

Updated Duty to Cooperate Position Statement on strategic highways issues associated with the Maldon District Local Development Plan

This Position Statement has been produced in collaboration with:

- 1) Chelmsford City Council (CCC)
- 2) Essex County Council (ECC)
- 3) Maldon District Council (MDC)

1. Purpose and background

A Position Statement (document reference CED10 Appendix 5) was submitted to the Maldon District Local Development Plan (LDP) Inspector on the 1st September 2014, to provide further information on highways works that are required at Eves Corner / Well Lane in Danbury, as requested in Paragraph 26 of the Inspector's Key Concerns (document reference IED06).

This document provides an update to CED10 Appendix 5, to outline the work which has been undertaken since September 2014 to identify appropriate mitigation works and funding to reduce delays at Eves Corner / Well Lane, Danbury, and to address concerns raised by CCC.

2. Work undertaken in relation to Eves Corner / Well Lane since September 2014

2a) Completion of highways assessments undertaken on behalf of Chelmsford City Council

CCC commissioned Rowland Bilisland Traffic Planning to undertake a review of ECC highways modelling assessments, to conduct spot check site visits at key junctions on the A414 in Danbury, including Eves Corner, during peak traffic periods in Spring 2014, a formal queue length survey of the A414 East in June 2014, and an assessment of pre-signals options at Eves Corner using LinSig¹. The report was presented to CCC's Development Policy Committee on 2 October 2014, and provided the following key conclusions:

- There would be a significant increase in queuing at Eves Corner over and above the existing situation with the proposed LDP strategic development and pre-signals in place.
- The development of pre-signals at Eves Corner would reduce current levels of congestion, however following proposed growth allocated in the LDP, queuing along the A414 during peak periods would be significantly worse.
- Concerns were raised regarding the A414/Well Lane mini-roundabout, based on traffic queuing that has been observed at this junction particularly in the PM peak period.
- The full signalisation of Eves Corner could enable the least queuing with the proposed LDP strategic developments in place.

¹ LinSig is a software tool which allows traffic engineers to model traffic signals and their effect on traffic capacities and queuing. As well as modelling the effects of traffic signals LinSig also optimises signal timings to reduce delay or increase capacity at a junction or group of interlinked junctions.

2b) Further highways assessment and modelling undertaken by Essex County Council in relation to Eves Corner / Well Lane

To inform further highways modelling, ECC undertook a traffic count at the Well Lane junction in September 2014. This is in addition to previous counts undertaken at the Eves Corner junction in October 2013. Following an assessment of the report produced by Rowland Bilsland Traffic Planning, ECC concluded that Linsig would be the most appropriate tool to model the Eves Corner junction/. This is consistent with the approach taken by Rowland Bilsland Traffic Planning, and therefore provides a good basis to review the results of the assessments of Eves Corner junction. The existing Well Lane mini-roundabout was modelled in Arcady with the proposed priority junction layout being modelled in Picady.

A draft highways report has been produced by ECC (November 2014) and outlines initial findings of the further highways modelling undertaken in relation to Eves Corner and Well Lane. Its initial conclusions are:

- Following an assessment of concerns raised by Rowland Bilsland Traffic Planning, ECC do not consider that background growth in the December 2013 Highways Technical Note (EB004b) is underestimated. There has been negligible growth in traffic over the last 10 years on the A414 (ECC Annual Average Daily Traffic monitoring sites, 2000 – 2013 and manual classified turn counts at Eves Corner). ECC modelling has therefore continued to use the same traffic flows as the December 2013 study (EB004b).
- Modelling of the proposed pre-signals arrangement at Eves Corner has indicated that, in capacity terms, they should provide a minor, short term improvement in queuing over the existing double mini-roundabout layout. However, the proposals tested are in concept only and have not been reviewed in detail for engineering feasibility or road safety.
- Video observation of the A414 / Well Lane mini-roundabout shows that, although traffic flows are reasonably heavy, the junction generally operates well with minimal delay for straight-on movements on the A414. Traffic can, however, be quite slow moving and any obstruction can lead to delays extending back some distances. Eastbound delays in the PM peak could arise from a rippling effect of slow-moving traffic through Danbury caused by the uphill section, sharp bends and Eves Corner. However, this is not clear and could also be attributable to vehicles slowing for the mini-roundabout, zebra crossing and bus stop.
- The modelling assessment of the A414 / Well Lane intersection has indicated that a priority junction could be beneficial in terms of capacity on the A414 in place of the existing mini-roundabout arrangement. This will assist in prioritising A414 movements over the minor road.
- The advantage of both the pre-signals layout at Eves Corner and the priority junction at the A414 / Well Lane is that the proposals favour through movements on the main A414. This ensures that the minor roads in and around Danbury will become less attractive to drivers. However, traffic queues will still be prevalent at these junctions.

