

## **A14 Cambridge to Huntingdon Improvement Scheme**

### **Written representation and request for an accompanied site visit to the Station Cottages in Huntingdon**

**Dr Jan C. Axmacher, [REDACTED]**  
**REF A14-AFP101**

Dear Ms Frances Fernandes and members of the Panel of Examining Inspectors,

Following my attendance at the preliminary meeting, I would now like to submit my written representation and a request for an accompanied site visit. My concerns are about the proposed new road scheme providing access to Huntingdon Railway Station and the associated car park area.

#### **Request for a site visit**

I believe a site visit would help the Panel to appreciate the problems of the station area and to understand the problems that the scheme, without major modifications, will present to residents of Station Cottages.

I suggest you use the existing footpath to the south of Station Cottages, accessible from the station car park, to appreciate:

- i. the proximity of Station Cottages to the proposed new car park access road and to the A14
- ii. the necessity for substantial barriers between Station Cottages and both the proposed car park access road and a de-trunked A14 to mitigate the impact of noise, air and light pollution, and provide security for residents if the scheme proceeds.

#### **Representation and objections**

I am convinced that the proposed access roads from the de-trunked A14, along with the substantial traffic queues inevitably occurring on and in the vicinity of these roads, will have a very serious detrimental impact on the quality of life of the residents at Station Cottages if constructed as proposed. The scheme will also have

severe detrimental impacts on this part of the conservation area and the protected woodland.

*(If not clearly indicated otherwise, all text references refer to the documents and figures contained in the Environmental Statement on the disk obtained from the Highways Agency showing the current state of the proposed scheme.)*

## **1. Substantial increase in local air, noise and light pollution that will not be mitigated by the de-trunking of the A14**

### **Coinciding traffic peaks on the road network**

The extreme spikes in traffic volume on the Huntingdon Railway Station access roads associated with rail commuters leaving and arriving at the station coincide with heavy rush-hour traffic in and around Huntingdon at both morning and late afternoon/early evening peak hours. This already causes severe congestion. The arrival of two commuter trains from London at about 5:30 pm for example causes a very substantial traffic spike and congestion affecting the entire station area (as you will be able to observe if you can visit at that time). These peaks will automatically lead to very severe congestion on the proposed new station access road layout and neighbouring roads. Traffic “waves” moving on the station access road network will attempt to access the newly de-trunked A14 at times when these are already carrying large volumes of vehicles, inevitably leading to substantial queues in the entire section of the road network.

### **Resulting traffic patterns and implications for pollution levels**

The coinciding traffic peaks described above result in a stop-and-go traffic pattern along the road network, which will not be mitigated by the traffic lights at the respective junctions with the de-trunked A14 and across the entire local road network. A substantial body of research has shown that the resulting patterns of deceleration and acceleration at the affected roads leads to very significant increases in both noise and air pollution levels as compared to flows at constant speed. Additionally, the amount of air pollutants (e.g. NO<sub>x</sub>, CO<sub>2</sub> and CO) a vehicle produces per distance travelled massively increase with decreasing velocity at low speed, as it will occur at the congested junctions (see e.g. El Fadel et al., 2000, Panis et al., 2006, Jensen 1995). These factors will result in very high levels of pollution occurring at the intersections of the station access roads with the de-trunked A14, but also along the entire length of these access roads with queuing vehicles.

The pollution and noise levels are further exacerbated by the fact that car engines will be cold when commuters leave the station car park, which will lead to a

substantial additional increase in pollution created by the stop-and-go traffic on the station access road towards the junction and on the de-trunked A14.

The factors mentioned above will inevitably lead to very substantial levels of air and noise pollution along the station access roads, and the placement and arrangement of these access roads and associated pollution mitigation measures must therefore be considered very carefully to minimize the impacts on us, the local residents. In this context, the current layout is in my view extremely problematic, as it leads the highly polluting traffic along the planned southern access road (i.e. the longer of the two proposed access roads linking to the station car park and being located to the south east of the second, shorter access road) into the direct vicinity of our properties, with nothing planned to mitigate or alleviate any of the associated highly detrimental effects on us and our families.

### **Potential inadequacy of traffic and pollution models**

It could be argued that the very strong negative impacts the proposed access roads will have on our properties and the associated risks to our health are unrealistic, as they are not reflected by the pollution levels predicted by the Highways Agency modelling. However, it must be noted that any model predicting pollution levels that does not take account of the station access-specific factors (i.e. travel occurring in sharp peaks, moving in a generally very slow, stop-and-go pattern and at least in evenings being comprised entirely of cars with cold engines) will create fundamentally flawed results, massively underestimating the pollution occurring in the vicinity of these roads. Judging from earlier communications with the Highways Agency, I fear that none of these factors has been appropriately integrated into their models, and the predicted pollution levels based on these models are therefore under-representations – possibly by several orders of magnitude – of the pollution levels we will face if the planned station access roads are built as proposed.

