Delivery Plan, contrary to Local Plan Policies 44 and 45 and NPPF para 131. (Vale) SODC’s Forestry Officer concludes that the scheme is contrary to Local Plan Policies ENV1, ENV8, DES1 and DES2, paras 131 and 180 of the NPPF and BS 5837, 2012 Tress in relation to Design, Demolition and Construction.
- The Conservation Officer of SODC concludes that the scheme proposals remain in conflict with paras 199 and 200 of the NPPF and Policies ENV6, ENV7, and ENV8 of the SODC Local Plan.
- The Vale’s Planning Team question the suitability of the road alignment between Didcot and the Thames crossing (at Appleford) and asked that consideration be given to moving the road further west.
- Further concerns are expressed in relation to a wide range of environmental impacts, including lighting, acoustic barriers and noise, noise and vibration, road alignment and lack of “sufficient information” in other areas to enable a proper understanding of the scheme.

In summary, the professional officers of both local authority areas through which the road will run continue to maintain significant policy objections to the scheme. These objections should be afforded considerable weight in any planning balance assessment.

9. Local Impacts on Air Quality and Noise.

Appleford PC has produced two documents which are appended to this objection, the contents of which are not repeated here. (See Appendices 5 and 6)

In summary, given that the projections for air quality and noise are based on a fundamentally flawed assessment of traffic impacts on the villages affected by the scheme, effects on residential amenity have been significantly underestimated in the ES. Some of these shortcomings have been accepted by the officers of the District Councils, as set out above in their consultation responses, giving rise to a number of Local Plan Policy conflicts.

10. Financial Viability and Deliverability

Whilst it is accepted that purely financial considerations, per se, are not material planning considerations, the financial viability and deliverability of projects are accepted as being relevant material planning considerations, particularly where Compulsory Purchase Orders (CPOs) will be necessary, as is the case here.

The conclusions of a recent CPO decision, The Vicarage Fields CPO (APP/PCU/CPOP/Z5060/3278231), dated 4 October 2022, warrant consideration.

The Inspector found (see Inspector's Report paras 372 et seq.) that as there was a lack of tangible and substantive evidence on the viability of a scheme, there was no reasonable prospect that the scheme would proceed. Consequently, CPOs could not be justified as being in the public interest.

With regard to the HIF 1 scheme, overall cost estimates have increased substantially since the planning application was submitted in November 2021 and are very likely to increase further given current inflationary pressures, particularly in respect of construction costs and materials.

On 17 January 2023 a report “Key questions for road investment and spending” was published by an independent body of experts, the Road Investment Scrutiny Panel (RISP). The report can be found here:

https://uwe-repository.worktribe.com/output/10295773

The aim of the RISP is “exploring and setting out shared concerns about forthcoming decisions on road investment and spending”, and the concerns expressed in the Report are highly relevant to the HIF1 scheme under consideration.

The Executive Summary identifies, inter alia, the following areas of concern:

- Decarbonisation – the Panel is concerned that;

“investment to generate enhanced road capacity for motor traffic and the assumptions on future road use may run counter to the course we need to steer to meet our decarbonisation obligations.” (page 4)

Actions that the Panel would like to see to allay such a concern include “analytical consistency between road expenditure decisions with capacity implications and the trajectory necessary for whole economy decarbonisation” and a “demonstration of consistent and competent application of carbon valuation in appraisal.” We wholly endorse this approach and, for the reasons set out above, consider that OCC has failed to do so in respect of the HIF1 scheme.

- Health and social impacts – the RISP is concerned that

“the local benefits and disbenefits of road investment tend to be averaged out in appraisal at an area level but are experienced unevenly by constituent individuals and neighbourhoods such that investment showing an overall net benefit may disproportionately blight the lives of some individuals and communities who may not be adequately recognised or compensated.” (page 5)

This is clearly the case with the HIF1 scheme in respect of the villages and residents who will be adversely affected by the scheme. The Panel recommends that “evidence that the detailed distribution and concentration of the benefits and detriments to health and livelihoods arising from road schemes experienced by individuals and communities are being identified and given appropriate weighting at every stage of decision-making.” Given the inherent defects in the Environmental

Appraisal process, such detailed evidence is not available, and cannot be appropriately weighed.

- Consideration of alternatives – The Panel is concerned that;

"the selection of which projects to implement may not be based on a sufficiently wide-ranging review of alternative options (including no-build or low-build solutions such as demand management) for meeting high-level objectives or resolving specific local issues" and that *"problem/opportunity definition and selection of options to be assessed both risk being too constrained by organisational interests, siloed funding allocations, or simply adherence to established practice."* (page 6)

The critical review of the assessment of alternatives at Appendix 1 to this objection expresses precisely these concerns.

- Robustness of investment decisions in a changing world – The Panel asks what would be required to persuade it that road investment and expenditure decisions are likely to represent long-term value for money, given that;

"the decision-making process may not be engaging sufficiently with uncertainties about the future and therefore lacks robustness to the possibility of changed circumstances (for example the nature, extent and severity of climate change effects, or anticipated developments failing to materialise or being delivered later than expected." (page 7)

The Panel recommends that investment decisions should be tested against a wide range of plausible scenarios (including reductions in motor traffic volumes and step changes in sustainable travel, a willingness to revisit assessments at key stages of scheme development and serious consideration given to smaller interventions with lower risk profiles such as the reduction of travel demand.

We share the concerns of the Panel in this respect and endorse its recommendations. We have already suggested that such approaches should be adopted with regard to the HIF1 scheme in our interim objection previously submitted to OCC and reiterate such here.

11. Conclusion

For all the reasons set out above this planning application should be refused. In summary;

- The application conflicts with a significant number of policies in the adopted Development Plan.
- The scheme, if approved, will have the effect of undermining part 2 of the newly adopted LTCP, contrary to the guidance set out in para 49 of the NPPF.
- The application conflicts with national planning guidance as set out in the National Planning Policy Framework (NPPF) as revised in 2021 and Planning Policy Guidance (PPGs).
- The application, if approved, will have the effect of undermining legally binding national targets for significant reductions in carbon emissions and carbon neutrality.
- The application conflicts with policies in the newly adopted Local Transport Plan – the Local Transport and Connectivity Plan (LTCP).
- No Health Impact Assessment (HIA) has been submitted, despite the specific policy requirements of LTCP Policy 9.
- Although a Climate Change Position Statement (Appendix K) has now been submitted it fails to meet the requirements of LTCP Policy 27.
- The HIF 1 scheme fails to comply with the Department for Transport's Transport Analysis Guidance (WebTAG) in its assessment of alternatives to a new road and in its assessment of landscape and visual impacts.
- The traffic modelling is fundamentally flawed in its scope and failure to assess the impacts of induced traffic. As a consequence, the Environmental Statement (ES) wholly underestimates adverse impacts on residential amenity, biodiversity and landscape.
- There is no tangible or substantive evidence that the scheme is financially viable.
- The Environmental Statement which includes the Further Information submitted pursuant to the Regulation 25 request still fails to fully comply with the Environmental Impact Assessment Regulations 2017. Pursuant to

Regulation 3 of the 2017 Regulations planning permission cannot lawfully be granted.

The Parish Councils reserve the right to submit further representations in response to any documents that may be produced prior to the determination of this application.

Sincerely,

Charlie Hopkins MA (Oxon) PG Dip Law
Solicitor (non-practicing), Planning & Environmental Consultant
20th January 2023

APPENDIX 1

OXFORDSHIRE COUNTY COUNCIL (OCC): DIDCOT HIF 1

PLANNING APPLICATION R3 0138/21

REVIEW OF ASSESSMENT OF ALTERNATIVES

JANUARY 2023

Alan James BSc MA MLI (retired)

This submission is made on behalf of the five Parish Councils of Appleford-on-Thames, Burcot and Clifton Hampden, Culham, Sutton Courtenay, and Nuneham Courtenay (the Neighbouring Parish Councils – Joint Committee) and covers the assessment of alternatives to the preferred option of the major new road proposal in the above planning application. The part of the application with direct impact on the five parishes includes sections C (Didcot to Culham) and D (Clifton Hampden bypass).

SUMMARY

The assessment of alternatives to HIF1 are covered in the ES Ch3, summarising the history of scheme development since 2014. The need for the scheme was purportedly established by the Vale of White Horse and South Oxfordshire District Council Local Plans, later supported by an Option Appraisal Report (OAR) in two parts in 2018 and 2019, and a further 'updated' OAR in 2021. The last of these underpins the current HIF1 proposal's status as the preferred option in the planning application.

The assessment of alternatives fails at a very basic level, in relation to both guidance in the form of WebTAG (DfT standard transport appraisal guidance since 2004, current version 2014 with later updates), and Oxfordshire County Council (OCC) policy most recently set out in the Local Transport Connectivity Plan July 2022 (LTCP). The central problem of the option assessment is that there has not been adequate consideration of alternatives to road building at the earliest stages in the project development, either as standalone packages of options or in conjunction with a lower level of highway provision. The full HIF1 highway scheme, with a smattering of active travel facilities that do not contribute significantly to the scheme's core provision, has been the required option since at least 2014, and as such it was inevitably the preferred outcome of the HIF1 appraisal.

Furthermore, it is now very clear that HIF1 is in fundamental conflict with the LTCP's core target to remove or replace one in four car journeys in the County by 2030, and with OCC's policy on option appraisal. Policy 36 of the LTCP states that OCC *"will only consider road capacity schemes after all other options have been explored"*, and that transport schemes should move away from 'predict and provide' to 'decide and provide'. The justification for HIF1 is entirely predict and provide – a given amount of development is going to happen in the area, which will require this scheme, rather than a balanced transport and land use strategy that seeks to establish what level of development is compatible with sustainable transport solutions aimed at traffic reduction.

The main failures in appraisal of alternatives are summarised below, and detailed more fully, with references, in the main report.

1. WebTAG requires assessments to start with as wide a range of identified options as possible, without preconceptions of a preferred outcome: with HIF1, the requirement for the whole scheme had been 'established' by the Local Plan development targets from 2014 onwards,

so by the time of the first OAR in 2018 it was impossible to start without a preferred outcome and with a dispassionate appraisal of non-road or low-road options.

