

THURSTON PARISH COUNCIL

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30th October 2017

Mr P Isbell
Corporate Manager – Growth & Sustainable Planning
Mid Suffolk & Babergh District Council
Endeavour House
8 Russell Road
Ipswich
IP1 2BX

Dear Mr Isbell,

CONCERNS REGARDING THE RESULTS OF AECOM HIGHWAYS ASSESSMENT - THURSTON

We write to inform you of the serious concerns we have regarding the recommendations within the AECOM reports on Highway matters associated with the large-scale development proposed for Thurston. There are 2 areas we consider the solutions proffered to increase capacity stemming from the developments are both unsafe and will result in serious harm.

1. A143/ Barton Road (Bunbury Arms) Junction

Scope of the Report

Both the Report and SCC indicate that, following mitigation, this junction will operate at or near capacity; however, the AECOM report, as far as can be determined¹, does not take account of the similarly large developments proposed in the surrounding villages, the 97 apartments already under construction at the Granary in Thurston or the very large scale business and domestic development currently happening and planned by St Edmundsbury Council – all of which are likely to contribute to the traffic density at the junction. This is a major shortcoming that, in our opinion, throws the validity of the report's analysis into question.

The Report recommends a number of measures be implemented in order to satisfy the capacity and safety issues. These include, but are not limited to, a full resurfacing of the roads up to the junction, fitting street lighting, changes to the carriageways,

¹ It is assumed that the modelling out to 2021 has included some form of road use increase based on traditional growth expectations. However, the details of these growth assumptions are not transparent within the report. Growth within Thurston, the surrounding villages, the St Edmundsbury area and the A14 corridor is anything but traditional. The scale is unprecedented in recent years and we suspect it has not been accurately reflected within the reports.

the fitting of traffic lights etc. We ask for confirmation that the current S106 agreement covers these in full. If not, then assurance is needed that funding will be forthcoming for the full gamut of works and the scheme implemented.

Identified Problems

AECOM recognise that there are a large number of “problems” associated with the junctions and propose recommendations. The most significant of which are highlighted below.

Problem B6. The Report states:

“Narrow through-lanes may result in side-swipe collisions with right turning vehicles or head on collisions with oncoming vehicles. The proposed junction features A143 through-lanes of 2.5m width either side of the 2.5m right turn area. Site observations revealed that there were large numbers of large vehicles (HGVs, agricultural vehicles and buses) using the A143 and the relatively narrow through lanes may result in side-swipe collisions between larger vehicles and waiting right turners or head-on collisions between larger vehicles and opposing vehicles.”

It recommended that wider A143 through-lanes are provided through the junction. However, the Designer response states that:

“The limited extent of public highway adjacent to the junction provides a constraint to the provision of wider A143 through-lanes at the junction. The provision of 2.5m lanes adheres to standards set out in DMRB Volume 6 TD 50/04.”

However, examination of the junction diagrams clearly shows how “tight” the lanes are and the close proximity when large vehicles pass, thereby reinforcing the original comments made regarding safety concerns in the Report. The maximum vehicle width is 2.55m², with refrigerated lorries being allowed up to 2.6m³– greater than the lane widths proposed. The Designer’s response dismisses the reality of the concerns and is a less than optimal answer to the risks that remain.

The diagrams also identify very short distances back from the junctions to the point of turn into the middle lane for right hand turns. Again, this is less than ideal and it is likely to cause a backlog on the through lane if more than one large vehicle wishes to turn right. Additionally, the risk of a rear end collision is increased.

Problem B1. AECOM states that:

“Opposing gap seeking right turners will have their forward visibility to oncoming traffic masked by vehicles waiting in the opposing right turn lane. This may result in right-turning vehicles pulling out into the path of oncoming vehicles continuing along the A143.”

and they recommend a:

“hooking right turn layout”.

They state:

“The non-hooking right turn layout and stagger of the junction will result in vehicles needing to undertake an awkward ‘S-type manoeuvre’ (involving driving a short distance along the opposing traffic lane before making the

² www.gov.uk

³ researchbriefings.files.parliament.uk/documents/SN00654/SN00654.pdf

turn) in order to avoid other vehicles waiting in the opposing right turn lane and at the minor road stop lines. This may result in vehicles striking other vehicles waiting in the opposing right turn lanes or at the stop lines or head on collisions with opposing vehicles on the A143 mainline giving their extended exposure in the opposing carriageway.”