### **Highly problematic predicted pollution levels**

I am greatly concerned that even given the severe flaws and errors in the modelling and the resulting substantial underestimation of expected pollution levels, the predicted exposure of the Station Cottages to NO<sub>x</sub>, and especially PM<sub>10</sub> is very high according to the data provided in the Highways Agency response letter we received in response to the earlier version of the scheme. The long-term exposure values for PM<sub>10</sub> as predicted by the flawed models are already above the WHO air quality guideline (AQG) limit of 20 µg/m<sup>3</sup> (WHO 2006) at all Station Cottage properties. This value has also been adopted in EU Council Directive 1999/30/EC, a daughter directive of the Council Directive 96/62/EC on ambient air quality assessment and management. In Annex III, the indicative limits for Stage 2 (with a proposed start date of 01/01/2010) for annual mean PM<sub>10</sub> concentrations are, in accordance with the WHO guidelines, set at 20 µg/m<sup>3</sup>.

### **Lack of mitigation to greatly enhanced exposure**

It might be argued that the new scheme will be mitigated by the removal of the A14. However, the existing A14 rises towards the viaduct well above the surrounding residential properties, and most air and noise pollution from the traffic is carried away from the Station Cottages by the prevailing westerly winds, as you will appreciate during your site visit. The existing A14 is also bounded by a thick, continuous belt of mature trees that provides privacy, screening of the traffic even in winter, and further limits the spread of noise and air pollution. Any harmful emissions that at present move towards our houses can disperse freely southwards across a wide area of gardens and green space towards the river, limiting any possible negative effects on humans, animals and vegetation by rapid, wide dispersal.

The proposed southern station access road would be located much nearer to the level of and much closer in distance to Station Cottages than the current A14. Furthermore, it would create a significant break in the embankment of the elevated, de-trunked A14 (see e.g. Section MM, Figure 3.3: outline environmental design – Illustrative cross sections, Sheet 11), channeling pollutants resulting not least from the aforementioned traffic congestion on the de-trunked A14 down towards our properties. Planned changes to the de-trunked A14 embankment itself will also severely compromise the current protective screening by trees, leading to a substantial increase in air, noise and light pollution experienced by our properties. Once the planned new embankment planting eventually matures, the channeling of pollutants down the southern station access road towards our property will be exacerbated. The opening in the embankment of the de-trunked A14 at its junction with the station access road, but particularly the traffic moving on the new station access road itself, will overall result in a persistent higher noise and light exposure of our properties.

It therefore appears that regulations relating to compensation could apply here.

The embankment on which part of the proposed new southern station access road itself is to be built would effectively create an additional barrier that would 'dam up' harmful emissions around our properties and hinder their effective dispersal. The same will hold true for water-bound pollutants e.g. when surface runoff occurs, but potentially also via groundwater flow. In contrast, the proposed, extremely limited planting indicated along the raised northern side of the southern access road would take years to create even a minimum degree of privacy and protection from light, noise and air pollution for the householders, and is completely inadequate.

More effective mitigation might be gained by building a solid physical structure in the form, for example, of a soundproof screen fence/wall that could also address the substantial security issues associated with opening up the southern boundary of our properties to easy public access, in association with appropriate planting which in time would absorb pollutants and improve the visual appearance.

### **Further problematic details and misrepresentations**

There are also details in the proposed scheme which seem senseless. For example, the green space, woodland and properties south of this proposed new southern station access road will benefit from protective planting (see e.g. Figure 3.2: outline environmental design plans, sheet 3), while the generally much closer residential properties to the north (Station Cottages) will not receive any such protection. This planted barrier to the south will further dam up air pollution and therefore increase the exposure of the Station Cottages in the north to harmful chemicals. Additionally, the aforementioned figure shows our garden as well as that of our neighbouring properties (Station Cottages [REDACTED] and [REDACTED]) are mostly taken up by "retained trees, hedges and shrubs" that even cover sections of our houses (see e.g. Figure 3.4: Retained and removed vegetation plans, sheet 15). As you will see during your site visit, this is a complete misrepresentation of the actual situation. Our garden for example, is chiefly set to lawn, with a relatively limited hedge currently planted within our property boundary. The protection indicated by this figure is totally misleading.

### **2) Access and traffic safety**

It is unclear to me how access to our properties would generally be arranged in the proposed scheme. We need urgent clarification which of the two proposed station access roads would be linked to our private road, and how safe pedestrian, bicycle and car access to our properties can be guaranteed 24/7 for residents and also for emergency vehicles, refuse collection, deliveries etc. We insist you ensure that the safety and security needs of inhabitants at the Station Cottages are not forgotten or neglected when the railway station access routes are planned.

The proposals would leave the Station Cottage properties completely surrounded by a ring of roads and car parks, with the proposed access road to the short-stay parking area and taxi stands in its current form being a danger-hotspot for our young children and other pedestrians. Current plans suggest that there will be no pedestrian access for us to safely get onto the foot and cycle path through Mill Common towards Huntingdon town center, as there appears to be no safe crossing opportunity for the proposed northern access road.