2. WebTAG also requires a range of future scenarios to be evaluated, not just a 'with-development' scenario that may or may not happen. It is already clear that the housing targets of the Local Plans have been reduced considerably, and may be reduced further.
3. Both WebTAG and the LTCP set out a sequential appraisal process, which begins with a full range of options, including all transport modes, regulation, pricing, demand management, and infrastructure measures, sifted to arrive at a preferred option which could be a mix of several types of measure. As LTCP makes clear, highway infrastructure should be a last resort, but HIF1 has throughout its existence been the first resort.
4. In the option selection process in the 2021 OAR, the scheme proponents took four 'options' out of 16 forward, the four being the four sections of HIF1. This is disingenuous, since at most only one of the four sections (A4130) could exist as a standalone option, and it was already known that the full HIF1 was the preferred option.
5. There is little if any environmental assessment input into the option appraisal process, only an incorrect statement that all options (that is, the four sections of HIF1) have similar levels of environmental impact. A particular problem is that at the time of the 2018 and 2019 OARs the 330m viaduct across the gravel lakes south of the Thames crossing was not part of the scheme[1]: this is one of the most significant areas of environmental impact, and had it been known about at the time it would – or should - have been a factor in route assessment.
6. As long ago as 2014, OCC Science Vale Strategy was not to provide a new road crossing of the Thames, since it would release suppressed demand arising from capacity restrictions on the existing bridges. The HIF1 Thames crossing directly conflicts with the LTCP's traffic reduction objective, but the scheme promoters appear to be in denial over induced traffic effects that have been a recognised consequence of increased road capacity since at least 1994.
7. The absence of a worked-up, rail-led option throughout the selection and appraisal of alternatives is testimony to the lack of serious consideration of non-highway solutions. The one high quality Thames crossing between Abingdon and Wallingford is the railway line, with a station adjacent to the Culham Science Park which is one of the main traffic generators in the area. The purported rail option in the 2018 OAR was anything but an integrated rail-based strategy and was summarily dismissed from that point onwards.
8. The LTCP target to remove or replace 1 in 4 current car trips is contradicted by the HIF1 modelling, which assumes that there will be no reduction in current car trip generation.
9. The conflict between the scheme and the LTCP is neatly summarised by comparing the LTCP policy 36 objective with the stated HIF1 objective. In the LTCP, OCC *"will only consider road capacity schemes after all other options have been explored"*: in HIF1 *"one of the main objectives of the Proposed Development is to provide additional highway capacity"*.

WebTAG and the LCTP are fully aligned on the need to move away from 'predict and provide' to what the LTCP terms 'decide and provide'. The essence in both cases is that instead of assuming a particular level of development or traffic growth in the study period, a more dynamic approach should be adopted in which the ability of a study area to accommodate various levels of development and transport provision is as important as any aspirations to achieve a given level of development. The clear objective of OCC transport policy is traffic reduction, which requires active decisions to make it happen instead of a meek acceptance of trends in the opposite direction. HIF1 instead represents acceptance and promotion of significant traffic growth.

[1] The viaduct was not costed as part of the business case in 2018, but appeared in the scheme description and drawings in the 2021 planning application. Its omission led to a £23 million cost increase in the report to committee in March 2022.

REVIEW OF ASSESSMENT OF ALTERNATIVES

The scheme appraisal failings are considered in relation to two elements of planning guidance:

1. Non-compliance from the outset with guidance on 'optioneering', in particular the DfT WebTAG document 'Transport Analysis Guidance: the Transport Appraisal Process' January 2014
2. Conflict with Oxfordshire County Council (OCC) Local Transport Plan policies, updated and distilled in the new Local Transport Connectivity Plan (LTCP) adopted in July 2022

The central problem of the option assessment in the supporting documents for the planning application is that there has not been adequate consideration of alternatives to road building at appropriate stages in the project development, either as a standalone package of options or in conjunction with a lower level of highway provision. The full HIF1 highway scheme, with a smattering of active travel facilities that do not contribute significantly to the scheme's core provision, has been the required option since at least 2014, and as such it was inevitably the preferred outcome of the HIF1 appraisal.

Assessment of alternatives and WebTAG

1. The relevant sections on identification and appraisal of a possible range of alternatives are in the Transport Appraisal Document (see above) Section 2. It should be read as a whole, but key messages are (references are to TAG unit paragraph numbers):

    - Stage 1 involves identifying the need for intervention and developing options to address a clear set of locally developed objectives. It involves generating a broad range of options, which reflect a range of modes, approaches and scales of intervention. (2.1.2)
    - Analysts should identify a range of scenarios for the future against which options and subsequent further appraisal would be undertaken ... This is important as the **need** for a project … should be clearly apparent across a range of scenarios. (2.4.2, emphasis in original)
    - The traditional transport planning approach has been to assume a particular land-use pattern for the future planning year as a starting point … However, at the micro-level, studies should examine the interaction of transport and planning decisions and may consider land-use planning based solutions. (2.4.5)
    - The 'without scheme' case needs careful consideration and should involve specifying a **core scenario** based on standard assumptions of economic growth and other trends, and several **sensitivity tests** or **alternative scenarios**. (2.4.5 emphasis in original)
    - When identifying objectives at an early stage, they should avoid indications of preferred solutions and be drawn up to enable more specific targets to be developed as the project proceeds and options are refined. (2.6.2)
    - The purpose of option generation is to develop a range of alternative measures or interventions that look likely to achieve the objectives identified in Step 4a. Analysts should start with a wide range of possible measures, and then narrow these down … in a robust, transparent and auditable manner. (2.8.1)
    - It is important that as wide a range of options as possible should be considered, including all modes, infrastructure, regulation, pricing and other ways of influencing behaviour. Options should include measures that reduce or influence the need to travel, as well as those that involve capital spend. (2.8.2)
    - Studies should not start from an assertion about a preferred modal solution, or indeed that infrastructure provision is the only answer. Following the Eddington Transport Study 2, Sponsoring Organisations will be looking to encourage the better use of existing infrastructure and avoiding "solutions in search of problems". (2.8.3)

- Where highway solutions are being considered, options should include a consideration of different link/junction standards and other alternatives to address the problems in the area, such as public transport provision, demand management policies, traffic management measures and strategies. (2.8.5)

2. ES Chapter 3 affirms the need (3.1.2 to 3.1.5) for option identification and appraisal in relation to EIA regulations, the NPPF, and DMRB (Design Manual for Roads and Bridges), but surprisingly fails to mention WebTAG. It has sometimes been argued by scheme promoters that WebTAG is applied only to Value for Money assessments, but there is no substance to such claims. WebTAG makes clear its applicability to schemes like HIF1, and outlines its congruence with the three stages of DMRB (TAG unit A5.5 para 1.1.4). There is no question that WebTAG guidance is applicable to the whole of the HIF1 scheme, not just the environmental assessment.

3. ES Ch3 sets out the sequence of option appraisal in section 3.2, the key elements of which were as follows (reference are to ES Ch 3 paragraph numbers unless otherwise stated):

    - The Vale of White Horse DC Local Plan *"as early as"* 2014 'established' that new highway infrastructure would be required, confirmed by the South Oxfordshire DC Local Plan 2017; and *"Consequently, options selection has generally been focused on either a new road connection across the River Thames or improvements to existing infrastructure that provides a link between Didcot and Culham,"* (3.2.3)
    - Two Science Vale Option assessment reports (OAR) were produced in March 2018 and September 2019. The first of these (3.3.1 to 3.3.4) identified two major road options (MR1 comprised sections A/B of HIF1, and MR2 sections C/D, so in reality they were two sections of a single option), three public transport options (bus improvements, rail improvements, and autonomous vehicles), and two low-cost options (traffic management and cycle/pedestrian facilities). Apart from the autonomous vehicle proposal, the non-road options were rather more ill-defined than the road options. This report concluded (for reasons discussed below) that the three preferred options to take forward were MR1, MR2 or a combination of both.
    - OAR2 (3.3.5 onwards) considers these three options plus do-minimum, and unsurprisingly concludes that the combined scheme was the preferred option and do-minimum was unworkable. There was no attempt to reconsider non-road options either standalone or in conjunction with highways improvements.
    - In 2021 there was a belated further OAR *"reflecting the updated evidence base and options, including multi-modal options"* (3.3.20), though it is unclear what 'new evidence' was introduced. This identified 16 options. For the first time, each section of HIF1 was treated as a discrete option, all disingenuously described as 'multi-modal'. Seven options are presented as 'previously defined' from the public transport and low-cost options in OAR1: and four/ five are new public transport options. Again unsurprisingly, the four 'options' taken forward were the four sections of HIF1. Since the HIF1 horse had bolted long before 2021, this should be regarded as rather cynical window-dressing.

4. It is very clear that the HIF1 optioneering failed at the first hurdle to comply with WebTAG 2.8.3 (see above), since *"Studies should not start from an assertion about a preferred modal solution, or indeed that infrastructure provision is the only answer"*, but HIF1 started from the Local Plan dictate that new highway infrastructure would be required, with a new road connection across the Thames the clear intention.

5. OAR1 confirmed that the only options to be taken forward would be major road construction. The reasoning behind this is extraordinary. The rail option was lumped together with the road options as having the most significant environmental impacts, when all that was proposed

was an increase in rail services, upgrades of Didcot and Culham station, and a new station at Grove. By implication the rail option is discarded because of environmental impact. The ES then quotes OAR1 as stating that *"it is unlikely that increased cycling and walking alone will be able to resolve the problems associated with connections from the town to the wider national transport network"*, so any recognition of the contribution of walking and cycling to a strategic sustainable transport mix is deemed irrelevant. Then, without further ado, it is concluded that only highway infrastructure will meet the development needs. This is a long way from the above quote from WebTAG 2.8.2; *"It is important that as wide a range of options as possible should be considered, including all modes, infrastructure, regulation, pricing and other ways of influencing behaviour. Options should include measures that reduce or influence the need to travel, as well as those that involve capital spend."*. It is also a long way from the option sifting being done in a *"robust, transparent, and auditable manner"* (WebTAG 2.8.1)

6. The 2021 OAR, on which the planning application is predicated, is a post-rationalisation of what had clearly been the intended transport solution for at least the previous seven years. It is there to support and justify HIF1, and there is no indication whatever that an option making maximum use of more sustainable transport options and demand management, as called for in WebTAG, has been seriously considered.

7. WebTAG 2.4.2 and 2.4.5 are often overlooked, and require consideration of a range of future scenarios against which to test options, and a move away from the assumption of a particular land use pattern as the starting point for transport planning. The latter is close to the evolving policy away from 'predict and provide' towards 'decide and provide'. This is important, because the future invariably turns out to be different from what is forecast at any given moment, and a transport strategy has to be based as far as possible on interventions that remain valid and justified – in other words sustainable - in any emerging context. This suggests a step-based strategy, in which lower cost and lower impact measures are taken first, and the level of intervention may be scaled up only as and when the need becomes clear. HIF1 is the opposite of this, with the blockbuster intervention selected from the outset.

