

- 1. The Lincolnshire County Council (A15 Lincoln Eastern Bypass) (Classified Road) (Side Roads) Order 2014
- 2. The Lincolnshire County Council (A15 Lincoln Eastern Bypass)
 Compulsory Purchase Order 2014
- 3. Application In Relation To Proposed Compulsory Purchase Of Land Held By The Canal & River Trust

Department for Transport Reference: NATTRAN/EM/LAO/0084

Response to Objector's Addendum No.2 To Proof Of Evidence

Mr Alex Lake

OBJ/472/9

Introduction

The following are responses to further issues raised by Mr Lake in response to the LCC responses to his proof of evidence and questions (documents LCC3i, LCC3i1, LCC3i2 and LCC3i3) detailed in his addendum proof of evidence submitted on the 16th of August 2015.

Further Issues Raised by Mr Lake

1.0 AL Section 2.0 Increased Design Speed At Site Of Interest.

Response From LCC:

- **1.1** As stated in the proof of evidence submitted by Mr Chetwynd (LCC4 para 2.17): 'The new route will have a design speed of 100kph (with the understanding that there will be a 60mph speed limit)'. This continues to be the case and has not changed since the issue of the Errata on the 11th of August 2015 which sought to correct a discrepancy in the proof from the scheme that has been developed and is before the Inquiry.
- **1.2** The Errata sought to correct the description of the vertical alignment elements that have been used to provide a design that satisfies the requirements of the single carriageway scheme and provides the future proofing for a Dual Carriageway scheme.

2.0 AL Section 3.0 Introduction of High Load Route and Abnormal Load Route Requirement:

2.1 AL Page 4 Para 3.5 'With regard to the headroom declared at structures along the LEB route, based on the drawings lodged by LCC as part of the January 2013 planning application reference PL/0007/13 (L/0110/13) upon which planning permission was granted in June 2013 for the single carriageway scheme, the following table summarises the declared headrooms which to our knowledge remain in place today:'

Response From LCC:

2.2 The declared headroom's have been superseded by the Section 73 Planning Permission amendments consented on October 2014 as stated in LCC3i3. As noted previously, Planning condition 10a requires all details of permanent structures (including clearances heights) to be submitted for approval to the County Planning Authority.

2.3 AL Page 4 Para 3.6 'It is understood that the decision to designate the route as a combined HLR/ALR has occurred after the planning permission was granted in June 2013. We are unclear therefore what alterations have been required to the wider scheme, including the Washingborough Road roundabout to incorporate this change which has presumably been lowered'.

Response From LCC:

- **2.4** Minor elevation alterations were required to the Washingborough Road Roundabout to contribute to the additional headroom necessary to negotiate the Lincoln to Spalding Railway Line.
- 2.5 AL Page 4 Last Paragraph 3.5 'it is considered to be an omission on LCC's behalf that the revised designation is not documented within any of the published documentation thereafter. It was not an unreasonable expectation that such an important route designation be lodged within the December 2012 Route Appraisal & Justification Statement by LCC as this is the document that sets out matters of material alteration to the scheme and those with a planning and cost implication. Whilst it is accepted that projects are subject to alteration, and notwithstanding Condition 10a of the existing planning permission, there do appear to negative implications on cost that have not been fully considered'.

Response From LCC:

- 2.6 The decision to adopt the HLR and ALR designated was made in July of 2013 as part of the scheme development and is fully documented in para of LCC3i3.
- 2.7 The only significant change in terms of an individual element of the works that has a cost implication is the Lincoln to Spalding Railway Bridge which required the lowering of the carriageway underneath the structure.
- **2.8** The Heighington Road overbridge is already significantly in excess of the required headroom requiring no intervention.
- 2.9 The NMU bridges were only required to be lifted an additional 0.75 metres which has been largely assessed as being cost neutral as the additional earthworks required to accommodate this adjustment improves the earthworks balance.

2.10 AL Page 5 Para 3.6 'Another aspect of this route designation that must not be lost is that of the ALR. The axle weights associated with an ALR are significantly greater (potentially 60%-70% greater depending upon the load configuration) than those for roads designed for maximum legal axle weights. The damaging effects of such vehicles is not directly proportional to the overall vehicle weight, but in real terms an abnormal load could have up to 35 times the damaging effect that a normal road going heavy good vehicle would have. This means that road pavements and structures have to be designed accordingly. This could in turn have a direct cost impact on the entire LEB route, possibly requiring both additional thickness of asphalt (or increased maintenance) of estimated £700,000, and the assessment of the deck and piers at the Witham Crossing to account for both type HA and HB loading. Reference should be made to DMRB BD37/01. As part of this report, it is not possible to determine if and what the true cost impacts would be on the Witham Crossing, but such assurances should be sought from LCC'.

