

Harston Parish Council

Response to East West Railway Consultation May 2026 (“EWR”)

A Details of Parish

Harston is a rural village of c 2000 residents just 5 miles South of Cambridge within the South Cambridgeshire District Council. It is strategically located beside the River Rhee (or Cam) that runs between two chalk hills to the West and East. It also has the A10 Trunk Road from Royston through the middle and the Cambridge King’s Cross railway line on its eastern flank. It is a “gateway” village before the traveller meets Cambridge and the fens. The Parish Council is active in fostering and protecting the social and economic life of the village.

B Summary of Adverse impacts on Harston

EWR’s current plans produce serious costs and loss of value and amenity for Harston and will sever the relationship between Harston and Newton. It will also change forever the structure of the village and in our view have a detrimental impact on its rural society. The direct impact on it and the costs include inter alia:-

B 1 The economic loss of farming, changing the nature of the village and reducing much needed food production. It will also affect businesses by the noise and pollution as well as the traffic congestion generated during construction affecting custom and use. See **Section D**.

B 2 The loss of property values to Harston and Newton residents, losses that have already been estimated by local estate agents as substantial. This will cause stagnation in the local property market and less new builds. In addition, particular properties will be adversely affected and retirements will be deferred. See **Section E**.

B3 The loss of a direct connection between Harston and Newton, two closely integrated villages, with the more circuitous alternative route planned by EWR. The loss of social values in the combined primary school for the two villages (potentially hundreds of pupils) and the dispensing surgery in Harston that services many local villages

The stress on local transport links will be unbearable during the construction phase and the thought of using Church Street as a construction route for HGV’s is unbelievable – it is already under strain from the Button End industrial estate where HGV’s cause the traffic in the other lanes to mount the pavement. (See **Section F**.

B 4 Pollution exposure (air pollution and noise in particular) from the construction and operation railway and from the elevated A10. EWR has yet to produce a pollution profile both for air quality and noise. See **Section G**.

B 5 Pollution and construction risks to the River Rhee, most notably as current plans have diesel trains stationary over the flood plain. See **Section H**.

B 6 Damage to the chalkland environment of Harston. See **Section I**.

B 7 Damage to the wider ecology that the environment of Harston sustains. See **Section J**.

B 8 The current plans exacerbate rather than relieve travel connectivity in the area. See **Section K**.

B 9 The current design is ill-suited to the purposes for which an Ox-Cam links is intended. See **Section L**.

B 10 Current plans fail to take into account the risks of failure that might be involved. See **Section M**.

B 11 Harston and Newton Parishes have provided an alternative rail alignment that would alleviate at least some of the problems local to Harston, though issues of environmental damage, connectivity, risk and economic values still remain. See **Section N**.

None of these adverse effects is justified by an economic rationale for EWR's plan to adopt a southern approach to Cambridge, as noted in **Section C**.

C Lack of Economic Justification for Southern Approach

C1 Construction Costs. EWR itself estimated the cost of the southern approach to be £330mn greater than the northern approach in its 2023 Economic and Technical Report (ETR, 2023:114). As a measure of opportunity cost, this cost *difference* is equivalent to some 3% of the total cost of the Transpennine upgrade (£11bn) or 60% of the likely total cost (c£500mn) of upgrading the Ely rail junction, the latter delivering significant benefits in taking freight traffic off the A14. The difference in construction costs largely reflects the need to cut and tunnel through hills on the southern approach.

C2 Benefit-Cost Ratios. EWR published estimates of the benefit-cost ratios, the northern approach yield a higher ratio of benefits to cost than the southern approach (ETR 2023 Appendix 5: 66). The net cost to government of the northern approach is less than for the southern. The published figures are at 2010 prices (ETR 2023, Appendix 5, 64). A simple updating of the numbers using the Bank of England inflation calculator

would give a net cost to government of -£2,939mn for the northern approach and -£3,647mn for the southern approach, a difference of £708mn.

C3 Inadequate Justification. In reply to questions about these figures, EWR has repeatedly said that these analyses were ‘high level’ and revisions are under way. The term ‘high level’ has never been defined. EWR’s reluctance to publish a business case before going to a DCO suggests that the supposed finer grained analysis is unconvincing. If EWR were so confident of the economic benefits it was producing, it should be rushing to publication.