8. The need to consider a range of scenarios is already being demonstrated, with the Vale of White Horse DC having announced that it is reducing its housing targets by 32%. Further uncertainty surrounds housing provision over the coming years, with the apparent government decision to scrap mandatory targets for local authorities, which in turn will nullify the requirement to meet a five-year supply of housing land.

9. A further implication of WebTAG 2.4.5 is that decisions that link housing and land use may lead to the conclusion that the level of development that may be desired by housing authorities may not be possible if it causes serious strains on the transport system. Instead of saying "we want to build 15,000 houses, so need this much new transport capacity" it is possible to say that "we can sustainably provide this level of transport capacity which only supports this amount of development". Strategic transport policy is heading in that direction (see discussion below on the LTCP) and it is essential for transport practice to catch up.

10. Environmental impact is a key element in option assessment, and some options may be ruled out or adversely affected on environmental grounds. There is some environmental input, but it is generally weak and flawed. The equating of the impact of rail improvements against road improvements in OAR1 has already been mentioned. A worse example occurs in OAR2, where it is claimed that *"Overall, all options will have very similar impacts".* The options are DS1 (HIF sections A and B), DS2 (HIF1 sections C and D), and DS3 (DS1 and 2 combined). It is nonsense to claim that DS1 has similar impacts to DS2 or 3, since DS1 as a standalone has no impact on the areas with the most important environmental constraints along sections C and D. There

is no suggestion that any part of HIF1 should be ruled out or modified as a result of significant adverse environmental impact.

11. The 2018 HIF1 business plan did not include the 330m viaduct across the gravel 'finger' lakes south of the Thames crossing, for which £23 million had to be added to the scheme costs in March 2022 (Report to OCC Cabinet). The reason for this may have been that the largest lake had not yet been formed, and the area was unaccountably not within the reserved route corridor for the road. The viaduct appears on the plans submitted with the 2021 planning application. This means that the environmental impacts of the viaduct, which could and should have had a bearing on route selection, had not been assessed at the time of OAR1 so did not feed into the selection process.

Regulation 25 response, Appendix K and the LTCP

12. Further issues relating to the assessment of alternatives arose in the Regulation 25 request for further information, covered in AECOM's Appendix K 'Climate Change Position Statement'. This response also considered the emerging policy context of OCC's LTCP, which was adopted in July 2022 and is a material consideration in the HIF1 planning application.

13. Although this section of the review is with reference to Appendix K and the LTCP, it should be noted that in many respects HIF1 sat uncomfortably alongside previous OCC transport policies in the LTPs that preceded LTCP. The problems are typified by para 15 of the 'Science Vale Strategy Update' (May 2014):

    "Improvements to the Culham and Clifton Hampden road river crossings or implementation of a new bridge are not identified projects within the Transport Strategy … the strategy to accommodate movement north/south is focussed on rail and the A34. Capacity problems are not only created by the bridges themselves but also by the surrounding road network and junctions. The capacity issue acts as a deterrent to some drivers and aids commuters to make a choice about how/when they travel"

    This approach is far more in tune with the LTCP than is the 'predict and provide' philosophy of the new Thames crossing in HIF1`.

14. The key LTCP policies with a bearing on option assessment are in Policy 36. OCC will:

    - *Only consider road capacity schemes after all other options have been explored*
    - *Where appropriate, adopt a decide and provide approach to manage and develop the county's road network*
    - *Assess opportunities for traffic reduction as part of any junction or road route improvement schemes*
    - *Require transport assessments accompanying planning applications for new development to follow the Council's 'Implementing Decide and Provide: Requirements for Transport Assessments'*
    - *Promote the use of the 'decide and provide' approach in planning policy development to support site assessment*

15. In addition, the LTCP has a target to "*replace or remove 1 out of every 4 current car trips in Oxfordshire"* (LCTP pdf p6). The modelling of HIF1 is in unambiguous conflict with this target, as it assumes no reduction in current car trips, alongside an arbitrary reduction of 20% in car trips generated by future development. Whilst transport modellers often characterise this as

'robust', it can equally be characterised as over-inflating demand and boosting the case for the scheme as it is then argued that nothing else would cope with the forecast traffic volumes.

16. The gulf between OCC policy and HIF1 intention is succinctly expressed in Appendix K:

    - The LTCP policy 36, as quoted in Appendix K para 3.5 final bullet, is that OCC will "*Only consider road capacity schemes after all other options have been explored"*
    - Appendix K para 3.8 states that *"one of the main objectives of the Proposed Development* (HIF1) *is to provide additional highway capacity"*

    It is futile to pretend that the scheme promoters only moved on to a road capacity scheme having exhausted all other possibilities. The starting point was that a there was a presumption in favour of new highway capacity, purportedly established by earlier Local Plans that have since been revised to reduce the levels of potential development. At best, HIF1 was only ever assessed ***alongside*** imprecise and half-hearted non-road options: there was never any suggestion that the alternatives were considered ***sequentially***, with the road scheme as a last resort. There was also little if any attempt to harness the synergies of non-road options with or without some new highway infrastructure, to present genuine multi-modal options: it is not a multi-modal option simply to provide footways, cycleways, or improved road crossings.

17. In the entire approach to HIF1, there is very little mention of the one high quality bridge across the Thames – the main line railway between Oxford and Dicot – or the presence of a railway station adjacent to Culham Science Centre. Appendix K makes no mention of railways other than as geographical locators. In contrast, the LTCP has several pages (pdf pp75-78) devoted to rail strategy, and a separate policy (21). It is almost beyond belief that no rail-led transport option was considered, without needing a major new bridge across the Thames.

18. It appears that the promoters of HIF1 are in denial that a major new road with a significant increase in road capacity across the Thames is fundamentally incompatible with a council policy to reduce car trips by 25%. A new river crossing is one of foremost examples where induced traffic may be expected because it facilitates car trips that were previously either not possible or at best slow and congested. At the Thames crossing at Culham , the low capacity of the old bridges throttles the ability of traffic to cross the river and thereby suppresses demand. A great deal more demand is triggered if the river crossing by car becomes easier, and as a result many people are more likely to use their cars in preference to alternative modes of travel. In contrast, difficult road crossings in conjunction with significantly upgraded rail services to Culham Science Park, will encourage more people to use the train.

19. In summary, HIF1 was predicated on Local Plans that are 5-8 years old, at least one of which has been reviewed and development demands downgraded. The scheme is based on 'predict and provide' concepts that were discredited almost 30 years ago (PPG 13 1994), but which seem to take a long time to disappear from project practice. It appears that the LTCP has finally caught up, and supplanted 'predict and provide' with 'decide and provide'. The approval or rejection of HIF1 will be a test of whether this policy evolution has translated into project practice.

Alan James
January 2023

APPENDIX 2

OXFORDSHIRE COUNTY COUNCIL (OCC): DIDCOT HIF 1

PLANNING APPLICATION R3 0138/21

OBJECTION ON LANDSCAPE GROUNDS

JANUARY 2023

Alan James BSc MA MLI (retired)

This submission is made on behalf of the five Parish Councils of Appleford-on-Thames, Burcot and Clifton Hampden, Culham, Sutton Courtenay, and Nuneham Courtenay (the Neighbouring Parish Councils – Joint Committee) and covers the landscape objections to the preferred option for HIF1 in the above planning application. The part of the application with direct impact on the five parishes includes sections C (Didcot to Culham) and D (Clifton Hampden bypass).

The objection falls into two parts:

- General issues concerning the LVIA assessment and its reporting; failure to follow WebTAG guidance on landscape appraisal; and Green Belt
- Comment on the most severely affected sections of the proposal

LVIA (Landscape and Visual Impact Assessment)

The AECOM assessment follows standard LVIA practice, and records several significant adverse appraisal outcomes both on landscape and visual impact, but downplays the effects to the point that they sound fairly harmless. The Planning Statement (PS) typifies this practice in two statements:

"the LVIA concludes that no significant adverse effects are predicted on published landscape character areas" (PS 7.4.7)

This is disingenuous. The Landscape Character Areas (LCA) identified by the District Councils are relatively large areas compared with the parts affected by the road, so it is argued that the impact on the overall area is at most slight. However, the LCAs are baseline expressions of landscape character from which impact assessment proceeds within the visual envelope of the road, not an area measurement against which to compare the proportion of the LCA affected. The LCA highlights what matters and why in the affected area: what proportion this is in a given LCA, or a national character area, or Oxfordshire, or England, is irrelevant. The effects on the Local LCAs (LLCA) identified by AECOM are considerably greater and include significant adverse impacts. Even so, the LLCAs usually extend beyond the visual envelope.

"it will not be possible to provide a highway scheme in a rural context without some significant adverse landscape and visual effects" (PS 7.4.13)

This is a standard argument, that major roads inevitably have major landscape impacts, so in itself that is not a barrier to going ahead with the scheme. The conclusion should instead be that significant landscape and other environmental impacts create a high bar against which to evaluate scheme benefits: it is not acceptable to shrug off the appraisal and say that as usual there are significant landscape impacts.

LVIA (and WebTAG) appraisals almost always downgrade year 15 impacts by one step, for example from large adverse to moderate adverse, on the grounds that maturing landscape treatment softens the discordance of the new road in relation to its landscape setting. This depends on the nature of the discordance in relation to the core aspects of the landscape character of the area. For example, the landscape impact on LLCA 12 (Thames floodplain) is said to reduce from large adverse in year 1 to moderate adverse in year 15, but the overwhelming impact of the embankment is the severance of the open floodplain, which is not mitigated at all by maturing trees along the embankment.

I flatly disagree with some of the baseline impact assessments, in particular for VH7/ LLCA 9 which include the area West of Appleford and the viaduct across the gravel lakes. The impact is greater than 'moderate', and the sensitivity is not 'low' at the restored and maturing lakes. LVIA is also silent on the *potential* value of areas like the gravel lakes, which in a few years have gone from industrial extraction sites to tranquil and attractive water bodies with great recreational potential.

The HIF1 LVIA acknowledges impacts of traffic as well as the road itself, but fails to assess the impact of additional traffic on roads affected by the scheme, notably at Nuneham Courtenay village and Abingdon, both of which are excluded from the study area but will see significant increases in traffic levels. This omission is subject to objection on several grounds other than landscape assessment.

