

Town and Country Planning Act 1990 (As Amended) Local Highway Authority (LHA) Response

Application Reference	18/00083/CON		
LHA Reference	19871		
Proposal	Mixed use urban extension for up to 1000 dwellings, local centre, employment, primary school, community facilities, footpaths/cycleways, A427 Weldon relief road, roads, car parking, balancing ponds, formal and informal open space, landscaping and associated development		
Location	Weldon Park, Corby		
Date consulted	8 th October 2018	Date sent	31 st October 2018

In the first instance I would apologise for the delay in the response beyond our normal 21 days. The submitted *A427 Oundle Road, Capacity Assessments – Transportation Technical Note*, (“The Technical Note”) did not, however, cover everything we were anticipating but has informed consideration of implications, options and opportunities arising from the proposal to remove the currently required restriction to movements out of the development onto the A427 when the Development Link Road is completed and open to traffic.

1. Background

- 1.1 As reiterated in our original consultation response 5th March 2018, the intent behind the right turn restriction onto the A427 that this application seeks to lift, was to protect Weldon and reduce inappropriate movements through Weldon.
- 1.2 You will recall in particular the need to ensure that the implications within Weldon of the lack such a restriction were fully considered. In addition that it is important to ensure that the current A427 development roundabout is capable of accommodating all movements that it would be required to absorb, (those associated with through movements, (including those from Priors Hall), from the A43 to the A427, Weldon Park, the recently consented Mulberry Development and of course any movements that were previously restricted.
- 1.3 Following on from such an assessment if impacts are identified resulting from the proposal it is important to ensure that adequate mitigation is in place to address such impacts. That may take the shape of additional measures or amended measures over and above those already planned / secured as part of the Weldon Park development.
- 1.4 We have therefore reviewed the Technical Note submitted with the above in mind, noted some assumptions made within it, reflected on the implications that arise and come to a number of conclusions based on the Technical Note.

2. Trip Rates

- 2.1 As you will be aware, one of the key building blocks of an assessment are trip rates and previous iterations of assessments associated with this proposal, indicated that TRICS (the nationally accepted database of trip rates) derived rates would be used based on mixed housing data from TRICS, which gives a low average rate. However, as they were planning to use 85th percentile rates, the final resultant rate was not necessarily unreasonable. We therefore considered that trip rates had been agreed.
- 2.2 We have noted that alternative trip rates have been used in the Technical Note. These have been derived from counts at the A427 / Weldon Park roundabout less presumed construction trips.
- 2.3 Those rates have then been used for all new development trips including trips generated from Priors Hall. Whilst we may have indicated that as counts were required at the Weldon Park / A427 roundabout that it may be possible to see if actual trip generation from Weldon Park with its current mix of development and facilities deviated much from the agreed rates, this was not agreement to use such rates for all new development which would not be appropriate.

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- 2.4 Having now seen the derived rates it appears they are notably low and should, in our view be treated with some caution as they may not be representative of the development when built out and would certainly not be representative of any other development.
- 2.5 As such, it is likely that trips assessed within the Technical Note for Mulberry but mainly Priors Hall would be low and, therefore, highly conservative and would underestimate any impacts. This would result in capacity assessments indicating greater capacity available than may be the case.

3. Count data

- 3.1 Whilst it may be available, we could not locate queue length survey data within the Technical Note. This would be used to validate the base line junction capacity assessments to ensure the modelling accurately reflects actual traffic patterns and behaviours so that future predictions and modelling at the same junction would have greater robustness.
- 3.2 It is possible that such local validation and such surveys have been done but simply not submitted. Clarification on this matter is requested and submission of such queue length surveys requested to close out this query.
- 3.3 Clearly if such surveys were not undertaken then full validation of the base line modelling is not possible.

