From: Aaron Tilley
Sent: 17 November 2021 15:07
To: Joshua Ambrus
Cc: Lynnie Ler
Jonathan Harper
Subject: RE: RE: Thorley Lane, Timperley

Good afternoon Joshua,

Thanks for sending through Mr Oates correspondence in objection to the application for residential development on the World of Pets site.

In the first instance, we would highlight that the Local Highway Authority has considered the application and concluded that the "the development itself would not constitute a severe traffic impact".

There are three clear elements to Mr Oates comments which are considered in turn below.

## Thorley Lane/Clay lane/Wood Lane Junction Model Validation

It is suggested that the observed queue lengths and modelled queue lengths in the 2019 AM and PM peak hour periods at the junction are not comparable.

Whilst the observed queue lengths are not identically reflected in the junction model, this does not suggest that the operation of the junction is misrepresented. Mr Oates has kindly summarised the queue lengths for the AM and PM peak hour periods which confirms similar vehicle numbers on the Thorley Lane ( n )/Wood lane approaches in the AM peak and Clay Lane/Wood Lane approaches in the PM peak hour periods. There are only minor discrepancies on the remaining approach roads and reflect the slow moving nature of vehicles on approach to the junction rather than queuing traffic.

It is considered that the junction model provides a suitable representation of the highway network operation and is appropriate for determining the traffic impact of the application.

## Thorley Lane/Clay lane/Wood Lane Junction Model Results

It should be noted that the junction assessments have been considered by Trafford Council and determined to be acceptable.

Notwithstanding the above, there is clearly a point of reference that requires further clarification.

The submitted TA states "once an RFC is calculated above 1.00 the associated queue length increases at an exponential rate and is not a true reflection of the development impact."

The above statement is correct in that junction performance becomes highly sensitive once the RFC exceeds theoretical capacity (1.00). This is clearly reflected in the table below (Table 6.9 of the submitted TA).

The minor increase in RFC between the base and base plus development scenario on the Thorley Lane (s) approach arm results in little impact on the queue length. However, an RFC increase of similar magnitude on the Wood Lane approach produces an unrealistic increase in queue length. This is particularly noteworthy as the proposed development would generate 15 and 6 additional
vehicle movements on the Wood Lane approach in the AM and PM peak hour periods respectively which is clearly not representative of the increased queue length.

| Lane Descriptor | 2026 Base |  |  |  | 2026 Base + Development |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AM Peak |  | PM Peak |  | AM Peak |  | PM Peak |  |
|  | RFC | MMQ | RFC | MMQ | RFC | MMQ | RFC | MMQ |
| A5144 Thorley Lane (N) | 1.01 | 40.7 | 0.81 | 4.1 | 1.01 | 43.7 | 0.82 | 4.5 |
| Clay Lane | 0.74 | 2.8 | 1.00 | 28.6 | 0.74 | 2.9 | 1.02 | 40.3 |
| A5144 Thorley Lane (S) | 0.62 | 1.7 | 0.81 | 4.1 | 0.64 | 1.8 | 0.82 | 4.3 |
| Wood Lane | 1.02 | 39.1 | 0.65 | 1.8 | 1.05 | 64.1 | 0.66 | 1.9 |

The above is a well-known feature of the junction modelling software and the results should be considered as purely indicative.

## Trip Generation

Mr Oates suggests that the traffic generations for the application scheme have been determined using TRICS but the adopted rates are low and the outputs not included within the TA.

To clarify, the submitted Transport Assessment makes no reference to the TRICS database and is therefore not in a position to include outputs. The adopted trip generation methodology is based on trip rates used for a previously approved residential development located in Partington (planning permission 94949/HYB/18) at the request of Trafford Council. The trip rates have been accepted elsewhere by the Highway Authority and there are no reasons why they should not be applicable to the application site.

I trust that the above is helpful and responds to the queries which have been raised.

Regards,
Aaron Tilley Associate
Curtins