WebTAG

The AECOM ES includes reference to WebTAG landscape appraisal guidance (Unit A3, sections 5 and 6), which is broadly parallel to LVIA (and DMRB/ LA107), but is somewhat more focused on arriving at an overall summary of scheme effects, where LVIA too often (as here) ends up as an inventory of individual assessments. The overall assessment in the 2018 WebTAG appraisal for HIF1 was 'moderate adverse', which by definition (Unit A3 Table 4 pdf p44) is not moderate in the conventional meaning, merely between 'large' and 'slight'.

One part of WebTAG guidance is especially significant, the most adverse rule:

"Most adverse category *… a scheme as a whole should be assessed according to the most adverse assessment of the key environmental resources affected. For example, if a scheme affects, say, five key environmental resources, of which one is in the 'large adverse' category and the remaining four are 'slight adverse', then the overall assessment score should be 'large adverse'. The rationale for this approach is that highly adverse impacts should not be diluted or masked by less adverse impacts."* (TAG unit A3 para 5.3.19)

This is one of the ground rules of the Environmental Capital approach, not specific to landscape assessment. HIF1 has several 'large adverse' assessments, for example at the Thames river crossing, the impact on the nationally significant Thames Path (National Trail), and the Clifton Hampden bypass. **The overall assessment should therefore be Large adverse**.

Green Belt

Green Belt planning guidance contains the proviso in NPPF 4 (para 150) that certain types of development, including roads, might not be considered inappropriate provided that the openness of the landscape is maintained. The Planning Statement (PS) acknowledges that the scheme will have effects on openness within the Green Belt, notably at the Thames crossing and the Clifton Hampden bypass, but claims that harm has been limited where possible (PS 7.3.17). Limiting harm is not the same as preserving openness, and the feeble attempt at the Thames crossing to *"retain the openness of views along the river bank for footpath users through the setting back of bridge abutments on the*

North side of the River Thames" (PS 7.3.15) falls well short. Is it really thought that a bit of a gap between the river and the bridge abutments preserves the openness of the flood plain?

Major impacts on specific sections

1. Thames Path National Trail

ES Ch 8 Table 8.13 assesses the impact on recreational users of the Thames Path National Trail, whose sensitivity is rated as 'High', to be 'Major' at viewpoints RV19 and 20, with a 'Very Large Adverse' effect in Year 1, and 'Major' impact and 'Large Adverse' effects in Year 15. I dispute that the effect of the embankment and bridge would reduce in Year 15, especially as the impact remains major. This is a National Trail, of national significance, and the assessments cannot be brushed aside. Also, though not assessed, the same conclusions are likely to apply to recreational boat users on the river.

2. Clifton Hampden Bypass

The assessed impact on LLCA 16 (farmland at Clifton Hampden) is 'large adverse' during construction, 'moderate adverse' in Year 1, and 'slight adverse' in Year 15: visual impact reduces similarly. The main landscape impact is said to be loss of tranquillity, so it is difficult to understand why this would diminish over time with a bit of tree planting, given the intrusion of traffic in a currently peaceful landscape.

AECOM claim that the adverse effects of the Clifton Hampden bypass are offset by the removal of traffic in the village. It is questionable how much relief the bypass would bring to the village, given that a substantial amount of existing traffic in Clifton Hampden is travelling along the A415 to and from Abingdon and the A4074 southwards.

3. Viaduct at gravel lakes

The 330m long viaduct on the southern approach to the Thames bridge was not part of the scheme presented and assessed at the time of the 2018 business case, possibly because the lakes were not there at the time. The landscape assessment is therefore a retrospective appraisal of a massive scheme alteration. As such it must be treated with caution, as a conclusion of very large adverse impact would be embarrassing and could in theory require a major rethink of this section of HIF1. This outcome is avoided: the area (LLCA 9) is described as 'low' sensitivity and the viaduct has only a 'moderate' impact at all stages, resulting in a 'slight adverse' overall effect.

This is a travesty of an assessment. The photographs below show the main lake in March 2022 in poor weather: tranquil, visually attractive, with several species of water fowl, and maturing bankside vegetation even after only a few years. Imagine this scene, with further tree planting around the lake, on a bright summer's day in 15 years' time compared with the 15 year road assessment stage.

LLCA 9: Main gravel lake – viaduct would cross in centre foreground

LLCA 9: Main gravel lake detail of water's edge (R Thames immediately behind the trees

The landscape assessment in ES Appendix 8.5 (pdf p13) claims that the extensive road earthworks will not be out of keeping with existing landscape character *"which includes extensive engineered earthworks as part of the mineral workings and landfill sites*".

Even more dubiously, the assessment claims that *"the viaduct will sit above [the] water bodies such that it will not sever the landscape east and west"*. The photomontages (ES Fig 8.79) tell a different story, in spite of half the viaduct being hidden behind a temporary spoil heap! The viaduct is a low, squat, functional concrete structure, anything but the image of a soaring bridge allowing the landscape to flow effortlessly beneath. An accurate depiction of the viaduct as a photomontage on the first of the above photos would demonstrate its lack of transparency in the landscape setting.

Appleford Sidings

The road crosses the Appleford Sidings rail line around 8m above the tracks, with the tops of HGVs a further 4.5m above that, in close proximity to several residential properties. For some reason, the sensitivity of residents is classed as medium[1] (ES Ch 8, Table 8.12 pdf p45). The magnitude of impact is assessed as 'moderate', resulting in 'moderate adverse' effects which are nonetheless classed as significant. It is beyond comprehension that a significant effect on local residents can be accepted without further question.

Alan James
January 2023

[1] This may be a problem with GLVIA, which relates sensitivity in part to numbers of users at receptors, but it is difficult to accept that residents whose lives are blighted in their own homes are only of medium sensitivity: and ain any case assessors are not obliged to follow GLVIA, which is avowedly non-prescriptive.

Title	Independent Transport Assessment Review – Queries to Oxfordshire County Council - Responses
Application Reference	R3.0138/21
Application	The dualling of the A4130 carriageway (A4130 Widening) from the Milton Gate Junction eastwards, including the construction of three roundabouts; - A road bridge over the Great Western Mainline (Didcot Science Bridge) and realignment of the A4130 north east of the proposed road bridge including the relocation of a lagoon; - Construction of a new road between Didcot and Culham (Didcot to Culham River Crossing) including the construction of three roundabouts, a road bridge over the Appleford railway sidings and road bridge over the River Thames; - Construction of a new road between the B4015 and A415 (Clifton Hampden bypass), including the provision of one roundabout and associated junctions; and - Controlled crossings, footways and cycleways, landscaping, lighting, noise barriers and sustainable drainage systems.
Date	02/01/2023

1. Purpose of this note

This note has been developed taking account of the additional information provided by Oxford County Council and its consultants in October 2022 pursuant to a February 2022 request from the five Parish Councils.

This note is linked to an earlier one which undertook and independent review of the Transport Assessment. For clarity the original ten queries and associated responses are set out in a table below with additional relevant information provided thereafter

2. Responses to the Additional Information Sought

Looking at the application of the modelling and the wider Transport Assessment the following additional information is sought from the 5 Parish Councils to inform their view on the application.

Query A: Substantial concerns arise from the reassignment of traffic from the A34 to using the upgraded HIF alignment and the subsequent impacts on the junctions into surrounding villages. Please could Oxfordshire County Council confirm if junction reassignment has taken place and provide visual results of the demands along the HIF alignment in 2034.
Response: The response provided notes that the A34 is substantially attractive as it

is shorter and is 70mph for the vast majority of its length. This would mean that traffic wouldn't naturally reroute. The balanced nature of the strategy is also recognised with the investment in walking and cycling infrastructure.

The answer therefore does not apply a test of reassignment which is something that is requested, particularly with any diversionary factors associated with accidents or closures.

In addition, as the modelling refers to traffic levels being pre-pandemic, it limits the assessment of changed travel behaviours. This is relevant as traffic levels are recorded as increasing to near pre pandemic levels.

Query B: Please could comparative modelling be undertaken to demonstrate the effects of traffic calming and speed restrictions on B4016 Church Street Sutton Courtenay, and B4016 Main Road Appleford when considering their links to the HIF1 proposal? In addition, please could OCC comparative modelling undertaken to evaluate the traffic density within Sutton Courtenay and Appleford assuming no interconnection between the B4016 and the proposed HIF1 road?

The response notes that such a modelling request is out of scope for the HIF 1 scheme but notes this could be established in the future. Additional flows have been supplied within the note which show daily two-way traffic with and without the scheme. This does show a decrease across all studied links within the villages but substantial increases on the HIF alignment. It is noted that the HIF scheme seeks to reduce demand in the villages of Appleford, Burcot, Clifton Hampden, Culham, Long Wittenham and Sutton Courtenay and if traffic calming is considered in the future this could further reduce the attractiveness of these routes. The county wide 20mph policy by the county council is also referenced as a potential option to pursue.

Sutton Courtenay, Appleford, & Culham all have applied for 20 mph. Long Wittenham 20 mph has already been implemented.

As such the assessment should factor in by modelling-

(1) Traffic calming local villages (yet model claims traffic reduction in villages?). Noted these are predictions and not modelled figures??

(2) The impact of Thame Lane / Europa School

(3) Golden Balls - significant impact for NC, adjacent villages (Berinsfield, Stadhampton etc)

(4) Nuneham Courtenay

The applicant cannot scope out the unfavourable impact of HIF otherwise the impacts will be significantly underestimated.

The PCs request that this is considered, particularly if through query A, flows are higher than they recognised. This also links to the previous requests for 'comparative modelling be undertaken to evaluate the traffic density (including queue lengths) within Sutton Courtenay along the Drayton Road, High Street and Church Street; and Appleford assuming no interconnection between the B4016 and the proposed HIF1 road, to prove whether traffic will increase or decrease through Sutton Courtenay under the present proposal?'
Query C: Traffic Modelling (Through Local Villages) – The Parish Councils have concerns regarding the level of investigation of the traffic on existing local roads connecting to the proposed road, in particular: ***• Rush hour capacity of the new river bridge and potential overspill impact on Culham, Clifton Hampden and Sutton Courtenay.*** ***• Rush hour density on the A415 at Culham and the effect on the adjacent Europa School.*** ***• Rush hour density on the A4074 passing through Nuneham Courtenay.*** ***• Rush hour density on the B4016 passing through Sutton Courtenay*** ***Europa School – A safety audit should be undertaken at this junction at peak school times to ensure the safe operation of the school with revised flows.*** ***Traffic taking back route between SC through Appleford, via Didcot Road to Long Wittenham to Clifton Hampden (& vice versa) – rat run to avoid heavy traffic on new road at rush hour etc.*** ***Nuneham Courtney – Subject to a separate query – see below, but modelling should extend North to this village*** ***Please could comparative modelling be presented to demonstrate the effects in this area?***
This answer references the answers to queries A and B above and no additional modelling has been undertaken other than the predicted daily flows from the Paramics modelling referenced in query B above and further assessment is requested. The answer also refers to the assessment of new development in the area with a 2034 assessment of 15,825 new dwellings in 2034. There is concern that the Ladygrove development isn't captured within the model assessment. This could cause diversions of flows. Furthermore, any changes to the network associated with new developments should be captured in this application, particularly where they are already committed. An example is the Ladygrove East development and a review of this is suggested. ***Rush hour capacity of the new river bridge and potential overspill impact on Culham, Clifton Hampden and Sutton Courtenay.***

With regard to the rush hour capacity of the New Thames Crossing, the crossing is modelled to operate within capacity with the exception of PM peak in 2034 where it would be approaching capacity with a queue of 9 vehicles.