4. Junction Capacity

- 4.1 Junction geometry has been taken at face value and assumed to be accurate.
- 4.2 As you will be aware, our position on junction capacity is clear and consistent in that any junction with a Ratio of Flow to Capacity, (RFC) of 0.85 or above is of concern and may require mitigation to at least nil detriment status. Clearly an RFC of 1.0 is unacceptable and represents a junction that requires mitigation in our view. In such cases we would expect to see proposals for such mitigation to see what can be done to address the issue identified to at least nil-detriment.
- 4.3 However, the Technical Note has used the RFC of 1.0 as such a threshold and has not proposed any mitigation where junctions have reached that level.
- 4.4 We are struggling to locate any reference to through traffic movements on the Development Link Road which would clearly impact on the capacity of the Weldon Park / A427 roundabout. Clarification is sought on that point.
- 4.5 The addition of references to Priors Hall is of some interest. Clearly the Weldon Park development being consented after Priors Hall should accommodate it and not prejudice it in any way. The Technical Note does, however flag up some concerns.
- 4.6 The capacity of the existing A427 / Weldon Park Roundabout is reported to work within capacity without the restriction that this application seeks to lift. However, it is noted that the capacity assessment appears to lack any account for through movements between the A43 and the A427 and vice versa and has used lower than anticipated trip rates.
- 4.7 This will clearly impact on the capacity of the roundabout as would any other adjustments for trip rates associated with Priors Hall traffic. It cannot, therefore be confirmed if the roundabout would work with all movements in the future year without the restriction in capacity terms. Some modification may, therefore be required.

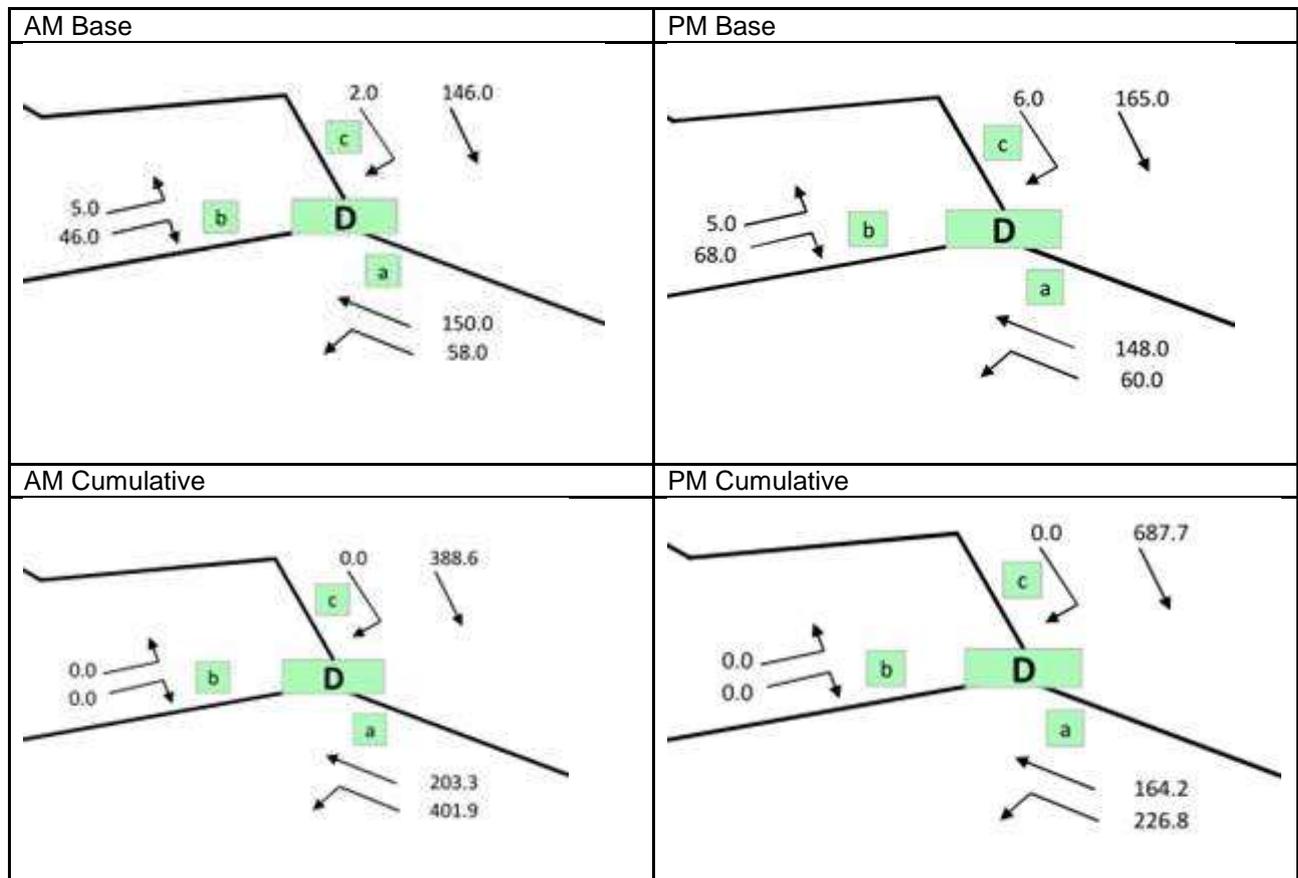
5. Redistribution and Impacts

- 5.1 Clearly the restriction of the right turns out of Weldon Park was a key consideration and that, along with the works on Kettering Road to restrict movements, were part of a strategy to minimise the impacts on Weldon and its internal streets secured at the Outline Stage.