C4 Freight Justification. It is clear from what has been said and from the evidence below that the only operational reason for constructing **passing loops** is so as to be able to schedule two freight trains per day from Tempsford to Ipswich and the East Coast ports inc Felixstowe Docks (a major user of road transport). There have been estimates that this design criteria will cost EWR in excess of £1bn. Further it routes freight trains through central Cambridge for no operational reason other than that there is a single track existing line. We in Harston would strongly urge that Freight is dropped as “an objective” of what is in reality a commuter line and save the risks and related mitigation that will be required around Harston and the MRAO etc.

C5 Local Benefit. There is no local benefit to Harston or Newton and only temporary and permanent disruption; and ongoing increased costs for local residents and others.

D Economic Losses to Harston Businesses

Businesses in Harston will have NO benefit from EWR and over the construction period could be severely disrupted by the construction activities; especially as the compounds around Harston and the “EWR River Rhee crossing” equate to an area nearly three times the size of built up area of Harston.

The Science Group (capitalised at just under £250mn), originally the Generics Group, was moved from the Science Park to Harston to be free of transport and commuter issues. EWR are in effect moving the transport issues back to the Science Group. Much of its business was and is overseas and very few of the customers are based in the Cambridge area or indeed Oxford. It is also home to spin out and other technology companies.

Similarly, the businesses at Button End will be adversely affected, given the likely congestion caused by construction traffic moving along Church Street. They will find it increasingly difficult and incrementally more costly to deliver services to other local companies.

Harston is a rural community that has three farming entities produce crops on land much of which will be temporarily taken as construction compounds and then

subsumed in balancing ponds and embankments. This will mean that the nature of agriculture will change away from mixed activities to amenity land such as horse paddocks. The other impact will be the lack of agricultural production of cereals and legumes due to the traffic congestion during construction. It has also been noted that much of the compound land will not be returned to agricultural production for many years after completion (so up to 10 years lost productivity) and we are predicting the loss of one in three farms in this area. There will be a consequent long-term loss of much needed food production.

E Loss of Property Values

The planned route runs so close to the south of Harston that it will adversely affect property prices. Indeed, properties in that area are already blighted by uncertainty and local estate agents have estimated sizeable losses (c10% of value) on properties most affected.

In addition, there are particular properties that are adversely affected. The path to Linden House is in effect being commandeered as an access route for construction traffic. The curtilage of Harston Manor, a Grade 2* listed property, is affected by the EWR line that runs East West between Harston Manor and an earlier Manor Farm (an original farm that has a North South axis) and connecting it with the Anglo-Saxon Historic Monument site at Manor Farm.

The line also runs close to Harston All Saints', the Parish Church, a Grade 2* listed building with an active worshipping congregation that is well supported by the village. The view to Chapel Hill, and its meaningful historical spiritual value will be destroyed by the view of the EWR south tunnel exit.

F Harston and Newton: Splitting Communities

EWR's planned line involves the loss of a direct connection between Harston and Newton. In terms of the primary school, the GP surgery, village businesses and social life, the two villages are closely integrated. Yet, to take just one example, with EWR's plans, parents may well be spending 6 to 7 years during construction having to deliver their children to school via the A10, already a congested road. Even with the new road completed, EWR plans will cause an undoubtedly longer journey for parents taking children to school at peak congestion time. This has been recorded as a significant issue on the EWR line in Buckinghamshire, affecting the education of children.

To date EWR has not held a meaningful consultative meeting for the citizens of Harston and Newton to have detailed discussions about impact on their lives, their health, their finances and their housing

The splitting of the villages by driving a four track railway (by contrast with the two track that exists today) and closing the road forever is totally unacceptable. When the existing SBL-Royston London line was built they installed a station at the level crossing in Harston – this EWR proposal can not even come and talk to the two villages about it.