Rush hour density on the A415 at Culham and the effect on the adjacent Europa School.
Oxfordshire County Council have not requested a detailed assessment of Thame Lane and as such have not undertaken this assessment. Tollgate Road/Abingdon Road Junction has been studied and shows an AM peak flow of 526 vehicles and 674 PM peak vehicles on the eastern arm.

Rush hour density on the A4074 passing through Nuneham Courtenay.
An extract of the TA modelling has been supplied. This shows the junction at A415 / Clifton Hampden Bypass / Culham Science Centre will operate within capacity although the desirable maximum ratio to flow of 0.85 is exceeded on the Clifton Hampden Bypass (W) arm in the AM peak. The RFC is certainly a design objective to reduce levels of saturation and improve operation for all users. Clearly with planning for new junctions or changes, committing to a scheme being over the RFC of 85% is a concern. There of other factors in place, such as geographical constraints which the council should consider. It is however a valid concern that that junction will be approaching saturation from day 1.

Rush hour density on the A4074 passing through Nuneham Courtenay
No further assessment has been pursued for Nuneham Courtenay and it is referenced that this was scoped out by Oxfordshire County Council at preapplication stage. This is challenged by the Parish Councils as the up and down stream effects of the road require assessment.

Rush hour density on the B4016 passing through Sutton Courtenay
The assessments for the B4016 Appleford Road/ Abingdon Road, the A415/Tollgate Road and the Culham Bridge signals are presented. This predicts with the HIF scheme in place there would be improved operation of these junctions. The junctions however have not been subject to standalone junction modelling because of the close proximity of each junction.

Rush Hour density on the B4016 passing from / to Appleford with queue analysis of traffic turning right at the T junction to access Sutton Courtenay.
The results of the assessment at New Thames Crossing / B4016 are presented with the junction being at or nearing capacity at this junction in the AM and PM peaks. Usually, a desire to plan for a ratio to flow of 0.85 or less is the preference. Several reasons are provided as to why this is considered acceptable including the proposal to prioritise mainline flows, avoiding traffic diverting through villages. In addition, there are likely to be upstream and downstream impacts associated with wider road design. As such it is recommended modelled flows north and south of the bridge should be investigated.

100 HGVs per day (200 trips) enter the gravel & landfill site. A significant portion will approach from the north / heading south and will have to cross over northbound traffic travelling at 50mph. There is a daily risk of accident. Also slowing HGVs travelling down the elevated incline will slow traffic behind. Similarly, HGVs (laden

with gravel) exiting the commercial site will have to accelerate up a steep incline - slowing traffic. An added feature will be vehicles approaching or exiting the roundabout & accelerating up the incline. Sutton Courtenay PC has regularly queried the need for the roundabout and they have never seen traffic data to support it. The pedestrian and cycle provisions also impact on:

Europa School – A safety audit should be undertaken at this junction at peak school times to ensure the safe operation of the school with revised flows.

Safety audits are usually undertaken where there are physical changes and as such this is deemed by OCC not to be required. Where flows have been changed and there are concerns around school safety, audits can be pursued. Although it is appreciated that a safety audit is not strictly required there are sections where the changes to the network would demand it.

As an example, there is a section of the route where school children are crossing 50 mph road with traffic coming down off the sidings elevation.

There are specific comments raised by the PCs as to the assessment which we have previously requested comments from Oxfordshire County Council

Link 24: B4016 – There is a 62% difference. An explanation of this difference is requested. This is the same for link 29: High St Long Wittenham 80%

There is no analysis of traffic feeding into Sutton Courtenay from Drayton and this would benefit the assessment

Link 26: B4016 HGVs - A predicted decrease of 194 HGVs. The old rail bridge has 7.5T limitation and as such it is questioned whether a 194 reduction would materialise.

Link 33: B4016 HGVs - predicted increase 335 – it is questioned why, - given that HGVs can exit at the new site junction near the lake & level crossing? It is questioned if this traffic would route through Sutton Courtenay.

Query D: HGV demands – Please can OCC clarify the presumed breakdown number of HGV, light commercial and car traffic through Sutton Courtenay (B4016, Church Street) and through Appleford (B4016 Main Road) for the two options; with HIF1 road in place, without the HIF1 road in place?

As local evidence Currently 100 HGVs access the Appleford Landfill and Hanson Gravelworks sites daily & HGVs travel to the Gravel Works from North & East access the site at Amey Gate / Sutton Courtenay (B4016). These will all pass Appleford on the elevated road section to turn right (across northbound traffic) into the commercial site. Please can OCC confirm these movements and demand have been factored in?

The modelling has not been extended to cover the villages. The demands on links 33

and 26 around Appleford are presented below. These are predictions and not modelled. Link 26: B4016: 2034 with scheme 2 HGVs showing a decrease of 194 HGVs Link 33: B4016 / Appleford Road: 2034 with scheme 490 vehicles showing an increase of 335 HGVs. This shows a decrease of traffic coming into Appleford from the south but an increase on links to the west of Appleford on the B4016. This impact should be modelled.
Query E: When looking at the reassignment as per Query A, please can OCC extract figures to show overall peak demand in HGV, LGV and cars between Didcot to the Culham Science Centre?
This query has been addressed under query C which shows the Northbound flows at the Thames River Crossing and the B4016 junction. Showing 904 vehicles in the AM peak in 2034 (up from 578) and 819 in the PM (up from 447). Within Table 16.14 any comment around the Abingdon Road differences and for the B4015 Oxford Road differences would be appreciated. It is considered that with local village traffic reductions and traffic calming as mentioned above, predicted flows could be higher along the HIF alignment and this should be reviewed.
Query F: Culham Science Centre has significant growth plans to accommodate circa 5000 workers. Please can OCC clarify if this demand has been accommodated?
Floor area of 56,079sqm in 2034 has been built into the model showing this additional demand has been factored in. Within the model flows associated with floor space is calculated i.e. x trips per sqm of floorspace. There is then an assessment of splitting that demand by mode, i.e. how many trips per car, public transport, active travel etc. Whilst this application is not assessing the demand of the Culham Science Centre, the question here is whether the upgraded HIF alignment would reasonably accommodate the demand from new and committed development in a balanced way. As such it would be beneficial to do a common-sense check of all new traffic volumes and what development is committed.
Query G: Looking at the impact of the scheme on surrounding villages (Query B), it would be helpful if OCC could present visual modelling extracts to show expected flows along the alignments of each of the roads highlighted in B in this area in a with and without scheme scenario. Any diversionary effects

should also be set out as an example traffic diverting through Sutton Courtenay from Didcot to connect up to the new HIF road in Culham.
As no additional modelling has or is planned to be undertaken through the villages, this request has not been undertaken but is requested.
Query H: Traffic Management – There appears to be a lack of analysis around developing local traffic management proposals for communities adjacent to the road, in particular:• Traffic Calming Measures to constrain traffic flow arising from the proposed road, on the B4016 through Sutton Courtenay; through Appleford from east of Didcot; through Clifton Hampden and Burcot connecting to the A4074. Modelling should ideally be undertaken to demonstrate the effects of traffic calming and speed restrictions on B4016 Church Street Sutton Courtenay, and B4016 Main Road Appleford when considering their links to the HIF1 proposal?
As above, the development of traffic calming measures is considered to be out of scope and as such is not proposed to be undertaken. It is requested by the PCs that this assessment is undertaken to accommodate routing plans for HGVs, the impact of complementary 20 mph in local villages on queueing and any changes to the control at Appleford rail bridge (potential for traffic lights). This is the only narrow bridge in South Oxfordshire with no traffic control
Query I: The Modelling appears to stop short of the Golden Balls Roundabout. Although it is understood that the roundabout is outside of the scope of the HIF scheme, for robustness and to demonstrate the impact, it is requested that modelling extends to this junction. The assessment should be made in a with and without investment scenario. This is particularly important given the reassignment / diversionary factors associated with a new HIF road.
As was noted at pre-application stage, OCC accepted that this roundabout was not in scope to be assessed. Subsequently OCC have been leading a separate study at the roundabout with a view to test and engage on options for park and ride and bus priority measures. The parish councils should be engaged in that process.

Query J: The modelling assessment has not extended to Nuneham Courtenay. The A4074 runs through the Village. Whilst it is understood the HIF improvements are not located in the village, the impact of the diversionary effects in traffic travelling from growth areas in Didcot etc and the A34 to Oxford need to be understood for the residents of the village, It is requested that junction assessments are undertaken in the village. Of particular concern is the operation of the traffic to turn into / exit Baldons at Grenoble Road junction. ***Additionally, within the village any impact of additional traffic on noise and vibrations and pedestrian crossing safety and capacity should be assessed.***
The modelling has not been extended to cover the villages as noted above. There is no select link analysis for Nuneham Courtenay. However, we can expect as the A4015 will remain running through the village there will be an increase in flow through the village. The exact extent is difficult to predict without modelling, however the information does note that diversionary impacts are not expected from the A34 traffic (an assumption and assertion without foundation challenged by the NPC-JC). It is noted that given the volumes of traffic ending on a narrow A road, this assessment should be extended through the village. Regarding Nuneham Courtenay the Reg 25 response was, 'Nuneham Courtenay is outside of the Paramics study area. Furthermore during the pre-application stage with the Highway Authority the impact on Nuneham Courtenay was agreed to be scoped out'. There are serious concerns regarding the lack of assessment in this area (factoring in the demand and reassignment arguments as above).