However, the AECOM Safety Audit – Designer’s Response states that: “Geometrical constraints posed by the alignment of the minor arms means that a hooking arrangement would not be possible in this location.”

It goes onto say that:

“Vehicle swept path analysis has been undertaken (see 60445024-ATR-C-0001-B in **Appendix D**) to demonstrate that vehicles can safely manoeuvre from the proposed right turn lanes on the major road to the minor arms. “.

However, the associated diagrams clearly indicate vehicle paths infringing on the hatched lines and opposing lanes in a number of scenarios. The viability of this mitigation is again called into question.

Problem A1. AECOM states that they witnessed speeds in excess of the current 40mph limit and if :

“ drivers travel through the scheme at excessive speeds this may result in collisions (failure to stop/ turning/ rear end shunt) occurring at the junction or potentially rear end shunts occurring on the A143 approaches given the relatively large queues predicted in the LINSIG outputs.”

But that the:

“audit team has not been provided with details with regards to the speed limit reduction proposals (i.e. locations of speed limit change transitions, or any speed limit reduction signage/ gateway measures should they be proposed) and therefore has concerns that drivers may not adhere to the proposed speed limit, particularly as the rural character of the A143 and the junction is likely to remain following the scheme.”

More work must be carried out to ensure that speed limits measures would be effective before this recommendation can be deemed viable.

Problem B3. The Report highlights the tight turn into the Bunbury Arms car park. The associated swept path analysis, in theory, shows that large vehicles could negotiate this turn; however, it is clear from the diagrams that traffic coming from the East will be extremely tight against the boundaries and the hatched centre section of the road. In practice it is more likely that large vehicles will infringe the hatched area and overrun the curbs. Drivers will take the easiest path, not the theoretical one assumed within the Report. Again this is a sub-optimal solution designed as a best “fit” which adds further to the uncertainty of the overall design.

Problem B5. The Report states that:

“Junction inter-visibility through third party land may cause collisions when signals not functioning”

and that the consequences:

“....may result in collisions occurring in these circumstances.”

It recommends that:

“the junction design is reviewed/ amended to ensure that the junction inter-visibility zones remain within highway owned land.”

However, the Designer's response is:

"Due to the limited extent of public highway adjacent to the junction it is not possible to achieve intervisibility between Brand Road and the A143 eastern arm in accordance with the requirements of DMRB Volume 6 TD 50/04."

This problem remains, as do the associated dangers.

Capacity

The AECOM report looks at a number of scenarios spanning a base line in 2017 out to 2021 with up to 827 dwellings. The key point to note is that with either 689 or 827 dwellings the junction is very close to capacity and queue length problems persist. Indeed SCC's Transport Policy and Development Manager has stated:

"Any future development in Thurston must, in the Highway Authorities opinion, address the following constraints;

- No further capacity can be provided at the A143 Bury Road / Thurston junction within the existing highway boundary for traffic travelling to / from the Thurston area.
- The C692 / C693 Thurston Road (Fishwick Corner) cannot be improved further in terms of either road safety or capacity due to the highway boundary constraints.
- Any significant future development is likely result in the C560 Beyton Road / C692 Thurston Road / U4920 Thedwastre Road (Pokeriage Corner) junction reaching its theoretical capacity. This work has not investigated the potential for mitigation but the site has similar highway boundary constraints as the other junctions.
- The C291 Barton Road under the rail bridge is at capacity and without mitigation this may restrict future development in the area."

The AECOM Technical report admits that following mitigation:

"the junction is forecast to operate over its theoretical maximum capacity on Thurston Road South in the AM peak hour with an RFC of 1.38, and on the A143 West in the PM peak..."

It also recognises that:

"...in terms of delay, the A143 traffic would be penalised compared with the existing priority junction arrangement,"

These points are based on the Report as written and do not, as far as we are aware, take into account the further demands on the junction already highlighted which we believe are not accurately considered in the Report. Consequently, the junction is likely to be well over capacity with its attendant safety issues exacerbated should development in Thurston, the surrounding villages and Bury St Edmunds go forward.

Summary

Were there to have been a small number of minor problems associated with the junction then a plausible solution might have been possible. However, in this case there are a large number of significant problems many with either no, or sub-optimal, solutions which, when taken in aggregate, render the overall plan unviable. It is disappointing that no assessment of the cumulative impact of the proposed sub-optimal recommendations has been carried out. The scope to design a suitable junction is limited by the third party land that has resulted in a third lane being squeezed into what is already a tight junction.