EWR has put a cosmetic overlay on the heavy railpath through Harston by creating an active travel path on two sides of the new track. And in part using the old railway line. These active travel pathways will not be available until after the heavy line tracks have been fully completed expected to be c 7 years after construction starts and will not make up for the disconnection between the historic village centres. It is not clear who will use these new pathways as they go over a high bridge which will be very exposed This will cause social re-engineering that has not been analysed in the context of the future of either Harston or Newton and the links between them.

G Pollution Exposure: Air Quality, Noise and Freight

Air and noise pollution will be a consequence of the construction and new operating railway and more so from the elevated section of the SBL. In addition, Harston will suffer more intrusion and pollution from the elevated section of the A10 as the main road from the A1 and Royston. EWR has yet to produce a pollution profile both for air quality and noise; and requests for the baseline traffic readings taken from the Village Green have yet to be received despite requests.

Baseline traffic readings on all the relevant roads around Harston and Newton have not been done and made public. It is not acceptable to know that traffic discussions have taken place with the County highways authority, when these are closed and confidential and are not in the public domain. It is impossible therefore to model the pollution effects on citizens, their health and wellbeing let alone their productivity. This must be addressed immediately.

The proposed construction haulage routes are unacceptable, particularly for Church Street, where the GP surgery is located, and there are many old buildings (three grade 2* listed buildings). Station Road which is the main entrance for the school will also be heavily impacted.

There is an urgent concern about the use of diesel locomotives for freight. Diesel trains will emit pollutants damaging to human health and nature, including nitrogen dioxide, particulate matter and oxides of nitrogen, as well as sulphur dioxide unless the fuel is low sulphur. Oil and diesel discharges are an added major risk especially on passing loops.

H Pollution and Construction risks to the River Rhee

These risks are not only of particular concern to Harston, but have wider, indeed national, resonance. As is well-known, the UK is home to some 80% of the chalk streams in the world, and chalk streams form a unique habitat. The construction work and operation of EWR's line would adversely affect Bourn Brook and The Rhee that is crossed just South of Harston Mill. The Rhee itself would be particularly vulnerable from the operation of the line, as on current plans the Rhee valley would be the location of passing loops for freight with heavy diesel vehicles parked across the river waiting for a slot or pathway. There is a clear likelihood of the river being polluted. This problem is not adequately mitigated by the proposal for a wetland under the railway bridge, since that wetland would drain directly into or be part of the river. As it is, the Environment Agency grades the River Rhee as below Good quality. At the very least this risk assessment needs to be clarified in the full environmental assessment given the river is an Internationally recognised chalk stream.

Since the existing pressures on the Rhee derive from physical modifications, dewatering during construction and wastewater pollution, the operation of the line both in its physical structure and its polluting potential with many drainage ponds on both the East and West banks, will lead to deteriorating river and water quality. This is an area that is already being monitored as it just upstream from the bathing area in Cambridge itself

Current plans envisage balancing ponds to enable drainage. However, there is no information on how these ponds will be monitored and who or how they are being maintained over the 150 yr life. Experience elsewhere, for example with the M25, suggests that this is a problem, with there being no guarantee that the holding ponds would meet chalk river quality status now or in the future. Again, this risk needs to be assessed in the full environmental assessment.

There is a widespread call among nature protection organisations for all chalk streams to be designated under UNESCO auspices to be granted World Heritage status. This is a critical aspect of the UK government's approach to protecting key biodiversity sites under the UN Convention on Biodiversity to which the UK is a signatory. Any comprehensive environmental assessment should take account of this.

I Environmental Damage: Geology and Chalkland

The problems of Harston and Newton are indicative of the failure to properly plan for a project on the scale of a new line between Bedford and Cambridge over virgin territory. In particular, the choice of the southern approach after Cambourne poses a number of serious environmental problems to which EWR has responded inadequately. Of these, a number of issues arise from the difference of geology between the northern and the

southern approaches. A northern approach would largely run over gault, a hardened clay, whereas a southern approach runs through chalkland. EWR appears to have paid little or no attention to this difference when choosing a route either in 2020 or 2023 or 2026. As a result, it has needlessly created major environmental problems as follows.