Andrew Dorrian (MRTPI)
Planning Aid England Volunteer
06/01/2023

Title	Independent Transport Assessment Review – Reconciliation of modelling
Application Reference	R3.0138/21
Application	The dualling of the A4130 carriageway (A4130 Widening) from the Milton Gate Junction eastwards, including the construction of three roundabouts; - A road bridge over the Great Western Mainline (Didcot Science Bridge) and realignment of the A4130 north east of the proposed road bridge including the relocation of a lagoon; - Construction of a new road between Didcot and Culham (Didcot to Culham River Crossing) including the construction of three roundabouts, a road bridge over the Appleford railway sidings and road bridge over the River Thames; - Construction of a new road between the B4015 and A415 (Clifton Hampden bypass), including the provision of one roundabout and associated junctions; and - Controlled crossings, footways and cycleways, landscaping, lighting, noise barriers and sustainable drainage systems.
Date	18/01/2023

1. Purpose of this note

This note has been developed taking account of the additional information provided by Oxford County Council and its consultants in Autumn 2022 pursuant to a request from OCC and the Neighbouring Parish Council Joint Committee. It should be read alongside the Independent Transport Assessment Review dated 2nd January 2023 and its predecessor note from January 2022.

2. Modelling Assessment

This note fulfils a request by the Parish Councils to undertake an assessment of the base modelling and projected demand from committed and future development in the area, pursuant to the planning application for the HIF road improvements The

base documents utilised in this assessment include the model validation report produced by JTC dated 28th January 2022 and the Transport Assessment and subsequent response documents produced by AECOM in 2021 and 2022.

2.1. Base modelling

The model utilised to forecast traffic is a model known as a Didcot Paramics microsimulation model. This model is owned by Oxfordshire County Council and is maintained by the consultancy Systra. The models used to assess the impact of the proposals on individual junctions or links are standalone models developed by AECOM known as LINSIGs, PICADY and ARCADY. These models have been assessed by JCT as an independent party.

Base traffic flows supplied to AECOM are derived from the Paramics model. This utilises a 2020 baseline. The model extents have already been subject to discussion within the TA Assessment note including the extent towards the North in Nuneham Courtenay. Although a 2020 base year, model counts were undertaken in 2016 and 2017.

2.2. Committed Development

The model includes a number of employment and housing trajectories which have been supplied by the Local Planning Authorities. These are applied across a period of additional residential units and employment floorspace to be completed in the 2020 base year, 2024 and 2034. This analysis shows an additional 2073 units in the base year 2020, 4,112 in 2024 and 15,825 in 2034. This is alongside a projected 68,052, 312,946 and 747,446 sqm of employment floorspace in the same time period.

Whilst this development has been assumed and accounted for in the base model that is not to say development will come forward in exactly the same fashion; rates of delivery could be faster or slower and within reason, different levels of floorspace / units delivered.

2.3. Analysis of committed development

Once the committed development has been identified, trip rates for each development are applied. The paramics model has assumed a varying level of demand on the network associated with existing and new development. This assumes an 80% demand on the network in the peak hour period from new development accounting for demand reduction policies. It also applies a worst-case scenario which considers that travel patterns stay stagnant up to 2034. In practice some residents and those travelling to work in the area may switch modes or reroute.

2.4. Impacts of this assessment

Based on the above the assessment has been undertaken as to what this base and growth demand is forecast to look like in respect of Car and LGV trips on the network. This note was produced by Systra called the HIF1 Paramics Modelling Forecasting Note and is available as Appendix F of the 2021 Transport Assessment. This assessment is based on the main extent of the HIF alignment.

Applying this to car traffic only, generated by the residential development and those that work in the area, the following results are available,

	2017 base	2020 base+external	2024 base +external	2034 base + external
Car (base - AM)	45,699	46,199	46,290	46,407
Car (base PM)	50,646	51,201	51,251	52,315
Car (development) AM		3,204	7,062	24,485
Car (development) PM		3,384	7,365	26,310

Table 1: Vehicle Flows (Cars only) in the AM and PM peak periods.

It is noted that external growth factors are applied to the base figures before committed development rates have been applied. In deriving the trip rates for each new development, a national database called TRICS, which supplies observed flows from development typologies, has been utilised for both commercial and residential development. This has calculated both inbound and outbound trips from development in the AM, interpeak and PM peak periods. An assessment of the rates produced within the note suggests reasonable assumptions have been made in deriving these rates.

Notwithstanding this, the Covid-19 impacts of people travelling and working differently in certain industries, may mean that the impacts are experienced differently in future with the potential for peak demand to be lower than forecast and the interpeak periods to be higher, especially at weekends. There is limited data however to evidence this assumption, but it is a policy argument the Joint Committee and Parish Councils challenge and seek to progress.

Overall, the expected impact of development along the HIF alignment could be a 34% increase in car traffic within the AM peak and a 33% increase in car traffic in the PM peak period.

3. Conclusion

Overall, the exercise in establishing the base model, validating it and deriving future demand appears to be reasonable using industry practices. That is not to conclude that that demand will materialise in exactly the same manner as forecast, and this is a policy argument the Joint Committee and Parish Councils individually wish to make on the overall need for the scheme.

This note does not examine at the effects of this forecast demand, that is covered by the Independent Transport Assessment Review undertaken in January 2022 and 2023, specifically in relation to junction and link effects. It also does not cover the impacts of induced demand or rerouting caused by the delivery of the project. The note by Professor Phil Godwin and the Independent Transport Assessment notes should be referred to for this purpose.

The additional information may allow the Joint Committee and Parish Councils to make a reasoned judgement on the scheme. Additional questions may be requested of OCC and further advice can be called on.

Andrew Dorrian (MRTPI)
Planning Aid England Volunteer
18/01/2023

Planning Application R3.0138/21, HIF1 road between A34 Milton Interchange and B4015 north of Clifton Hampden.

Reply from the Parish Councils to the Regulation 25 Response issued by Oxfordshire County Council on the 14th November 2022 in respect of Air Quality and Population and Health.

7th February 2022

A statement of objection to the road proposal was submitted on 7th February 2022 by Appleford Parish Council on behalf of the Joint Committee of Neighbouring Parish Councils of Appleford, Clifton Hampden & Burcot , Culham, Nuneham Courtenay and Sutton Courtenay (NPC-JC). This addressed the deficiencies in the Environmental Statement, Chapter 6, Air Quality. It was established that the application fails to comply with Local and County planning policies, namely SODC policy EP1, ENV12, VoWH Dev Policies 23 & 26 in regard to air quality, pollution and amenity. The scheme also fails to follow NPPF guidance.

14th November 2022

A response to this statement of objection, prepared by AECOM, was lodged on the planning portal on the 14th November 2022, file name: *"Reg 25 Appendix S Air Quality Technical Note (1). Pdf"*

January 2023

The following statement is the reply on behalf of the NPC-JC to AECOM's Air Quality Technical Note (AQTN) of 27th October 2022.

SUMMARY

S1 Inadequate measurement of existing air quality

The AQTN response indicates that no opportunity was taken in the period February to November 2022 to take additional air quality measurements along the proposed section Didcot-to-River crossing, and to undertake the required Health Impact Assessment in answer to the Regulation 25 request. The NPC-JC objection (para 2.4-2.6) highlighted that only a single measurement site of existing air quality was used to represent the whole of Appleford Village. This remains wholly inadequate to assess existing air quality and fails to capture the principal sources of airborne emissions in Appleford close to the HIF1 route. These are the aggregate handling and landfill activities around Appleford sidings and adjacent rail main line. The subsequent air quality modelling, used to justify the road, has not been calibrated to real-world data. This inadequacy renders the modelling unrepresentative.

S2 Lack of comparative assessments of alternative routes

The applicant is required to demonstrate that the chosen road alignment has been selected as the route with least air quality detriment on adjacent communities.

Contrary to the requirements of local planning policies e.g. VOWHLP Dev policy 26 , the lack of air quality investigations of alternative alignments for the HIF1 road indicates that the current route of the planning application is not based on route analyses to minimize pollution and emissions at existing communities. This planning application therefore remains non-compliant with planning policy.

The consultation response dated 22nd December 2022 submitted by the Vale of White Horse District Council, recommends realigning the road in the section Didcot-to-River Crossing, to reduce the adverse impact of the road on adjacent dwellings. This comment recognises that the adverse environmental impacts, in terms of noise, air quality and visual intrusion have not been given sufficient weight in this scheme.

S3 Inadequate standards

The Environmental Statement fails to address concerns regarding levels of emissions of NO_2 PM_{10} $PM_{2.5}$ as identified by the World Health Organisation in 2021 and as identified by the UK Health Security Agency in its response to the HIF1 road.

S4 Unreliable traffic modelling

Apparent failure to include induced traffic on the proposed HIF1 road and over-reliance on expected reduction in village traffic has skewed the air quality assessment.

S5 Insensitive air quality assessment

The AQTN confirms that critical aspects of vehicle emissions, such as those created by the gradient of the flyover at Appleford sidings have not been modelled. The assessment also shows insensitivity to the presence of HGV traffic and proximity of the HIF1 route and properties in Appleford. The model ignores the impact (noise and tail pipe emissions) of fully laden HGVs and LGVs accelerating up the steep elevated section past Appleford (DN) and similarly HGV and LGV traffic heading south accelerating up the other side. This latter will not only affect Appleford but also properties in Sutton Courtenay (old Amy site area).

The Environmental Statement therefore remains deficient and not in compliance with the applicable EIA Regulations 2017.

REPLIES TO RESPONSES WITHIN AECOM'S AQTN OF 27TH OCTOBER 2022.

The following paragraph numbers refer to the numbering of the Statement of Objection and subsequent AQTN response.

1.1 & 1.2 The air quality assessment is deficient in measured existing data and is derived from deficient modelled traffic data. The scheme remains non-compliant with local and county planning policies.`

1.2 The AQTN confirms that a Health Impact Assessment, as required in District Council policies and the LTCP, has not been undertaken for this scheme. The specific local combination of existing noise and air pollution sources, together with the proposed road, at sensitive locals such as Appleford have not been assessed. The scheme remains in conflict with District and County planning policies.

2.1 The air quality assessment for this scheme is out of date. AQTN para 2.4 & 2.5 confirms that no monitoring of existing particulate index PM $_{2.5}$ has been undertaken for this scheme. In recognition of the growing concern on the effect of these particles on human health (see World Health guidelines 2021), the Environment Act 2021 gives the Secretary of States power to set a target for PM $_{2.5.}$

All statements in the scheme's ES on emissions of NO_2, PM_{10} PM $_{2.5}$ are based on computer predicted values. As these are not adequately calibrated, these is no evidence that these values represent the local distribution of pollutants throughout the community of Appleford.