This sub-optimal solution is rendered still weaker by the fact that future large-scale developments have not been taken into consideration in the Report. We therefore believe that the proposals and recommendations within the Report are invalid and should not be accepted as a viable solution to the problems at the Bunbury Arms Junction.

2. Fishwick Corner

Fishwick Corner has an unenviable safety record. Since mid-July 2017 there have been 6 accidents⁴ at the junction. The AECOM Report states that the junction is already over the “desired theoretical maximum” during AM peak hours and will be over capacity should 689 (or more) dwellings be approved.

The proposed “improvement” entails changing the road priority, adding stop signs and reducing the speed limit from 60 to 40 mph. However, the report acknowledges that some drivers don’t adhere to the current speed limit of 60 mph.

The Report highlights that:

“The swept path plans show articulated vehicles undertaking a number of manoeuvres at the junction. All of the manoeuvres shown demonstrate significant overrun onto the opposing carriageways and given that this junction is currently well used by large agricultural vehicles, HGVs and buses, the audit team are concerned that this may result in head on/ side swipe collisions involving these turning vehicles. Large vehicles overrunning opposing lanes may result in collisions.”

It recommends:

“that the junction is amended to provide adequate space for larger vehicles to manoeuvre in order to minimise potential conflicts at this location. “

However, the junction cannot be amended (other than minor kerb realignments) due to third party land issues but the Designer’s response dismisses this serious issue by stating as a solution:

“Large vehicles which will require the use of opposing lanes to make turning manoeuvres at the junction will wait for opportunities where the required width is available prior to making the necessary manoeuvres.

This has failed to keep the junction safe in the past and will no doubt, with still greater traffic flows, fail in the future. The swept path analysis diagrams clearly demonstrate the severity of the lane overlap.

Bearing in mind the accident rate associated with the Give Way signs currently in use at the junction, it is somewhat incredulous to believe that AECOM wrote⁵ on 5 Oct 2017:

⁴ 17/7/17- 2 cars, police cars, ambulance. 1 Stretcher case.

25/7/17 - 2 cars.

13/8/17 - 2 cars, one on its side, fire service, paramedics and police

27/8/17 - 2 cars, 3 fire engines, Air ambulance, ordinary ambulance, police. 3 stretcher cases. Took over one hour to release a distressed child

14/9/17 - at least 2 cars involved. 2 police cars and fire engine attended.

26/10/17 - 1, possibly 2, cars involved. Mini appeared to be a write off, police in attendance,

⁵ Mark Watson to Bevin Carey ref 60445024/RAS1/Fishwick Corner dated 5 Oct 2017

“According to DMRB a stop line junction, as opposed to a give-way junction, is provided ‘where there are severe visibility restrictions’. It appears on the plans provided that at the western approach to the junction the required visibility splays of 2.4m x 120m can be achieved (with the removal of some vegetation from within the highway boundary). **Therefore it is suggested that a standard give-way junction could be provided at this location.** “
(Our emphasis in bold).

Summary

Third party land considerations prevent the design of a viable solution at Fishwick Corner and most of the risks that currently result in a high accident rate at the junction remain. Clearly, the same concerns regarding the failure to include expected expansion from the surrounding area is as pertinent here as it is at the Bunbury Arm junction. We do not therefore believe the risks at Fishwick Corner have been viable mitigated.

Overall

We do not feel that the Highway changes proposed adequately address the very real safety and capacity risks associated with the 2 junctions. We do not, therefore, accept that a viable solution to the problems associated with increased traffic flows resulting from the expansion within Thurston and the surrounding area has been identified. Until such serious safety issues have been adequately addressed we believe it would be premature to make a determination on the proposed developments within Thurston.

Yours faithfully,

Victoria S Waples

V S Waples, BA (Hons), CiLCA

Copies to:

Members of the Mid Suffolk Planning Referrals Committee: Councillors Roy Barker; Gerard Brewster; Michael Burke; David Burn; John Field; Julie Flatman; Jessica Fleming; Kathie Guthrie; Lavinia Hadingham; Matthew Hicks; Barry Humphreys, MBE; Diana Kearsley; Anne Killett; Lesley Mayes; Sarah Mansel; Wendy Marchant; Dave Muller; Derek Osborne; Jane Storey; Keith Welham and David Whybrow

County Councillor Penny Otton; District Councillors Derrick Haley and Esther Jewson
Michael Aves