In relation to conclusions in the report by Rowland Bilsland Traffic Planning regarding the full signalisation of Eves Corner, this was based on results provided by ECC in EB004b. However, ECC is currently undertaking further Linsig modelling of full signalisation at Eves Corner. The results of this modelling will be incorporated into the final highways report submitted to the LDP Inspector as document reference EB004d.

2c) The identification of funding for future mitigation works on the A414

The South East Local Economic Partnership (SELEP) has prioritised £2m from the Local Growth Fund, matched by a contribution of £2m from ECC, for a package of measures to reduce congestion and improve journey times along the A414 Maldon to Chelmsford route corridor, and assist in the delivery of new homes and economic growth in Maldon and Heybridge. ECC Cabinet Member for Highways and Transportation has agreed to prioritise four junction improvement schemes at A414/B1018 Limebrook Way, A414/Spital Road, and Eves Corner and Well Lane in Danbury. Improvements at Eves Corner/Well Lane have been identified as preferred projects to receive part of this funding. Project proposals, including specific scheme designs, have been prepared and costed, and will be submitted to SELEP in early 2015. In order to receive LGF monies these schemes are required to have commenced by 2016/17, which will ensure the early delivery of key infrastructure identified in the LDP.

3. Assessment

The highways assessment produced by Rowland Bilisland Traffic Planning, and the emerging results of further modelling undertaken by ECC, have concluded that:

- Delays at Eves Corner and Well Lane will still be prevalent following the development of growth allocated in the LDP.
- Pre-signals at Eves Corner will provide a minor short term improvement over the existing layout and will moderate the impact of growth allocated in the LDP, however queuing above current levels will still be prevalent at this junction

Further modelling by ECC (November 2014) reinforces observations made on site in that delays are experienced at Well Lane, but traffic rarely comes to a complete standstill for through movements. It is not the junction's performance itself that is the major factor in delays in Danbury, but a rippling effect back from Eves Corner, the sharp bends that precede it and the uphill section towards the Griffin pub. However, this is not clear and could also be attributable to vehicles slowing for the mini-roundabout, zebra crossing and bus stop.

However, ECC proposes a priority junction to prioritise traffic on the strategic A414, which represents a capacity upgrade on the current layout. Pre-signals at Eves Corner and the priority junction at Well Lane will favour movements on the A414, ensuring minor roads around Danbury are less attractive to drivers.

In modelling the potential wider impact of the LDP at Danbury detailed modelling has assessed a staggered junction, full signalisation, and pre signals at Eves Corner, and a priority junction at Well Lane. Consequently, all parties agree that sufficient highways modelling has been undertaken to seek to identify highways improvements to reduce the impact of growth allocated in the LDP. Based on the modelling undertaken and all potential options considered, the development of pre-signals at Eves Corner and a priority junction at Well Lane represent the best available options for reducing existing and future levels of congestion on the A414 in Danbury in the short term. However, these will not solve the predicted traffic impacts and significant delays will remain at 2026. All parties acknowledge that any further significant reductions in delays can best be achieved by the implementation of a strategic solution. The Secretary of State has recently announced funding for the A12 to be dual 3 throughout between Chelmsford and the A120, to be completed by the end of Road Period 1 – 2021. All relevant parties will continue to lobby for a link from the B1019 to an appropriate junction on the A12 to address issues in the Maldon and Heybridge area. An additional

long term solution to delays at Eves Corner may be the development of a Danbury bypass, but this is outside the reasonable scope of the LDP.