No programme of baseline air monitoring was discussed and agreed between OCC and Appleford Parish Council. The scheme applicant did not take the opportunity to undertake monitoring either during the consultation period or during the Regulation 25 response period.

It is noted that the Environment Act 2021 recognises the need for environmental monitoring and considers the duty of local authorities to identify emissions to secure an air quality standard.

2.4 & 2.5 discrepancies between *"under and over prediction"* in the computer model were acknowledged. No justification has been offered for ignoring the local discrepancies and applying the standard *"verification and adjustment process*" to Appleford. This ignored both the proximity of the proposed road to dwellings and the need for $PM_{2.5}$ measurement.

2.6 The AQTN admits that *"No site specific information was available* " to include the emissions from the particular industrial activities at Appleford sidings and their effect on Appleford within the air quality assessment. Residents currently experience excessive dust under certain wind and climate conditions. The constant traffic movement on the proposed road alignment with attendant particulate emissions will increase the risk of harm to the health and well-being of local residents. The adoption of standardised sector emission is insufficient to represent the combined and cumulative effects of the proposed road scheme in addition to existing emissions.

2.7 The Parish Councils have documented objections on the basis of deficiencies in the traffic modelling. Air quality predictions based upon the transport model are not reliable. Specifically for Appleford, the model assumes that dominant emissions are derived from the existing road (B4016) and traffic on this road will diminish due to the HIF1 road scheme. The emissions within

Appleford due to induced and diverted traffic flow on the adjacent HIF1 road are not adequately assessed. The application of traffic restrictions on the B4016, curtailing emissions, regardless of the HIF1 road are not assessed.

2.8 The Parish Councils consider that the benign impact of the HIF1 road on air quality in adjacent communities, as asserted in the Environmental Statement, has not been demonstrated. If the road proceeds it would be unconscionable to deny, as the ES does, the need for ongoing monitoring of the air and noise emissions from the HIF1 road and the need for mitigation measures as required. However, it is recognised that there are no mitigation measures available once the road is built in the current alignment.

In response to the Parish Councils criticism that the air quality predictions ignore the elevated HIF1 flyover at Appleford, the AQTN presents further modelled values for a road at 5 & 10m above ground. The tabulated comparative NO_2 values show no sensitivity to the road elevation. More tellingly the predicted values along the entire length of the B4016 (Main Road) are all insensitive to the proximity of the HIF1 road. This appears to be because the predictions are focussed on the traffic on the B4016 and not on the building elevations facing the proposed HIF1 road. The issue of the elevated HIF1 flyover relates to the emissions due to traffic climbing and descending the gradients of the proposed flyover adjacent to properties in Appleford. The air quality assessment fails to address this. Moreover, the assessment is limited to NO_2. There is no reporting of the PM_{10} and $PM_{2.5}$ implications of the adjacent HIF1 road.

2.9 The AQTN explains the insensitivity of the NO_2 air quality assessment to proximity of the HIF1 road to Appleford by suggesting that emissions fall rapidly by distance. Further comparative modelling of HGV traffic on the B4016 (Main Road), as described in Para 2.9 also shows insensitivity within the air quality assessment. In view of the necessity to set lower emission standards (WHO recommendations for public health) this lack of sensitivity of the air quality model is of particular concern.

2.10 The AQTN acknowledges that the vehicle emissions due to the gradient of the flyover at Appleford Rail sidings have not been included in the assessment.

2.11 The AQTN denies that substantial traffic will be induced onto the A4013 due to its connection to the A34. It further denies that this traffic, and its associated emissions will pass by and impact on the communities adjacent to the road. The Parish Councils consider this response undermines the credibility of the air quality assessment.

Date: 17th January 2023

On behalf of the (NPC-JC).

Planning Application R3.0138/21, HIF1 road between A34 Milton Interchange and B4015 north of Clifton Hampden.

Reply from the Parish Councils to the Regulation 25 Response issued by Oxfordshire County Council on the 14th November 2022 in respect of Noise.

20th May 2022

A statement of objection to the road proposal was submitted on 20th May 2022 by Appleford Parish Council on behalf of the Joint Committee of Neighbouring Parish Councils of Appleford, Clifton Hampden & Burcot Culham, Nuneham Courtenay and Sutton Courtenay (NPC-JC). This addressed the deficiencies in the Environmental Statement Chapter 2 & 10 on Noise and Vibration. It was established that the application fails to comply with Local and County planning policies, namely SODC policy ENV12 (3) & DE26; VoWH Dev Policies 23 & 25 and NPPF paragraph 185 in regard to noise, amenity and health.

14th November 2022

A response to this statement of objection, prepared by AECOM, was lodged on the planning portal on the 14th of November 2022, "Didcot Garden Town EIA Regulation 25 Response" (file name: *"Additional Information EIA Regulation 25 Response(1). Pdf)".*

Section 12 of this statement deals with Noise.

This response fails to address the specific objections raised by the Parishes NPC-JC in regards to noise.

Planning application R3.0138/21**,** remains non-compliant with local and County planning policies for the following reasons:

1 The scheme fails to meet the aims of the Noise Policy Statement for England (NPSE) 2010.

2 The ES noise assessment fails to take into account the "Noise Important Area" as identified by DEFRA mapping at the southern end of Main Road, Appleford.

The Regulation 25 response of 14th November claims that the rail noise source *"is unrelated to the Scheme*". This response fails to meet the need to assess the cumulative effect of different noise sources impinging on this NIA and surrounding locations.

3 No further noise monitoring in Appleford has been undertaken in the period May to November 2022 to address the deficiency in base line assessment of the noise environment. NPC-JC has pointed out that noise contributors include main line rail, industrial aggregate handling at Appleford Sidings, HGV movements at the Portway and traffic on Main Road.

The Regulation 25 response admits *"ambient noise levels in this location (Appleford Level Crossing) are higher than indicated by the predicted Do-Minimum traffic noise levels*", due to these contributors not being adequately assessed.

Modelling of the predicted noise environment is deficient as it fails to incorporate the characteristics of noise sources, e.g., Tonal, low frequency and impulsive nature of the industrial noise, periodicity of the main line rail noise, and continuity of imposed traffic noise from the HIF1 road scheme. It also fails to acknowledge and represent the noise impact of the proposed elevated road over Appleford railway sidings, i.e., rail noise below the arching bridge structure and the roadside noise screens reflected towards adjacent dwellings in Appleford. It fails to represent the specific noise contribution of vehicles accelerating and decelerating on the gradients leading to the road bridge.

4 No noise monitoring has been undertaken in Nuneham Courtenay, and no further monitoring undertaken at Culham, Clifton Hampden or Sutton Courtenay to correct the deficiency.

Baseline noise assessment and predictive modelling are an inadequate basis to assess the impacts of the scheme.

5 There are no noise assessments for alternative alignments of the route of the road. It cannot be demonstrated that this alignment has been chosen as the one causing least adverse impact on adjacent communities.

The consultation response dated 22nd December 2022, of the Vale of White Horse District Council, recommends realigning the road in the section Didcot-to-River Crossing, to reduce the "significant adverse effects" of the road on adjacent dwellings. This comment recognises that the adverse environmental impacts, in terms of noise, air quality and visual intrusion were not adequately assessed at the route selection stage of the scheme.

6 The need for noise mitigation measures demonstrates an inappropriate alignment of this road scheme. The proposed mitigations are inadequate and inappropriate. The proposed low noise road surface addresses only tyre noise and is ineffective for speeds below 75km/hr. Noise from engines, acceleration and aerodynamic sources are not mitigated. The response from the planning team of the Vale of White Horse District Council (22 December 2022 ref P22/V2475/CM) confirms that the proposed *"acoustic barriers are visually intrusive*". Moreover "*a Green barrier,"* as proposed to soften the appearance "*will be viewed against the sky and will stand out making it more intrusive*".

6 NPC-JC's objection of 20th May 2022 cited a long list of unresolved deficiencies in the Environmental Statement, Chapter 10, Noise and Vibration including:

- Failure to identify impacts on "tranquil areas"
- Lack of monitoring/modelling of elevation/ gardens facing the HIF1 road
- Limited traffic modelling, excluding induced HIF1 traffic & alternative traffic management strategies for village roads.
- No consideration of the intrusive landscape impact of 3m high noise barriers. Failure to examine alternative LA111 mitigation measures.

- Failure to assess noise impact on Nuneham Courtenay, properties in Sutton Courtenay, Culham, Clifton Hampden & Burcot, and Milton Heights.
- Misleading statements on construction impact, e.g. Appleford sidings bridge.

These concerns remain, despite the further information provided by OCC/AECOM.

NPC-JC 17 January 2023

Planning Application R3.0138/21, HIF1 road between A34 Milton Interchange and B4015 north of Clifton Hampden.

Reply from the Parish Councils to the Regulation 25 Response issued by Oxfordshire County Council on the 14th November 2022 on bridge and road design and landscaping .

The acceptability of engineering interventions in the landscape are dependent on the quality of the design.

1 NPPF requirements

The National Planning Policy Framework (NPPF) July 2011 recognises the importance of good design. Paragraph 126 of the NPPF expects:

"*The creation of high quality, beautiful and sustainable buildings and places is fundamental to what the planning and development process should achieve. Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities. Being clear about design expectations, and how these will be tested, is essential for achieving this. So too is effective engagement between applicants, communities, local planning authorities and other interests throughout the process.*"

The NPPF also advises that development should contribute to mitigating climate change. Paragraph 157 requires new development should be planned for in ways that *" can help to reduce greenhouse gas emissions, such as through its location, orientation and design. Any local requirements for the sustainability of buildings should reflect the Government's policy for national technical standards.*"

Paragraph 134 of the NPPF advises that **"** *Development that is not well designed should be refused, especially where it fails to reflect local design policies and government guidance on design"* .

2 The HIF1 road scheme

The HIF1 road scheme involves 3 bridge structures, and associated embankments and viaduct structures.

The generally poor and unsympathetic design of these landscape interventions have been cited by the Planning Team of the Vale of White Horse District Council in their comments, dated 22 December 2023 to the Regulation 25 response.

"*The design of the River Thames Crossing between Didcot and Culham is not revised. Appendix G (Oversized bridge examples) of the Reg 25 response, provide little confidence that the bridge will an attractive feature or sensitive to its rural setting. … The bridge designs by reason of their concrete materials, massing, unbroken grassed banks, lack of vertical landscaping on the approaches to the Science Bridge and on the banks of the bridge will result in them being an unspectacular and visually intrusive feature comprising poor design contrary to paragraphs 126,*

130 and 131 of the NPPF, core policies 37 and 44 of the Local Plan 2031 Part 1 and the Didcot Garden Town Delivery Plan. The design of the bridges does not necessary minimise their visual impacts, the viaduct supports are visually bulky, and there is minimum space to soften the northern side of the Science Bridge."