I1 *Aquifers and Construction Dewatering.* Chalk acts as an aquifer meaning that it is a rock holding groundwater in permeable fissures. Chalk is a friable rock and is characterised by numerous joints and fractures in addition to structural fault lines that are rarely shown on geological maps. These joints and fault lines provide preferential routes for water flow (both vertically and horizontally) and need to be taken into account by engineers working on a project.

Construction dewatering is required to control groundwater when excavations are made in chalk. The tunnelling work itself can lead to pollution problems from run-off and to damage to an aquifer much of which is unpredictable as chalk aquifers have high levels of horizontal flow. Also the damage to the aquifers can have long-term consequences on water storage and flow. Since chalk aquifers in Cambridgeshire provide all the public water supply sources, for example with licensed abstraction areas to the west of Highfields Caldecote and north of Harlton, there is the risk of damage to supply arising from both construction and operation.

I2 The general geological risks are not purely theoretical, as is illustrated by the experience of HS2 tunnelling where The Chiltern and Wendover tunnels passed through the main chalk aquifers. One effect was the creation of sinkholes and major impacts on the River Chess. Wider experience confirms these problems; for example, the road tunnel at Baldock encountered major problems leading to cost increases because of the faulting in the chalk.

J Wider Environmental Impacts

J1 Biodiversity. There are a number of species that might be adversely affected by the southern approach, including badgers, water vole, amphibia, breeding birds and wintering birds including swan that use the Harston mill pond for breeding. In fact the River Rhee is a wildlife corridor with few houses fronting it between the M11 and Barrington. But critical attention has been focused on the Barbastelle bats, a internationally protected IUCN red-list species, with their maternity roost in the Eversden and Wimpole Woods Special Area of Conservation. Barbastelles have complex foraging patterns that make mitigation of adverse effects particularly difficult, perhaps even impossible. Monitoring has shown that these bats forage in Harston.

J2 Electromagnetic Radiation. The planned route passes close to the Mullard Radio Astronomy Observatory (MRAO) on the A603. In its 2024 Technical Report EWR

recognised that the rail line may have adverse effects but was not able to offer a solution. Despite years of study and consultation, EWR has not been able to put forward a workable solution to electromagnetic interference at the MRAO site. This is a very significant impediment to the current route proposed by EWR; which is avoided in the Northern Approach to Cambridge .

J3 Historic Environment. The planned route potentially affects a number of heritage sites. Some are designated by Heritage England as heritage assets. In addition, there are important non-designated sites in particular Money Hill, which are hard and expensive to protect.

There is a strong suspicion that there may be a burial mound on Rowley Hill ; Money Hill was only discovered because it lay in the direct path of EWR and artefacts were discovered not far from Rowley Hill when the M11 was constructed c 1986 .

J4 New Environment. EWR proposes that embankments will be part of the Biodiversity Gain and be planted with trees. Unless non-native species are chosen it is likely that these trees , like those alongside the A14, will need significant watering in their early years. We have not identified any system or calculation of the amount of water that will be required. We would suggest that EWR will need to build reservoirs to cope with this so as not to affect the groundwater that is required for Cambridge residents and its expansion in a “Water Scarce” environment, as evidenced by the Environment Agency’s own reports.

K Travel Connectivity

K1 Rail. EWR claims that the Southern approach ‘provides easier access for more people to more jobs’. That claim is based solely on a notional one-person journey comparison of travel times from Tempsford to the Cambridge Business Park in north Cambridge via a northern approach and the Biomedical Sciences Campus in south Cambridge via a southern approach.

This was based on a 5 minute walking distance at each end and totally ignored that Cambridge is well known for its cyclists and many people do bicycle to stations and to work. This lack of understanding of the local peculiarities at the design and analysis stage will ensure that travel modes and optimisation of end to end travel are ignored. EWR also ignored or failed to analyse the number of journeys between the wider catchment areas at each end.

Moreover, the wider access benefits of a northern approach are ignored based on internal EWR subjective analysis. The science and technology companies on the north side of Cambridge are expanding fast, with a projected jobs growth from of 20,000 over the next ten years in the Cambridge Science Park building on such successes as CMR Surgical.