4. Chelmsford City Council's Current Position

For the avoidance of doubt CCC considers:

- That the potential highways implications of the proposed growth in the LDP have been significantly and suitably assessed through the various studies undertaken by Essex Highways (on behalf of MDC) and by CCC (document references include EB004a,b,c and EB065).
- Although there are some differences in the methodology and transport assumptions used to underpin the Essex Highways and CCC studies (e.g. growth in car ownership and some methodology used in Linsig modelling) there are no outstanding strategic cross-boundary highways matters that require further appraisal.
- The proposed mitigation measure of pre-signals at the Eves Corner junction is the only option for reducing potential traffic impacts post-development in the short-term. A staggered priority junction or full signalisation would not be appropriate and potential longer-term solutions (e.g. a new junction along the A12) would be far beyond the reasonable scope of the current LDP.
- That the potential impact of development traffic on the Well Lane mini-roundabout could be acceptable with a priority junction in place. CCC therefore supports this proposed mitigation measure. However, it specifically requests that it be identified as a Section 106 requirement of strategic sites S2 (a) and S2 (d) in the LDP to ensure its implementation.

Notwithstanding the above, CCC remains of the view that the level of development traffic associated with Maldon's strategic sites through Danbury is anticipated to result in a severe adverse impact at the Eves Corner junction. This is considered contrary to paragraph 32 of the NPPF which explains that development should only be prevented or refused where the residual traffic impacts are severe. Whilst this is subject to interpretation, CCC considers that the residual impact (post-mitigation) as assessed is likely to be severe and therefore unacceptable.

CCC considers that an alternative option could be for MDC to re-consider the LDPs current distribution of major growth and explore locating more of its strategic housing developments in other parts of the District, in order to reduce the traffic impact on Eves Corner junction. CCC accepts that this option would not be supported by MDC and regrets that it would undoubtedly require the recommendation of Major Modifications which could significantly delay or even halt the progress of the LDP.

5. MDC's Current Position

The LDP seeks to meet the 'objectively assessed needs' for housing as required by NPPF, and in so doing necessitates a significant uplift in the amount of future housing development required in the District. The LDP has sought to contain the majority of growth in the District to the most sustainable, accessible and appropriate locations within and adjacent to the main settlements taking into account environmental and infrastructure constraints and the need to protect the rural character of the District. MDC believes that through the strategy set out in the LDP, the concentration of development will enable the provision of key infrastructure necessary to enable strategic growth to

take place in a sustainable manner, including increased local highway capacity, improved public transport provision, and increased schools provision. Further justification of the growth strategy within the LDP is provided in MDC's Hearing Statement (paragraph 2.19 onwards, Matter 2, Question 2).

MDC supports the assessment work undertaken by ECC and conclusions regarding appropriate mitigation works required at the Eves Corner and Well Lane junctions in Danbury (EB004b and d). MDC/ECC believe that the most appropriate solution for addressing wider highway issues for the District is through a longer term solution regarding the A12, which is beyond the reasonable scope of the LDP. The recently announced Road Building Strategy (December 2014) in the Autumn Statement included commitments to upgrading the A12 up to 2021, including widening to 3 lanes from Chelmsford to the junction A120 south of Colchester.

In addition, developers associated with the South Maldon and North Heybridge Garden Suburbs will be required to contribute towards, in partnership with public transport operators and ECC, a public transport strategy which will focus on improvements to existing routes and potential new services as required from Maldon District to key wider destinations including Chelmsford (including new station at NE Chelmsford), Colchester and Witham.

6. ECC'S Current Position

All parties agree that all reasonable options have been considered at Eves Corner to help mitigate the potential impact of the LDP at Eves Corner. In so doing some additional mitigation has been identified at Well Lane, which in tandem with mitigation at Eves Corner will assist the flow of traffic on the A414, and prioritise such movements. Both schemes have been prioritised by ECC for funding and delivery, as part of the SELEP Local Growth Fund, and business cases are well in progress to commence schemes by 2016/17.

Video observation of the A414 / Well Lane mini-roundabout and the local area, including the Eves Corner junction, does indicate high levels of traffic in the peak hours, but which can be expected given its status as a strategic primary route providing a continuous and direct route from Maldon to the primary destinations of Chelmsford and the A12. It is recognised that in places the A414 will need to route through populated areas but this should not detract from its function as a key primary route. While queues can form on the A414 approaches to Eves Corner in peak hours, traffic is seen to still be moving, albeit slowly.

Video observation of the A414 / Well Lane mini-roundabout shows that, although traffic flows are reasonably heavy, the junction generally operates well with minimal delay for straight-on movements on the A414. Eastbound delays in the PM peak are, instead, probably attributable to a rippling effect of slow-moving traffic through Danbury caused by the uphill section, sharp bends and Eves Corner.