

Objectors' Alternative Proposals Alternative 4 Roundabout at Heighington Road to Fund Road Bridge at Hawthorn Road

- 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

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1. Introduction

The A15 Lincoln Eastern Bypass is a Major Project promoted by Lincolnshire County Council. The published Scheme includes the construction of 7.5km of single carriageway between the A158 Wragby Road in the north and the A15 Sleaford Road in the south. It also includes the additional NMU bridge at Hawthorn Road.

Alternative 4 involves the removal of the proposed overbridge at Heighington Road and a roundabout junction being provided to maintain access between Heighington and Lincoln. An NMU Bridge would have to be provided in lieu of the overbridge in order to maintain continuity with the current strategy of the scheme. The alternative has been proposed as a cost saving exercise that is intended to fund an overbridge at Hawthorn Road.

Alternative 4 was published in the Lincolnshire Echo on 23rd July 2015.

The County Council has carried out a desktop assessment of the Alternative but has not undertaken a detailed engineering design, or environmental assessment. The time available within the statutory process would make such detailed work unfeasible and the cost of a fully detailed assessment would not be justified in the County Council's view.

This note records the results of the desktop study assessment.

2. Engineering and Buildability

The main line of the LEB at the location of the overbridge in the current proposal is in deep cut at approximately 11 metres below existing ground level. In order to provide a roundabout at this location that complies with national design standards the cut would have to be increased to create a plateau for the junction for the following reasons:

- The roundabout would have to be constructed with a maximum long fall across its diameter of 2.5% in order to prevent vehicle overturning
- adverse long falls on the approaches to the roundabout would also have to be kept to a maximum of 2.5% in order to mitigate the occurrence of downhill overruns and uphill queueing caused by the stop starting of HGV's.

The depth of cut on the main line would have to be increased to approximately 14.5 metres and the side road approaches would therefore have to be cut to this depth. The side roads approaches would have to extend away from the LEB approximately 370 metres on each side of the junction incurring significant additional earthworks including the disposal of material from the resulting significant earthworks imbalance. This tie in could affect the access to the properties to the east of the roundabout.

The proposal would need to be future proofed to accommodate future dualling of the route. It would also split the climbing lane in the current proposal reducing the benefit of making such a provision due to the introduction of a large interchange that would interrupt traffic flows and reduce the opportunity for vehicles to overtake slow moving vehicles.

3. Environmental Impacts

The inclusion of an additional major intersection at this location would create a significant increase in noise due to vehicles braking / accelerating on the junction including HGV's on the uphill leg pulling away from the roundabout affecting some properties in the village of Canwick to the West and two properties to the East. There would also be increased airborne pollution associated with the stop / start nature of this type of junction.

The significant increase in the depth of cut would therefore result in a wider cut through the Lincoln edge which would increase from 70 metres to 160 metres wide at Heighington Road affecting significantly the visual impact of the scheme from the northern side of the River Witham Valley.

The proposed junction would also require street lighting which would impact visually on the landscape especially at night. A roundabout at this location would require the installation of a drainage pollution bypass separator (in a similar manner to all other roundabouts on the scheme) to mitigate the increased risk of fuel spillages associated with this form of junction.

4. Traffic, Safety and Economics

This alternative would potentially attract higher traffic flows through the village of Canwick as it would provide an additional access point into Lincoln from the LEB.

It will also add significantly to the dis-benefits and vehicle user costs of the scheme including the dis-benefits associated with the interruption of the climbing lane.

Although designed to national standards, the proposal would potentially be unacceptable to the cycling lobby as it introduces additional crossings of the LEB NMU route.

5. Consequential Impacts

This alternative will attract additional traffic through Canwick village, increasing traffic flows on Heighington Road. This will have a negative impact on residents of the village in terms of air quality, noise and will require intervention by the Highway Authority.

Although the consequences of this proposal have not been assessed by the traffic modelling team it is assumed that the increase in traffic on Heighington Road would require the Highway Authority to address any issues regarding the capacity of the existing simple T junction with the A15 at Canwick Hill. The likely solution at this location would be to signalise the existing junction at a significant cost. It is however beyond the scope of this assessment to establish these additional costs.

6. Land Requirements

The proposed alternative requires land that falls outside of the highway boundary for which Planning Permission exists for both the permanent works and the temporary works areas required to construct the alternative.

Will require additional land and as a result will need new Compulsory Purchase Orders. A change to the Side Roads Order will also be required.

7. Planning Considerations

A new Planning Permission would be required for the removal of the overbridge and the provision of the roundabout.

8. Cost\Funding

The net additional cost of providing the roundabout and additional NMU bridge in lieu of an Overbridge is approximately £9.26m.

As noted in Alternative 1, the cost of providing a roadbridge on Hawthorn Road is £4.84m. When this cost is included in the alternative the overall net cost is £14.10m. This would require the submission of a new Business Case to central government for funding and is unlikely to be capable of being justified before the DfT.

Additional costs would also be incurred due to the elongated construction programme to construct the roundabout.

9. Programme

The scheme programme would be delayed because of new planning application and CPO\SRO.

10. Conclusion

The Alternative, when compared with the Scheme with planning permission does not provide any advantages that justify investigating it any further as there is no net saving to be won for the removal of the overbridge.

There are significant environmental, cost and programme issues with this Alternative, given the increased visual impact and the need to obtain planning permission and publish new SRO and CPO's.

There is no net saving to be gained from this alternative that would be capable of funding a road overbridge at Hawthorn Road. Indeed the additional cost of the Alternative and the likelihood of the scheme failing to attract DfT funding would compromise the future of the LEB scheme.

There are significant disadvantages in traffic terms over the Scheme due to the potential for change in terms of vehicle movements through the village of Canwick.

In all other respects, the advantages offered by the LEB without the overbridge at Heighington Road are significantly reduced or negated by this provision. There is also significant additional cost when compared to the provision in the published scheme.

11. Matters Arising from the 2014 Inquiry

At the previous Inquiry Alternative No 4 (known as Alternative 6) was withdrawn by the promoter following the publishing of the Statement on the assessment of the proposal by LCC.

Appendix – Plan Showing Alternative 4