In addition the Cambridge Genome Campus at Hinxton also has plans to expand. Not having a rail connection which joins up all the dots unnecessarily limits the pool of recruitable employees particularly those with young families who favour the relatively cheap housing to the north and east of Cambridge.

It is unclear how all this dovetails with the Local Plan as adopted by the District and City Councils.

K2 Roads The expansion of Cambridge will cause there to be more vehicles on the roads and smaller and narrower old roads, of which we have one in Harston with a single track bridge, will not be able to cope. We expect there to be a need to upgrade this bridge and improve the whole length of Church Street (which is too narrow) due to the increased traffic caused either directly or indirectly by EWR.

L General Design

EWR's planning also lacks imagination. A northern approach allows trains to run directly to important locations south of Cambridge including perhaps Stansted Airport and the Eastern Side of London. If a new station were built at Hinxton, the Wellcome Genomics campus would be connected not only to both the Cambridge Biomedical Campus and the Cambridge Business Park, but also to the pool of labour resident to the west of Cambridge and also of course Oxford. Were a service to Stansted Airport be created, even an intermittent one, international passengers visiting the Universal Theme Park in Bedford would have a direct journey to another major international airport.

M Risk Analysis

There is a severe risk that the project will take longer to build than targeted. The reality is that we live in a complex society with many interlocking interests (unlike when the railways were built c 100+ years ago). Consequently aligning those interests takes time and establishing easements and rights of way over virgin land are complex issues. In addition when costing a major project there is a natural tendency not to over budget to ensure a) that it is approved and b) that interested parties/suppliers do not over specify their roles. When combining this natural financial underestimating with lack of understanding the risks of implementation/construction, it means that the probability range for a budgeted outcome could well be 100% of the best estimate. It is hard to have confidence in EWR's ability to deliver successfully on its plans, given its failure of design in the case of Winslow Station that has meant that Chiltern Trains has refused to take over the line until the problems are resolved. It would be surprising if passenger trains were actually running within two years of the line being completed.

If we are not interested at (or it becomes uneconomic to operate a railway) at twice the expected cost to build then we should not proceed now. As the assessment period for this project is over 150 years and there are other projects with a much better BCR with lower risk profiles, EWR would not, in our opinion, be our or the nations favoured project on financial grounds.

N An Alternative which mitigates impact on Harston

The Harston and Newton Parish Councils Working Group has proposed a more southerly rail route around Harston. This would mitigate the problems of the current plans, retaining the possibility of a more direct link between Harston and Newton and possibly save construction costs. EWR has rejected these plans on the grounds of some risk to trees and an historic milestone, increased dewatering of Rowley Hill and increased costs. However, EWR accepts that there would be reduced dewatering at Chapel Hill and the economic gains to Harston from a more southerly route and the savings from no footbridge and linking roadways would need to be netted out of any increased construction costs.

Moreover, any proper comparison between EWR's plans and those of Harston and Newton should take into account the social value of the mitigations achieved as a result of adopting the Parishes' route together with the savings from not having a Harston – Newton loop road and no walkway (pedestrian only) bridge over 6 tracks at one of its widest points.

Although the Harston and Newton plan would not entirely eliminate the damage from the construction and operation of the railway, it would be a distinct improvement. If EWR sticks with the southern approach, we strongly urge that it should adopt an alignment that accords with the Harston and Newton plan.

Conclusion

1. If EWR insists on persisting with its southern route, it should adopt **the alternative alignment suggested by the Harston and Newton Parish Councils** to a) mitigate the risks both in construction and in operation and b) maintain the connectivity between communities (not divide them) let alone within them.
2. To **avoid environmental damage to a chalk ecology** and other important environmental features, and avoid exacerbating water scarcity and local transport issues in this region, EWR should revert to its plans for a **northern approach** and enhance the BCR by building a line designed to take more **freight** services.

3. Before submitting a DCO, EWR should publish a **full Business Case** that it properly grounded make that data and analysis publicly available in a replication data set.
4. Before submitting the DCO, EWR should have **an overall risk analysis** of the project in addition to departmentalised risk analysis or what would be called a **"gap analysis"** including the risks of mitigation failure and project overrun; and hence the risk of underestimating the impact on villages like **Harston**.