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- 5.2 It is, therefore important to look carefully at the impacts of allowing movements that were previously restricted. We have, therefore interrogated the flow diagrams within the submitted Technical Note and noted a number of matters that are of concern.
- 5.3 In particular the additional movements along Church Street. To illustrate this, we have extracted below the AM and PM network diagrams for the A427 / Church Street junction (Junction D):



- 5.4 Attention is drawn to the existing flows and turning movements into Church Street. It can be seen that in the Base Line AM there are 150 movements straight on the A427 (from the development direction) with 58 vehicles turning left down Church Street. In the PM it is similar, 148 and 60 movements respectively.
- 5.5 However, looking at the cumulative flows, the same junction will see 203 movements straight on in the Am peak and 402 turning into Church Street. The PM case shows 164 straight on and 227 turning into Church Street. Clearly if higher trip rates are used and movements from through movements turn at the roundabout into Weldon then the volumes would increase.
- 5.6 You will be fully aware of the width, alignment and nature of Church Street. In our view, such a substantial increase in movements along Church Street is fundamentally unacceptable in safety and capacity terms. The road is simply unsuitable in its current form to accommodate such traffic levels. Clearly you may also have a view in residential amenity terms.
- 5.7 It is noted that the impact is not acknowledged or referenced in the Technical Note and as such no mitigation is offered.
- 5.8 Whilst the junction appears to work in capacity terms, (based on the trip rates used, taking the geometry at face value and with the cautions that go with that) if that were the only consideration, the wider amenity and safety implications are substantial.

5.9 It is suggested that the issue should be considered further and mitigation secured in lieu of the loss of the restricted turn that this application seeks to lift. It may be that an alternative strategy may be required and as such the basis of the "Option 4" plan used thus far may need to be revisited.

5.10 It has been noted that there has been no assessment of 'with and without' the tear drop roundabout within the Technical Note.

6. Traffic Calming

6.1 The assessment is reliant on traffic calming being implemented in Weldon (particularly a one way section of Kettering Road). No details of the traffic calming are provided, but the condition should not be discharged until such time that the traffic calming scheme is in place (assuming the issues raised above can be successfully resolved).

7. Teardrop Design

7.1 The principle secured at the Outline Stage was that movements out of Weldon Park onto the A427 should be restricted. The developer has promoted a teardrop design. However they have submitted a safety audit as part of this application which indicates that there are safety implications with the design solution to such a restriction. These concerns are noted. As such if you are minded to reject this application then that should not necessarily mean that the teardrop design is approved. An alternative restriction should be submitted for consideration that would achieve the same aim in terms of restricting movements. without the safety issues that the developer has identified.

8. Summary and conclusion

8.1 The Technical Note submitted for consideration 8th October 2018 has used trip rates that have not been agreed and whilst the traffic counts used and modelling may have had queue length survey validation this has not been submitted for consideration. In addition the lack of through movements on the Development Link Road casts some doubt on the capacity calculations and conclusions drawn on the A427 / Weldon Park Roundabout without the right turn out of Weldon Park restriction.

8.2 The modelling submitted clearly shows a substantial and significant increase in movements along Church Street which is not acceptable in highway safety terms. The road is unsuitable to take that volume and increase in traffic movements without substantial modification. Clearly you may also wish to consider the residential amenity issues of that increase in movements and the impacts that substantial works may have as well.

8.3 The lack of a restriction on movements out of Weldon Park would appear to generate a number of challenges in safety and amenity terms that need to be appropriately considered and mitigated. You may, therefore wish to obtain further proposals from the developer as to how they intend to address the increased traffic their Technical Note has identified on Church Street.

8.4 In conclusion whilst there may be a case to challenge some of the assumptions made in the Technical Report it appears clear that there are significant impacts on Church Street as a result of the lifting of the previously proposed restriction.

Signed



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