### **3) Conservation aspects**

#### **Impacts on conservation area**

The proposed new southern access road will pass through a section of the Huntingdon Conservation Area which was designated as part of the boundary review in 2007. The review stated that with the proposed changes to the A14, the opportunity should be taken "to consider re-integrating this part of historic Huntingdon" (Huntingdon Conservation Area Boundary Review 2007, p. 4). As mentioned above, the proposals would in fact isolate this part of Huntingdon by

completely enclosing it with busy roads and car parks, which is contrary to the aims of the extended conservation area.

In the Huntingdon Conservation Area Character Assessment, the area through which this new road will pass is shown as historic green space, which additionally contains a woodland area specifically protected by a tree preservation order (I believe this order is 7/90W1, see e.g. Figure 3.4: Retained and removed vegetation plans, sheet 15). Being located within the conservation area, we ourselves require permits to trim or fell any trees within the boundary of our own properties. In view of this, it appears very strange that the proposed layout will not only lead to very substantial felling of trees in the conservation area, but even severely affect the specifically protected woodland area. Overall, the corridor through which the proposed new southern station access road is to be built is by no means entirely taken up by “dense shrub”, as indicated on Figure 11.1: Phase 1 habitat survey, sheet 15. Instead, it contains a mosaic of habitats including woodland, shrubs and grassland. Sustainability appraisal objective 3 in the concomitantly published Huntingdon West Area Action Plan Draft Final Sustainability Appraisal Non-technical Summary is to “protect, maintain and enhance biodiversity and green infrastructure and maximize opportunities for biodiversity and green infrastructure”. Clearly, the destruction of a bio-diverse historic green site is not consistent with this objective, especially when alternative layouts that preserve this green space do not seem to have been appropriately considered.

### **Habitat destruction**

The intricate vegetation mosaic which has formed in large parts of the site that would be largely destroyed by the planned southern railway station access road contains for considerable parts of the proposed route a mixture of bramble and rose shrub mixed with young elm trees and nettles, providing food in the form of berries, nectar and other plant material, as well as shelter, to a diverse community of invertebrates, birds and mammals. Other parts of the proposed access route are covered by tree saplings of various ages and by a variety of herbs and grasses, forming a fine mosaic further altered by numerous ant mounds and nests of solitary bees. As such, the area forms a vital stepping stone connecting the main local site of international conservation importance (Port Holme) with the green spaces surrounding Huntingdon. According to the current A14 scheme, this section of the corridor would be reduced to much more homogenous, densely planted vegetation containing evergreen species. This would substantially lower its ecological value, especially for the diverse groups of invertebrates which use the existing corridor and are thriving in the current habitat mosaic with its highly variable environmental conditions.

### **Impact on species of conservation concern**

Apart from being a protected green space and important ecological corridor, the area is also an important habitat for wildlife, not least harbouring a number of red-listed species which enjoy a high level of protection. I have observed a range of bird

species of conservation importance, including *Turdus philomelos*, *Sturnus vulgaris vulgaris*, *Passer* sp. and *Pyrrhola pyrrhola*, in the area of the corridor. The song thrush *Turdus philomelos* is protected under the EC Birds Directive; the WCA 1981, and the Wildlife (Northern Ireland) Order 1985 (Cambridgeshire Biodiversity Action Plan website). Furthermore, specimens of another species of conservation concern, *Natrix natrix* have been observed on the site by our neighbours, while the local badgers regularly roam the site at night in search of food. If the proposed station access road is built as indicated, it will certainly have a strong negative impact on the local populations of all these species. This stands in direct contradiction to environmental legislation and policy (see e.g. Planning Policy Statement 9 – PPS 9) and to the goals and criteria clearly stated in Objective 3 of the Huntingdon West Area Action Plan Draft Final Sustainability Appraisal Non-technical Summary Document.

### **Wider environmental implications**

Apart from species of direct conservation concern, the area supports a wide range of other noteworthy species. These range from newts, bats, green and greater spotted woodpeckers, kestrels to a large variety of small garden and parkland birds. While many of these species might not enjoy a high level of protection, they are still an important part of Britain's environmental legacy, and their habitats should not be willingly destroyed (see also respective European legislation, e.g. 79/409/EEC). In relation to bat species, the statement made in an earlier reply letter by the Highways Agency to the previous version of the scheme that the area was "not likely to be important to foraging or commuting bats" stands in marked contrast to my own observations. Particular reference should also be made to the solitary bees observed at the site, which are of great ecological value especially in view of the general decline in pollinator species observed in Britain and other parts of Europe.

The scheme overall appears to be in contradiction to the National Planning Policy Framework. Section 11 paragraph 109 states that 'the planning system should contribute to and enhance the natural and local environment by ... minimizing impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity including by establishing coherent ecological networks that are more resilient to current and future pressures'.

### **References:**

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