

Hughes, Martha

From: Hughes, Martha
Sent: 14 September 2020 15:51
To: Palmer, Leanne; Evans, Louise
Cc: colin@satnam.co.uk; 'Jim Sullivan'; Heywood, Robert
Subject: Peel Hall VISSIM Position Statement WBC

Leanne, Louise

I would be grateful if you could forward the position statement below to the Inspector regarding matters that have been discussed today. I have copied this to the main parties and to Highways England.

WBC Position Statement on VISSIM model

WSP have been commissioned by Warrington Borough Council (WBC) to review a VISSIM microsimulation model of the A49 corridor in Warrington. The model has been constructed by Modelling Group (MG) on behalf of Highgate Transportation (HT) who themselves have been commissioned by Satnam Millenium Ltd in support of a development at Peel Hall.

The latest version of the model was issued by MG on the 8th September 2020. In the time from receipt a high level review of the model files and the supporting documentation has been undertaken. This is in order to inform the Planning Inspector of the Council's position when the Public Inquiry opens on 14th September 2020.

The original scoping note for the VISSIM model was issued for comment in October 2019, and the base model was issued for review and comment in January 2020. Since then there have been several iterations of the base and forecast models, as well as alterations made to the traffic demand forecasting processes.

As it stands the Council has the following concerns regarding:

1. The Base Model

The base year model has been issued on six separate occasions (January, March, May, July, August and September). The version issued in July acted upon the Council's recommendation to carry out journey time validation using observed data on the key local network links, of Sandy Lane West and A50 Long Lane. The journey route on Sandy Lane West would preferably be longer and this was highlighted in Technical Note 7 issued to MG on 28th August. Notwithstanding that issue, the model was deemed to be broadly representative of the base year and acceptable for use in assessing the Development. However, the subsequent versions have shown increased queue lengths and differing queue profiles across the modelled time periods on Sandy Lane West and Long Lane. This was highlighted in Technical Note 8 which reviewed the August version of the base model. The current base model is similar to the August version regarding the queuing issues on these links. To date MG have not explained this issue.

2. Committed Mitigation Signal Optimisation

The accompanying forecasting report to the September model issue is *MG0123_A49WarringtonCorridor_OptionA_ModellingReport_v5*. In paragraph 2.3.2 it states "As a result of the level of change these committed developments made to flow patterns around the network, it was reasoned to be an acceptable approach to carry out signal optimisation where needed, in each future year scenario." The principle of this optimisation is sound, however from an initial overview of the A49 / A574 Cromwell Avenue / Sandy Lane West junction some of the signal changes are not logical or explained fully. Comparing the 2032 scenarios for *Back + Comm Traff* with *Back + CommTraff + CommMit* shows an increase in green time on Sandy Lane West from 10s to 15s in the AM (cycle time 52s) and in the PM from 13s to 28s (cycle time 70s). In the same scenarios Cromwell Avenue green time is reduced and as consequence the EB journey time increases by 50% in the AM (Table 3.5 220s to 304s) and 85% in the PM (Table 3.8 351s to 659s). In 4.1.3 MG state that this junction is very sensitive to traffic growth so at first

glance it seems odd to make such changes to the signals here. The impact on Cromwell Avenue in particular seems out of proportion with any benefit realised elsewhere at this junction.

3. Forecast Demand Totals

The method by which forecast SATURN flows are input into the VISSIM model has been discussed at length between MG, WSP (on behalf of the Council) and Atkins (on behalf of Highway England). The level of demand between scenarios does not appear to follow a logical pattern. This has been further complicated by a large and complex demand forecasting spreadsheet constructed by MG that has been subjected to ongoing amendments. In Technical Note 9 issued on 28th August 2020 in response to the August release of the forecast model, WSP identified locations with lower demand in 2032 Do Something than 2032 Do Minimum, including Sandy Lane West. This appears illogical and contradicts the SATURN output which has been presented in TN/09. WSP also highlighted zones with very high growth from the base year and showed that certain zones have lower Peel Hall development trip totals in 2032 than 2027. No response to these comments has so far been received from MG. The latest forecast model issued on 8th September 2020 produces the same pattern of demand differences.

4. Mitigation at A49 / A574 Cromwell Avenue / Sandy Lane West

A proposed mitigation scheme drawing was issued by HG on 6th August along with the August modelling package. This showed the left turn from A49 south to A574 Cromwell Avenue widened to two lanes, with the nearside lane designated for A574 and the offside lane designated for Calver Road. The modelling of this scheme, both in August and September models, allows both lanes to be used for A574 Cromwell Avenue, resulting in merging after the left turn to go ahead. This does not align with the current lane designation on this section of Cromwell Road and for traffic on the circulatory carriageway from A49 north and Sandy Lane West. In addition viewing the model would suggest that two lanes of the circulatory carriageway are being used for the Cromwell Avenue ahead movement. This may be overstating the actual capacity of the junction.

For all of the reasons above the Council cannot accept the VISSIM model in its current form, as it does not have confidence that the model reflects either the base conditions or the impact of the Peel Hall development trips on the A49 corridor. The issues raised above may be resolved, but as stated above no response has yet been received by MG.

It is suggested that the most efficient means of addressing the concerns highlighted above is for direct discussions to take place between the Council, the appellant and Highways England (and their respective consultants) as a matter of urgency.

Kind regards

Martha Hughes
Principal Planning Officer

Development Management
East annexe
Town Hall
Sankey Street
Warrington WA1 1UH

01925 442 803

Warrington's Development Management service is now operating remotely and we have the technology and resources that we need to continue with our service delivery. We remain able to comment on pre-applications submissions, to validate and consider planning applications and to move the majority of applications to determination. However we will need to employ alternative operating procedures to deliver results due to the necessary introduction of restrictions on movement by Government. In some instances this may lead to delays. Where this is the case I will endeavour to liaise with you so that you are kept up to date with the

situation. In the meantime you can continue to correspond with me electronically or, if the matter is urgent, call me on the number stated above if you would like to speak with me.