Response From LCC:

- 2.11 The damaging effects of such vehicles is not considered as part of the design of any highway pavement design as the frequency of such journeys is not considered to impact on the structural integrity of the pavement and is unlikely to shorten the pavement life. It is not possible to mitigate for the effects of overweight vehicles on the highway network and therefore every application to use the Network is assessed by the Abnormal Loads Officer at LCC on an individual basis.
- 2.12 With regard to the structures on the LEB all have been designed to Eurocodes. The River Witham Viaduct has been designed to BS EN 1991-2 relating to General Order under STGO (Special Types General Order) regulations for the appropriate SOV 250, SOV 450 and SOV 600. References to HA and HB loading are no longer relevant. Designing for abnormal loads at the onset will reduce the cost of assessing every request to check the structures every time the Overseeing Organisation (LCC) are asked to check the suitability for the loads proposed. The design also increases the redundancy within the structure which will future proof against any potential change in standards.
- 2.13 AL Page 5 Para 3.7i. 'The revised cross section has been modelled along the new vertical alignment and the model indicates that with additional retaining wall length and height along the north western boundary of the site, the alternatives remain within both the red line planning and blue line highway boundaries, with no requirement for additional land. The pile clusters at the western abutment can very easily be adjusted should there be any concern regarding working space and the scheme boundaries'.

Response From LCC:

- **2.14** Whilst the introduction of a deeper retaining wall to the west may allow for some savings in land take to the west (at considerable additional cost to the scheme) there is no clear demonstration of how the additional land take to the east can accommodate the eastern NMU route.
- **2.15** There is no evidence to support the statement that the pile cluster can be constructed within the Planning highway boundary.
- **2.16 AL Page 5 Para 3.7iii.** 'British Geological Survey data available at www.scans.bgs.ac.uk indicates that groundwater level is at 29m below well head level'.

Response From LCC:

2.17 Bore hole logging and ground water monitoring at the site found that beneath Hawthorn Road groundwater strikes were recorded during the ground investigations within the Blisworth Clay / Blisworth Limestone at depths of between 2.5m bgl and 6.5m bgl (30.7m AOD to 26.7m AOD), although piezometer monitoring readings would indicate the monitored groundwater table to be at a depth of approximately 11.0m bgl (23.0m AOD), within the top of the Lincolnshire Limestone. The monitoring data therefore indicates that the water strikes encountered at shallower depths relate to perched groundwater tables within the more permeable and fractured limestone bands within the Blisworth Clay / Blisworth Limestone. LCC's original concerns regarding ground water reduction and additional attenuation still stand.

3.0 AL Section 4.0 Effects on Costs

3.1 AL Page 6 Para 4.2 'The cost estimates below also take advantage of further interrogation of the traffic modelling by Mr Paul Moore. This has concluded that the alternatives 1 and 2 do not show evidence of forcing the need to signalise the Bunkers Hill – Hawthorn Road junction, nor the Outer Circle Road – Wragby Road junction over and above the Project Scheme and as such cannot be considered to attribute net costs to either of the alternatives. Nonetheless it is worth understanding how the costs promoted by LCC appear to be somewhat inflated when compared to benchmarked costs'.

Response From LCC:

- **3.2** LCC maintain their consistent view that works will be required to both of these junctions as a result of alternatives 1 and 2. Further details can be found in the proof of evidence and subsequent responses provided by Mr Smith. As such the costs for these schemes should be included as they are additional to the scheme which has planning permission.
- **3.3 AL Page 6 Para 4,3** 'LCC has provided cost data during the preparation of this addendum within their document LCC3.i.3. This data has been reviewed and it is considered that the net costs attributed to the alternatives are overly pessimistic and fall outside of normal benchmarked ranges for such schemes. It is also evident that LCC is adopting an incorrect bridge span'.

Response From LCC:

3.4 Due to time constraints the cost estimates provided by Mr Lake have not been investigated in any great detail. However, there do appear to be some inconsistencies.

Example, Mr Lake has estimated the cost of the removal of the retaining wall associated with the NMU bridge as £302k and the replacement retaining wall for the road overbridge (which is a longer and deeper structure as stated in the addendum) to be only £187k.

3.5 With regard to the benchmarking study, even if Mr Lakes assumed costs are judged as being at the lower level of the possible cost range, on the basis of LCC's assertion that they are required to mitigate the alternatives then they are still additional costs that the scheme does not currently include.