3 Bridge over the River Thames

The bridge over the River Thames also requires a 330m long raised viaduct to span the wetlands on the south bank. This was not included in the original assessments of 2018 (nor included in the cost budgets of 2021). A commentator (1) has described the viaduct as a "*low, squat, functional concrete structure, anything but the image of a soaring bridge allowing the landscape to flow effortlessly beneath."* The impact on the viaduct and bridge on the river banks and overwise tranquil area of the wetlands has not been properly examined. The wetland is an emerging wild fowl habitat and observation resource. The bridge and viaduct will be a severe intrusion into this environment.

The road is accompanied by a footpath and cycleway alongside. However the design of the combined width of the bridge across the Thames is dedicated solely for 50mph motor vehicles. The design denies the opportunity for pedestrians and cyclists to experience and savour the qualities of the river setting and river banks on the journey across the Thames.

4 Bridge over Appleford Sidings

The proposed alignment of the HIF1 road as it crosses private rail sidings at Appleford requires a bridge structure to form a very acute angle with the rail lines below. Whilst originally conceived to cross a single rail track, the design had to be enlarged when two more rail tracks were added. The design of this bridge is now wholly inappropriate as observed by a local bridge engineer (3)

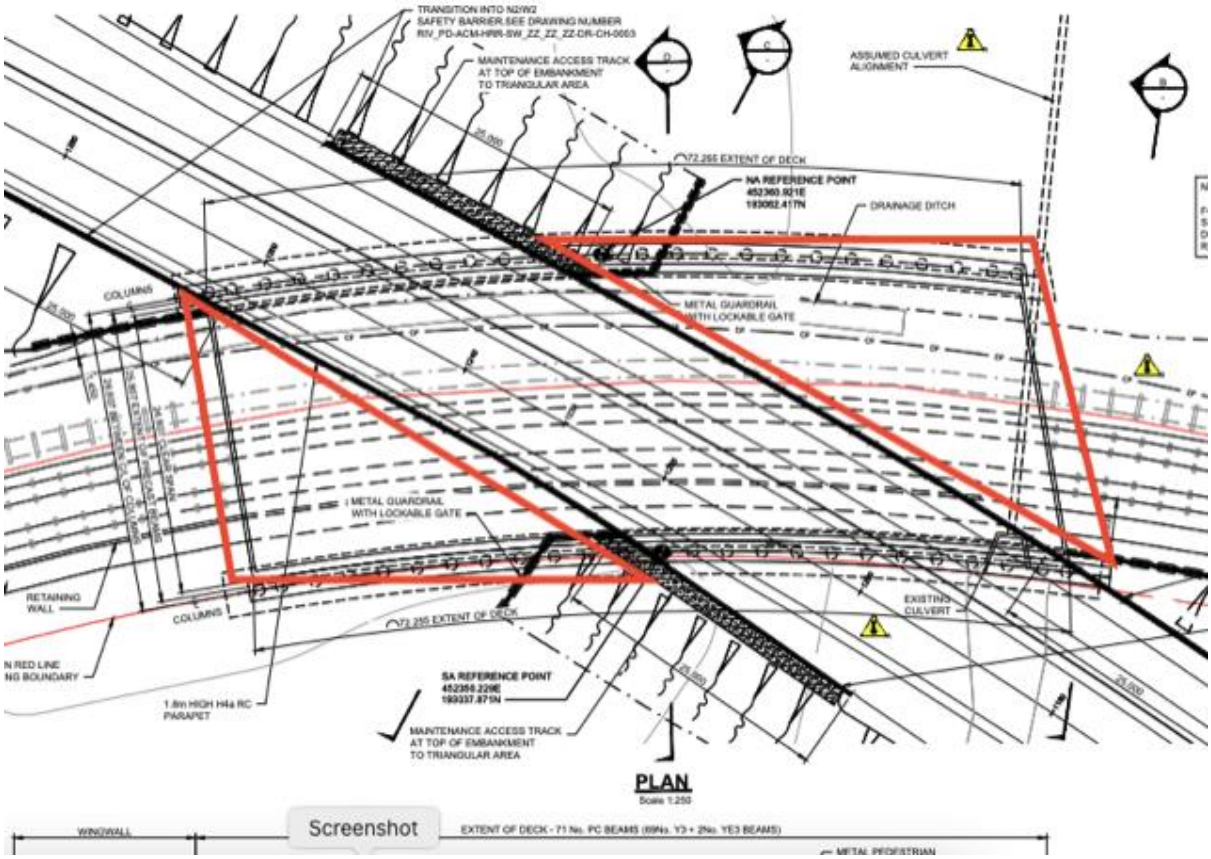
"*This bridge has a large area of redundant deck due to its very simplistic design. It has been designed as an almost "square" deck which means that approximately 1/3rd of the deck area is not used and almost 1/2 of the substructure and piles are only needed to support the redundant deck area (the two large triangles either side of the road).*

If a slightly more sophisticated design were employed the bridge could be reduced in scale and the large redundant triangle of deck projecting approximately 12m towards the homes in Appleford would be significantly reduced. There are approximately 11 exposed concrete columns in this part of the bridge which will be very unsightly to look at.

A more sophisticated "skew" design would significantly reduce the visual impact on Appleford residents and also enable a much more pleasant and aesthetic design overall. Although this would be slightly more complicated to design it would be a much more efficient structure and reduce an enormous amount of wasted concrete and piling into the bargain.

With OCC's drive for green initiatives this design is extremely lazy and wasteful of resources which could be significantly reduced by an improved design. The two large red triangles on the sketch below are completely redundant and could be designed out by a better design.

The amount of concrete in the bridge could probably be halved by changing to a skew design from this very simplistic and lazy "square" design."



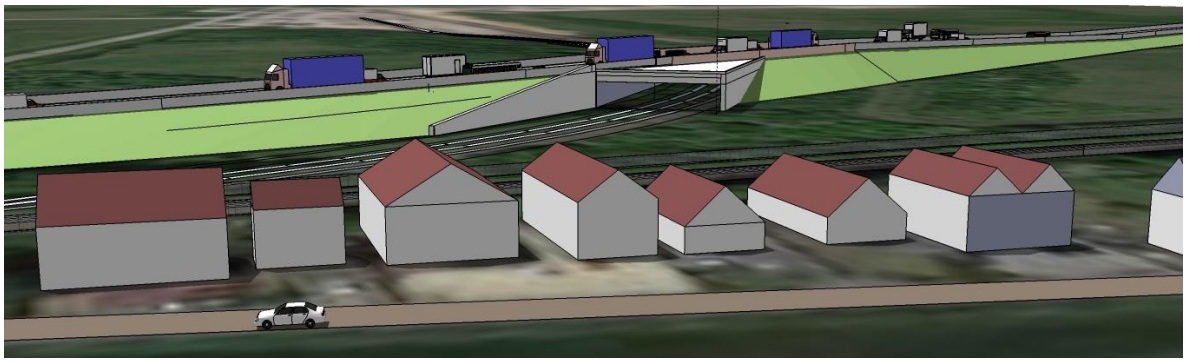
Plan view of the proposed bridge over Appleford sidings showing wasteful areas of structure either side of the road.

It is clear that this Bridge fails to meet the requirement of design (NPPF para 126) and for sustainability (NPPF par 157).

This bridge will occupy the main western field of view for windows in dwellings in Main Road Appleford. The height of the structure, at more than 10m above adjacent gardens, will dominate the skyline for these dwellings. The significant increase in rail and road noise and air pollution caused by this road alignment has been raised in other objections.

To excuse the impoverished design of the proposed bridge over the private rail sidings at Appleford, AECOM issued a document illustration “Oversized Bridge Examples” (2). This shows bridge structures for acute intersections that qualify for the criticism, above. This design should never be contemplated, particularly for positions with critical landscape and outlook requirements. The photographs below show one of the examples cited.

Photograph (credit Google Earth) of one "Oversized Bridge example" offered by AECOM as a precedent for the proposed Bridge over Appleford Sidings.



Modelled Image of the proposed Appleford rail sidings bridge overlooking dwelling in Main Road Appleford. (prepared by Appleford Parish Council for discussions with OCC, January 2021.

The commercial operators intend to use the

5 Acoustic Barriers and Road alignment

In addition to the deficiencies of the basic design of the road bridges, their intrusion of the road will be more severe by the use of noise barriers alongside bridges and sections of road. These barriers are a recognition that the alignment of the road incurs excessive damage to adjacent communities.

The Planning team of Vale of White Horse also criticise *"Acoustic barriers of unspecified height but possibly 2 or 3 metres in height, beside the road leading from Didcot to the River Thames Crossing will be visually intrusive in this primarily rural area.*

Given the comments made by the council's Environmental Protection Team (see below), whereby a number of residents of affected dwellings will experience significant adverse effects despite acoustic barriers and given the visually intrusive appearance of the acoustic barriers, this authority questions the suitability of the road alignment between Didcot and the Thames Crossing and consideration should be given to moving the road further west."

The designed alignment and elevation of the road has other intrusive consequences alongside existing communities such a Clifton Hampden and Appleford as well as on open green belt land,

The VoWH comments . "*The road should not be located on embankment simply to achieve a balance of cut and fill but should be kept as low as possible in the landscape to limit the adverse impact. Surplus fill can be accommodated through appropriate creation of false cuttings. Acoustic fencing,* (even as a) *green barrier will be prominent in views where seen against the sky, such as on bridges. The proposed acoustic noise barrier to the west of the Clifton Hampden and the edge of the village conservation area is an unfortunate solution and it does not appear to be supported by justification or alternatives that would have less potential visual impact".*

Due to the poor quality of the design of this scheme and it's resulting impact on the landscape, the HIF! Road scheme should be refused planning permission in accordance with paragraph 134 of the National Planning Policy Framework.

NPC-JC

20th January 2023

On behalf of the Parish Councils of Appleford, Culham, Clifton Hampden & Burcot, Nuneham Courtenay, Sutton Courtenay.

(1) Objection on Landscape Grounds by A James January 2023 as Appendix 2 to Further Objection following receipt of Regulation 25 further information.
(2) Regulation 25 Response Didcot HIF1 Appendix G Oversized Bridge Examples October 2022.
(3) Private comments from retired OCC bridge engineer Dec 2021.